



Use Arduino for Projects

Arduino UNO based Projects List


Arduino UNO based Projects:

Arduino Uno is a micro-controller board based on the ATmega328P. It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analogue inputs, a 16 MHz quartz crystal, a USB connection, a power jack, an ICSP header and a reset button.




Below is the list of Arduino UNO based Projects:


1.




[Garage Door Opener with iphone using Arduino](#) What do I need to start? The hardware requirements to start is: *Note: where can I purchase the material with all the components to build myself the system: http://iwup.altervista.org/shop/reference_list.pdf 1.-)...
2.




[Hercules: The Motion Controlled Android Robot using Arduino](#) When I was in the 8th grade, I was intrigued while playing the motion games on Nokia 5800. I was thrilled, how I could control the racing car by only...
3.




[How to Simulate Arduino in Proteus](#) Hey, fellas I hope you are doing well and getting smarter every day. This post is about How to Simulate Arduino in Proteus, here we will see how we can simulate...
4.




[2-Player Pong Game with Arduino Uno](#) Classical Pong game implemented on an Arduino Uno using a PCD8544 LCD screen which is better known as the Nokia 5110 screen. Player bars are controlled by a potentiometer for...
5.



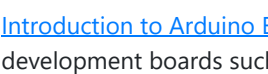
[James – Your first Arduino Robot](#) Edit: Thank you so much everyone for voting for James in the Toy Contest! He got first place and I won a \$500 Shapeways voucher! Expect to see more robot...
6.



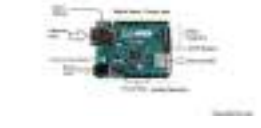




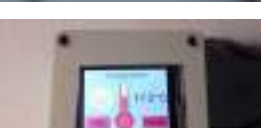









[Mini Arduino environment monitor ** UPDATE – Added RTC ***](#) This is an Example of how you can use the Arduino to monitor various environmental parameters And display them on a LCD screen. Note: I Added a Real Time Clock!! To...
7.





[ARDUINO MEGA FOR BEGINNERS](#) In this post I will discuss about the detailed ARDUINO MEGA FOR BEGINNERS. In the previous post I have discussed about brief introduction of the Arduino MEGA there I have discussed...
8.





[Introduction to Arduino Ethernet](#) In this post I will discuss about the Introduction to Arduino Ethernet. In the previous articles I have discussed different Arduino microcontroller development boards such as Arduino UNO, MEGA, NANO,...


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9. [Arduino Duemilanove for Beginners](#) In this post I will discuss about the Arduino Duemilanove which is one of the microcontroller development boards among other Arduino Boards. In the previous posts I have discussed the...
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10. [Top 10 Best Simulators for Arduino](#) In this post I will discuss about Top 10 Best Simulators for Arduino. The most popular software for simulating the circuits and embedded systems based on the Arduino microcontroller development...
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11. [Arduino V-USB / HID 14 channel data logger](#) UPDATE: Please see Addendum 2 at the end of this article for an Excel automatic logging implementation. There are several good articles on Instructables about building your own Arduino. Depending...
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12. [Smart Home Control System With Touch Screen](#) In this project, I have shown how to make a Smart Home Control with Arduino Uno and Nextion touch screen to control door lock system, temperature and daytime monitoring. During...
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13. [Resistor Color Code Calculator with Arduino](#) This is a 4 band Mechanical Color Code Resistor Calculator, The idea of making this Mechanical Resistor came when I accidentally dropped my box of resistors and all resistors (1300...
- 
14. [The Arduino Internet Gizmo](#) The Arduino Internet Gizmo is a USB, Arduino, and RFID device for web surfing. The gizmo works by placing an RFID tag on the top of the gizmo. The gizmo...
- 
15. [3D Printed Holo Clock With Arduino](#) Hello everyone! This is my first instructable. This project is a 3D printed clock powered by a stepper motor and is controlled by an Arduino Uno. It was designed in...
- 
16. [Arduino Motors and Transistors](#) This week, we'll finally be using the Arduino to control some motors! First up, we'll control a standard DC motor running off a 9V battery with the help of an...
- 
17. [Arduino NERF Ball Wireless FPV Sentry Turret](#) This project will guide you through the steps to make an Arduino based 360 degree rotating foam ball turret with full joystick wireless control, and first person view camera and...
- 
18. [Arduino Street Traffic Light – Breadboard Edition](#) Build a simple Arduino powered Traffic Light with us! This instructable is meant to walk you through almost every step, but there are a few assumptions. Read over the intro...
- 
19. [Arduino SD Cards and Datalogging](#) This is my first in a series of more advanced Arduino tutorials. [box type="note" color=" #202020 " bg=" #ffbb00 " font="verdana" fontsize="14" radius="20 " border=" #000" float="right" head="Attributes"]Thanks to Jeremy , for...
- 
20. [How to Control Any Drone From Your Arduino Microcontroller Using Bluetooth](#) Hello Everyone!!! In this Instructable I am going to show you how I converted my (Commercial) RC drone that uses an RC radio system into a drone that is controlled...
- 
21. [Cyborg Hand : Robotic-cum-Prosthetic Servo Powered Hand](#) <https://youtu.be/gO7L46sZTY4> Supplies Hey there ! For this Instructable you will need: 1- 3d Printer 2- CAD software(TinkerCad / Fusion360) 3- PLA and TPU filament 4- Servos [MG995...
- 
22. [Arduino Powered Micro Quadruped](#) From the previous projects on this page, you can probably see that I have a deep interest in robotic projects. In one of my previous Instructables, I built a quadruped...
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23. [Robopod the Arduino Powered Robot](#) Robopod is a simple arduino robot that uses antennas to detect obstacles. Robopod's motors are controlled by an H bridge and powered by a nine volt battery. Robopods circuit...
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24. [TSA Zombie Scanner Security Wand](#) Not even Zombies are exempt from a good pat-down. Scanner security wands are used at the most exclusive nightclubs and venues. Does not detect metal to indicate a presence of...
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25. [Android-Controlled Pneumatic Cannon Powered By Arduino](#) Every summer, Qualcomm hosts a Battle of the Schools competition, which gives employees the opportunity to represent their home universities. This year, entries were to be homemade contraptions, and they...
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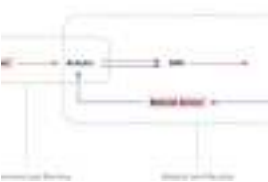
26. [Making Music with Makeblock](#) Makeblock is an aluminum extrusion based construction system that provides an integrated solution for aspects of mechanics, electronics and software design. With Makeblock you can make professional robots, toy machines...
- 


27. [First Ever Bluetooth Home Automation Shield for Arduino](#) This is my first instructable post, and it is about the Home Automation shield for Arduino that I have created. A little about myself my name is Krrish. I am...
- 


28. [Arduino Based LED City Model \(with Temperature Sensor\)](#) everything is boring without LEDs, so lets make a city out of it! Basic Idea: so we build a City mode out of cardboard, then illuminate it with a LOT...
- 


29. [Color Smoke Bubble Machine \(For Kids Safe Incense Smoke\)](#) Bubbles are always like by all ages. Its fun to see smoke filled bubbles. But color smoke using potassium nitrate are not advice to inhale. Also color from smoke fireworks...
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30. [Make a Mini LED Siren powered by Arduino](#) This is one of the first projects I have made with Arduino. It's a little siren with a LED that fades and blinks on and off. It demonstrates basic use...
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31. [Arduino – Simple Simon Says Game](#) In this instructable, I will show you how to make a simple Simon Says Game using an Arduino. it's not just simple but we can get a psychological benefit. I...
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32. [Climate | Material | Machine](#) <https://youtu.be/TQm3vCLWM7Y> This project was completed by Alexandra Pittiglio, Christelle El Feghali and Christian Steixner for our Computational Design and Digital Fabrication 'Material Manipulation Machine' Project, Semester 2, ITECH M.Sc Programme...
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33. [P-CNC Plotter Disguised As a Quadruped Robot](#) This is my P-CNC plotter which is laid out and disguised as a quadruped robot. Today, I'd like to share how I made it. It was quite simple, no 3D...
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34. [Display Your Photo on OLED Display](#) The tiny 0.96 inches OLED display is the most popular among the Arduino fraternity for displaying data like room temperature, humidity, and text messages. Have you ever thought of displaying...
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35. [Pinewood Derby Car Scale With Center-of-Gravity \(CG\) Calculation](#) A key factor when building a pinewood derby car is its weight. The Boy Scouts of America and other organizations specify a weight of no more than 5 ounces. To...

36. [Bike Turn Signal & Brake Light Handlebars](#) This project was inspired by a very cool kickstarter called Helios Bars. Essentially what this project does, is put an arduino, LEDs, and buttons into your bike handlebars. The LEDs...



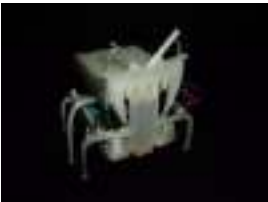
37. [Arduino Control via a Web Service with Teleduino](#) Convert your Arduino into a sophisticated web control platform using Teleduino. Teleduino is both a product and a service. Once the Teleduino sketch has been loaded on your Arduino (the...



38. [How to Make Powerfull Laser Engraver](#) Hello Guys Whats up, In this instructable, I am making an Awesome mini laser engraver from old DVD writers. It's very interesting project for any electronics hobbyist & Engineers. You...



39. [Hexapoduino: tiny hexapod 3D printed, Arduino controlled](#) A few time ago, i found out a 3d printed Micro-Hexapod on Thingiverse. I started to work on it in the following ways: - create new accessories/components 3D printable - explore...



40. [Basic Arduino MIDI Arppegiator](#) In this instructable I will show you how to make a basic MIDI instrument using an Arduino Uno. This instrument plays three notes (a triad) in a row. Using the different...



41. [Game maker Rover using an Arduino](#) In this Instructable I will be giving you step-by-step instructions on how to interface The Arduino, A Motor Controller (L293D), and a laptop to make a Wifi controlled rover you...



42. [Medicine Safe](#) <https://youtu.be/Xhga17lytQ4> We created this project for MSReva as an assignment from school. Supplies Laser or print all parts (see github): printed parts: 1x: 14 lock pin sleeve large 1x: 15 lock...



43. [Flora- an interactive flower](#) Hello everyone.....Today I have taken something out of my flower garden....We all know,plants have their own lives,they can feel just as we feel..but they can't express it...But what happens if...



44. [Build your own Arduino – Bare Bone System](#) I've read through a lot of tutorials online to make an Arduino Clone on a breadboard, and some of them are great, but none of them really seem to have...



45. [DIY 360 Degree SODAR Device](#) First off, why did we decide to call this thing SODAR? SONic Detection and Ranging, or SODAR, is a lot like SONAR and RADAR. However, we don't feel comfortable calling...



46. [Automatic Food Dispenser From Arduino](#) Howdy Readers, Dispensers for pets are expensive and this fact is known to all of pet owners But as there is a saying there is always one or other solution...



47. [3-dimensional Star Cluster using an Arduino](#) This instructable will guide you through the process of making your very own star-cluster from LEDs and acrylic. I made this piece for my electronics final project at college and...



48. [Gliderscore Timing Board](#) Gliderscore is a program developed by Gerry Carter that not only scores a model plane flying competition, but provides timing for the various flying tasks One feature of Gliderscore Timer...



49. [Lite Brite LED clock using an Arduino](#) Lite Brite pegs look like LED's don't they? That's what I though the other day after working on an LED cube for a few hours. I happened to see my...



50. [Cheapest Plug & Play Room Automation Setup](#) Their are many people who are struggling to make projects that are needed for their daily needs. One of the major example is none other than room automation. Even though...



51. [Sensors in Phone and Arduino Serial Communication](#) Sensors are one of the crucial things when it comes to building projects/robots. Many a times the sensor might be not available locally or it might take too long to...



52. [Arduino Game Controller for Both PC and Android](#) In this instructables session we are going to see . How to make your joystick . Which is compatible for PC, Laptop , Smart Phone . By Using UnoJoy Library....



53. [Perimeter Wire Using Matched Filter](#) Do you want to build a robot that is in an invisible enclosure? Or have you wondered how the robotic lawn mowers stay in their garden?In this Instructable I will...



54. [Low Cost, Easy to Build and Use: Arduino Die Toss Simulator](#) In addition to gambling, dice (die - singular) are used in many board games, e.g., Backgammon, Monopoly, Yahtzee, Liar's Dice, Dungeons & Dragons, Trouble, etc. Common dice are usually white...



55. [Strandbot – a solar & arduino powered R/C motorized Strandbeest](#) The Strandbot is a DIY upgrade for the Strandbeest originally designed by Theo Jansen. Strandbeests are amazing mechanical creatures that are able to move on their own using just a...



56. [Self-balancing skateboard/segw*y project Arduino Shield](#) General purpose Arduino shield for self-balancing machines. Why did I make it? I previously made an Instructable in 2010 on how to build a self-balancing skateboard. <http://www.instructables.com/id/Easy-build-self-balancing-skateboardrobotsegway-/> There are >500...



57. [Arduino Waveform Generator Shield](#) Waveform generators (also called function generators) are useful for testing and debugging circuits. They can be used to test the frequency response of electronic components like op amps and sensors...



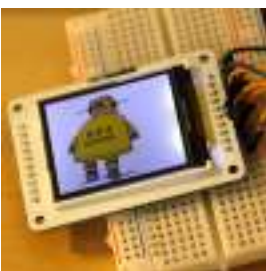
58. [Remote Control Arduino Car](#) A great introductory project for those diving into the IoT and Arduino platform. Working with motors and an IR sensor helps newbies understand various components and sensors compatible with the...



59. [GRBL Based Coil Winder From Water Pipe](#) When I was working on the Toy Magnetic Levitation project with a solenoid coil, I thought to myself, why didn't I make a coil winder. So I took my times to build...



60. [Your Image on an Arduino! – TFT LCD Screen Guide](#) Have you ever heard of TFT LCD screens? They are great ways to display information from your Arduino, or display pictures. The Arduino team just released an official TFT LCD...



61. [Multiplexing 7 Segment displays with Arduino and Shift Registers](#) In this instructable, I will be teaching the basics of multiplexing 7 segment displays using an Arduino and a couple of shift registers. This project is well suited for displaying...



62. [Tank Level Alert for Pellet Stove](#) If, like me, you have a pellet stove which does not indicate the low level of the tank, I suggest this little module which will beep when the reserve is...



63. [The Digital Drone Synth](#) Making a hardware synthesizer is a really fun and rewarding experience. But usually with a lead synth you would want to implement ADSR envelopes, multiple adjustable oscillators, multiple types of...



64. [An Arduino RSS Feed Display](#) This Arduino project will display RSS feed headlines on an LCD via an Arduino and a USB cable. It works quite well, and lets you keep up with the world...



65. [Display Images on OLED Display | Ft. Instructables Robot](#) Hi guys, in this instructable I will be teaching you how to display any image on an OLED display using an Arduino board. I know that this topic is quite...



66. [Rainbow Jar – RGB Pixel Strip Controlled via Arduino](#) Our most popular item on our display at Maker Faires is always the Rainbow Jar. One customer has already replicated it so we thought we'd share how we made it...



67. [ARDUINO with XBEE- WIRELESS SETUP DEMO](#) This video describes how to configure two Series 1 XBEEs using Arduino UNO board.The ways of making 2 way communication is also tested on Wireless mode. Overview The Xbee shield...



68. [Magic Dome](#) Francisca Molero Luque, Dolores Martín Cabrera and Laura Mejía Ospina, students of 'Creative Electronics', a Beng Electronics Engineering module at the University of Málaga, School of Telecommunications. We decide to make...



69. [Super Simple Arduino Powered Roomba Scheduler](#) Like most people I was skeptical about getting a robotic vacuum cleaner, so as a trial run I thought I would buy the now obsolete iRobot Roomba 530 which was...



70. [LED Chaser Game](#) Hello, my name is Vigas Balachandran and on this instructable, I will be presenting my final project. For this project, I have created a LED chaser game. In this game,...



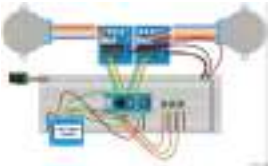
71. [DIY: ARDUINO SOUND SENSOR SYSTEM](#) I have a major problem when it comes to talking on the phone or playing video games with my friends - I often get loud (that's quite an understatement). Since...



72. [Yogy – The Arduino Powered Robot Made For Kids](#) In this Instructable I will show you how to make a cute and kid friendly Obstacle Avoiding Robot I like to call Yogy. Yogy gets his name from the Yoghurt...



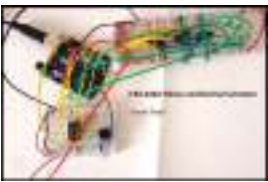
73. [Arduino: Portable Two-Axis Stepper Control](#) https://youtu.be/r_2DXRIM29s In a previous tutorial we have seen how to run two stepper motors synchronously from a given start position to a defined destination using an Arduino and a very simple "user..."





74. [Digital/Analog Clock – Arduino + PaperCraft](#) In this instructable we will be recreating a clock inspired by Alvin Aronson's original design. When I first saw this clock I was very impressed by how clean an elegant the...




75. [2 Bit Adder Binary and Decimal Calculator](#) By: Sonya Singh Computer Engineering Step 1: Project Overview Have you ever dreamed of building a 2-bit adder calculator, which can display the results in both binary and decimal? Well,...

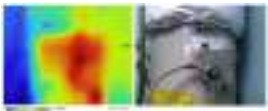



76.  [AAA Robot \(Autonomous Analog Arduino\)](#) The AAA Robot is a perfect robot for beginners. It is versatile, easy to build, and discusses many of the topics roboticists need to learn, including but no limited to...
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77.  [An Arduino Thermometer with Digital Display](#) This is a project for Arduino to make a Thermometer with Digital Display, aimed at beginners. Arduino measures the voltage on a TMP36 Temperature sensor, converts the Voltage to Degrees...
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78.  [Arduino Activated Light Catcher Arcade Game](#) This pandemic time has been rough for us all, as it confined us in our homes thus not enabling the opportunity to go outside and meet with family and friends...
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79.  [Cell phone text using an Arduino](#) Arduino text'in. Key Features: 24 relays controlled by 4 I/O lines! Cell phone text using your Arduino. This project hacks a cell phone to text using normally open relays. After...
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80.  [Thermal Camera](#) Have you ever had the desire to see what can not be seen? I never had the ability to see in thermal infrared, and it is rather cool to be...
-


81.  [Classroom Pencil Protection Machine](#) HEY KID, GIVE ME BACK MY PENCIL! As a teacher, one problem I face every day is losing my pencils. Now pencils don't just disappear, they walk away in the...
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82.  [Kaosduino: Create your own kaosillitaor using Arduino](#) This project is a part of experiments done while doing an artist in residence at Instructables. You can see the other projects here. Inspired by Korgs Kaossilator I took it upon...
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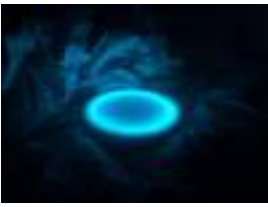
83.  [Splash! Water Droplet Photography](#) I have been shooting water drops for a while now.... since 2017. I still remember how excited I was when I got water drops bounce from the surface with my...
-

84.  [The Knock Box: Build a Knock-Sensitive Power Strip](#) The Knock Box is a power strip with superpowers - it turns on your lamp whenever you knock on your nightstand. You get two outlets, individually controlled by knock-knock-knocking on a nearby...
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85.  [Living Pixels – Imagine Technology Has Life](#) Seeing smart home products being more common in our lives, I've started to think about the relationship between people and these products. If one day, smart home products become an...
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86.  [DIY Arduino Bluetooth Controlled Car](#) Hello friends! My name is Nikolas, I am 15 years old and I live in Athens, Greece. Today I will show you how to make a 2-Wheel Bluetooth Controlled Car using...
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87.  [Mr. Indecision – a small felt version of yourself that turns its head and looks at you using Arduino](#) This is a tutorial on how to use 123D Catch to get a 3D scan of your whole body. Once you have the scan or "catch" the tutorial will take...
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88.  [Water Surface Lamp](#) This Instructable will show you how to make an atmosphere lamp that lights up just like making little waves on the water surface. It can be placed on your table,...
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89. [Gyroscope Platform/ Camera Gimbal](#) This instructable was created in fulfillment of the project requirement of the Makecourse at the University of South Florida (www.makecourse.com) tep 1: Materials List In order to begin the project,...



90. [Automatic Hand Sanitizer for Your Car](#) <https://youtu.be/IYw2ApjvN8I> The United States of America currently holds 20% of the infected individuals with the COVID-19 virus. Considering the ongoing pandemic, an automatic hand sanitizer would result in a decrease...



91. [Scintillino – an Arduino-based quick&dirty scintillation counter](#) Have you ever wondered about the radiation levels around you? Well today you can build your very own detector that measures ionizing radiation and displays data in real-time on an...



92. [Simple Inexpensive Wireless With Any IR Remote, Including No Longer Used Ones](#) I hope you will find this Instructable interesting and useful. It is only three (3) steps long, plus an introduction. If you do find this article helpful, even if it...



93. [Brainwaves Bend a Fork](#) In the 1970's, a psychic named Uri Geller introduced spoon-bending using his mental powers and became famous for it. Well, I don't claim to be a psychic, but I thought...



94. [Emoticon Helmet using Arduino](#) The Internet has become a pretty good mask to portray yourself as anything you want. This includes hiding your true emotions when posting facebook statuses, IMing someone, or sending emails...



95. [How to Make a Tactile Feedback Compass Belt](#) Have you ever wondered how migratory birds manage to have such an amazing sense of direction despite being so generally clueless? They can sense the Earth's magnetic field with what...



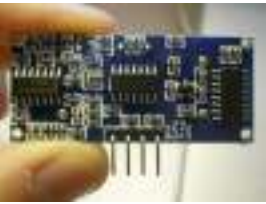
96. [Arduino Liquid Crystal Displays](#) I had initially planned to do an LCD tutorial a little further down the line, but there was very high demand for it, and I already had a circuit assembled...



97. [Interfacing Electronic Circuits to Arduinos](#) Interfacing Electronic Circuits to Arduino In this instructable I use an example of interfacing an Arduino to an ARINC 429 transceiver in order to demonstrate the general process of interfacing...



98. [How to make A light-up distance sensor](#) In this instructable, I will show you how to make a sensor that will light up more lights the closer you are to it. Step 1: Placing The Electronics This...



99. [Home Automation \(or Robot Butler called Geoffrey\) – iPhone controlled, arduino based](#) Being able to control everything from your pocket has long been a dream shared by many. Previously we've had universal remotes that can both control our TVs and radios, then...



100. [Save data of temperature and humidity on MySQL with Arduino Uno and Wifly](#) Hello guys, i make this instructable for the people that liked the electronics and the botanic, with this you have the data about the temperatura and the humidity of your...



101. [DIY Programming Cable Using Arduino Uno – Baofeng UV-9R Plus](#) Hey Everyone, this is a simple guide on how to convert your Baofeng UV-9R (or plus) Headphone / ear piece cable into a programming cable using an Arduinio UNO as...



102. [Baby Eats, Alternative Video Game Controller](#) This Instructables will teach you how to make the alternative controller to play my short game, Grogu Eats, on itch.io! This Instructables will be very basic up until the soldering. If...



103. [Arduino led pendulum](#) Step 2: Putting up the wires Strip both ends of wires -insert one end of each wire into sockets numbered -Gnd(black wire in my case)-this will be the common ground...



104.
- [Arduino Text I/O for Real World Applications](#)

Quick Start This tutorial will take you through the steps you can use to successfully process Real World text I/O You should avoid using any Serial methods in your loop() code...



105.
- [3d Maze Game Using Arduino](#)

Hello friends , so today we are going to make a maze game using ARDUINO UNO. As Arduino Uno is the mostly used board it is very cool to make...



106.
- [Mini invisible MIDI Harp](#)

English: This is a simple and easy to make MIDI harp, it runs on an Arduino UNO and uses infrared sensors as strings. It communicates with every recording software that...



107.
- [Using Ninjutsu Hand Signs \(Naruto\) to Unlock a Safe](#)

<https://youtu.be/z772hGGNcqg> Naruto is a Japanese manga series written and illustrated by Masashi Kishimoto.It tells the story of Naruto Uzumaki, a young ninja who seeks recognition from his peers and dreams...



108.
- [Arduino Controlled LEGO RC Tank and Transmitter](#)

I recently got my childhood Lego out and wanted to find a project that I could combine with Arduino and mechatronics. I started off building a digger but then realised...



109.
- [Self Balancing Unicycle](#)

Following the popularity of our self balancing scooter and the SciChair we decided to try something a little edgier, the Self Balancing Unicycle. This project reuses a lot of stuff...



110.
- [My Arduino Ping Display Robot](#)

Goals Hello all. I hope to please share a little robot that I have just finished building. There are many Ping Boat, perhaps with a tutorials and display less so...



111.
- [A Gentle Introduction to Arduino for Scratch Users](#)

There are lots of people who are very comfortable with the Scratch programming environment but want to try something with Arduino to Blink Lights, Sense Buttons, Run Servos or whatever....



112.
- [Arduino-controlled RGB LED Infinity Mirror](#)

Update 11/22/2013: Thanks to everyone who voted for this project in theMicrocontroller Contest! It was one of three first-prize winners. Update 9/17/2013: Thanks to everyone who voted for this project...



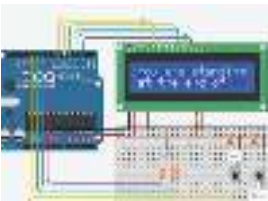
113.
- [Visual Network Threat Level Indicator v2 using Arduino](#)

By popular request this is a new wireless version of the Visual Network Threat Level Indicator. This uses a Roving Networks WiFly RN-XV Module to do 802.11 WiFi along with an Arduino...



114.
- [Create a Choice-based Text Adventure Game With Tinkercad Circuits](#)

One of my fondest childhood memories is visiting my grandparent's house and reading my uncle's old collection of "Choose Your Own Adventure" books. While I always got stuck playing text-based...



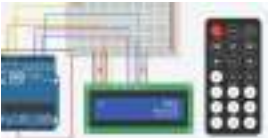
115.
- [Happy Birthday Song Using Arduino Uno](#)

Hello friends welcome back to "Techno-E-solution" in todays article I'll show "How to play Happy Birthday Song Using Arduino & Buzzer" in few steps. Most of the peoples are from...




116.
- [IR Calculator](#)


Hey, welcome to my first instructable where I will be helping you create a calculator. It's basically made up of a 16x2 LCD, with an Arduino UNO that you can...




117.




[F1 – Rider](#) F1(Formula One) Rider is a low-budget car. Aspiring people with inspiring speeds. The Rush of excitement is pressing accelerate. A fast Requires a sha are meant to...
118.




[Bluetooth Weather Lamp](#) This was a 2 hour project I whipped up in order to learn how to use a new Bluetooth LE 4.0 module I picked up at redbearlab.com, called a BLE...
119.




[LED Fader – With or Without Arduino](#) Have an awesome project in mind using some LEDs. In that project I will be using some LED Fading Effect and few LED Chaser Circuits. But before jumping onto that,...
120.




[Necomimi Arduino Cat Ears](#) They are so dang cute. If you have ever seen the cool promo for the Necomimi Neurowear wearable set of cat ears that respond to brainwaves, you would want a...
121.




[Parking Assistant Arduino Project](#) Do you ever get frustrated trying to park in just the right spot? Have you gotten tired of using a tennis ball as a guide? Is it time for something...
122.




[Eggbot](#) <https://youtu.be/hdoy4-F4xgl> Rafael Fuentes, Carmen María Fuentes and Carmen Pérez decided to create this project that was submitted to 'Creative Electronics', a Beng Electronics Engineering module at University of Málaga, School of...
123.




[Pressure Activated Light-Up Umbrella using an Arduino](#) Once upon a time, 2 girls greatly enjoyed walking in the rain with umbrellas. They decided the enjoyment of this experience could be maximized by building their own pressure-activated web...
124.




[TankWars: A Physical Video Game using Arduino](#) This instructable will show the game TankWars, a web based game played on an iPad that drives a real robot tank to fire lasers at a robot. When you hit...
125.




[Arduino Voice Controlled Robot](#) Over the years as technology advanced and grew at a tremendous pace, so did the horizon of ideas and creation in our mind. If we look a few years back,...
126.



[Arduino Fixed-point Vehicle Proximity Detector](#) This is the high-tech version of hanging a tennis ball from the ceiling from a piece of string. Of course, if you have two different types of vehicles, that tennis...
127.




[PlayPlace Lighting Using NeoPixels](#) With 2020 being the year of COVID, having a toddler that was stuck at home (especially during the winter) presented the need for, well, stuff to do. So, my wife...
128.




[Arduino Board Sound Alarm](#) I've just completed my second Arduino project, a sound level detector which sets off an "alarm" when there's the sound level is to high for too long. I built it...


129.




[Visual Network Threat Level Indicator using Arduino](#) Network monitoring is very important in todays world. The internet is a scary place. People have taken step awareness by installing Intrusion Detection Systems(IDS) such as SNORT....
130.




[How to Make CLAP Control Car || Using Arduino Uno](#) Hey Guys, welcome to my first instructables article. So guys today we are going to make a " Clap Control Car With Arduino " seems to be interesting Right? Let me...
131.




[Wireless nunchuk controlled animatronic doll using Arduino](#) This instructable will attempt to show you how to make an animatronic doll controlled by a wireless nunchuk. This doll can only move its head though. I'm sure there are...
132.




[Arduino & TFT Screen Volume Mixer](#) Before i start this AMAZING tutorial on how to build a physical windows volume mixer, i want to apologize for my bad written English. Now, let's get started. For this project I...
133.




[Automatic Opening Garbage Can Cabinet](#) <https://youtu.be/RrtcjfrJk7I> Sometimes you need to throw something away, but your hands are either full of garbage, or they're contaminated with raw chicken or meat. I was able to make this...
134.




[Arduino Tic Tac Toe Shield With an AI Opponent](#) In this Instructable, we're going to be making a Tic Tac Toe or Noughts and Crosses shield for an Arduino that allows you to play against another person or an...
135.




[Homemade CNC Machine From DC Servo Motors and Wooden Wine Boxes](#) Today, I would like to share how to build a 3 axis CNC machine at home using available or discarded materials. Specifically in this project, I reused 2 old DC...
136.




[Plant Bartender](#) https://youtu.be/xV2tXc584_A This project was completed by Alexandra Pittiglio & Christelle Feghali for our Computational Design and Digital Fabrication 'Useless Machine' Project, Semester 2, ITECH M.Sc Programme ----- We present Plant...
137.




[LED Chaser Circuits Using JC4017 and Arduino](#) <https://youtu.be/F6V1AjESWbU> A Chaser Circuit consists of a clocked IC or other electronic unit like an Arduino that drives an array of LEDs in such a way that individual LEDs (or...
138.




[Automatic Irrigation System \(Arduino\) With Usb Type DC Submersible Water Pump](#) This mini project is involved to use Arduino to control submersible watre pump when soil reach below or above predefined moisture level. How it works ? 1. Soil moisture sensor...
139.



[Android & Arduino Controlled Projector Screen](#) This is my first time using Arduino, or any microcontroller. I'm glad it worked out so well but my wife may not be, due to the stacks of microcontrollers that...
140.



[L.O.G. sous vide](#) So have you heard of sous vide? Well, this Lazy Old Geek (LOG) hasn't or hadn't. <http://en.wikipedia.org/wiki/Sous-vide> It's French. So it's kind of like boil-in-a-bag only you don't boil it....
141.



[ARC Reactor Lamp MKII](#) Welcome to this instructable, this time I will be showing you how to make the newest version of my ARC Reactor Mood lamp I did a couple of months ago....

142. [Gesture Controlled Interactive Desk Light](#) <https://youtu.be/4BFWbc2f39I> We all have seen different kinds of mood lamps & RGB light, most of them have some buttons or a remote to interact with them, but we thought of...



143. [Arduino Bird Shoo!](#) In the spring every year, we have a group of robins who start making nests around the house. We also have lots of windows in a patio area that when...



144. [SMARTWALKER D4E1](#) The smartwalker is being developed for a project called "design for everyone" at Howest university college of Applied Sciences (Belgium). We are a group of design and occupational therapy students. This...



145. [Arduino Lecture Sample Code](#) This collection of short Arduino sketches introduces a variety of programming concepts. The comments are minimal as these are intended to be starting points for explanation. blink // 1. blink...



146. [AI Auto-Classify Trash Can](#) This project is a trash can that recognizes and classifies garbage automatically. Use Machine-Learning and Arduino in Scratch. How it works 1. Camera takes an image of garbage. 2. Machine-Learning model recognizes...



147. [VERTICAL X-Y PLOTTER || DRAWING ROBOT || ARDUINO PLOTTER](#) In this instructable, we will learn to make an XY plotter/ Vertical plotter drawing machine using Arduino. With this very efficient Vertical Drawing machine, We can draw images on different...



148. [Brainwaves Fly a Drone](#) Drones are fun to fly, and it's possible to do limited flying using brainwaves. The headset senses my brainwaves and transmits them to a small computer. When I increase my...



149. [Arduino – How to Read SD Card Text File Line by Line](#) In this tutorial we will learn how to read the SD card text file line by line. Watch the Video! Note: You can use other Displays such as OLED, but...



150. [The useless alarmed Coke can using Arduino](#) Hi all! This is the most useless project in the world! It consist in a Coke can attached to an Arduino trough a coaxial cable and two resistors that make...



151. [RC Arduino Domino Layer With Bluetooth App Control](#) How to 3D print and assemble your very own programmable and remote controllable automatic domino laying machine. Who likes knocking down absurdly long runs of dominoes? I do. Who doesn't...



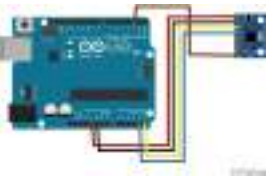
152. [The useless but mazing QR-clock using Arduino](#) I got this idea for a while but I never had the chance to try it out. Friday, a workmate gave me a LCD shield for Arduino and I thought that was...



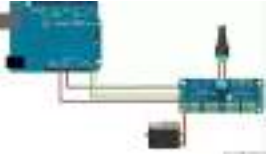
153. [Building the YaNis EOS Controller using Arduino](#) The YaNis EOS controller is a device that allows you to wirelessly control your Canon DSLR from your Android phone. What's really exciting here is that the Android interface allows...



154. [Arduino Sketch MPU6050 DMP6](#) This sketch is used by Exercise: MPU6050 IMU I2C Module. Main Source Code The main code is in MPU6050_DMP6.ino. // I2C device class (I2Cdev) demonstration Arduino sketch for MPU6050 class using DMP...



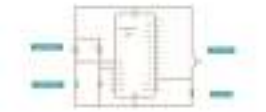
155. [Arduino Sketch Adafruit PWM](#) This sketch is used by Exercise: Adafruit PWM I2C Module. Full Source Code The main code is in Adafruit_PWM.ino. // ***** This is an example for our Adafruit 16-channel PWM & Servo driver...



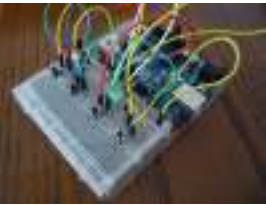
156. [Arduino Sketch WS2801LED](#) This sketch is used by Exercise: WS2801 RGB LED SPI Module. Full Source Code The full code is all in one file WS2801LED.ino. //
-*- mode:c++; -*- /// @file WS2801LED.ino /// ///...



157. [Arduino Sketch OneInOne Out ASCII](#) This sketch is an Arduino program which acts as an simplified hardware I/O server using a simple readable message protocol. The intent is to provide an easily modified and extended...



158. [Arduino Combi-button Lock optional Android support](#) Recently, I decided I would like to attempt to make a passcode lock with my newly acquired Arduino Uno, but all the tutorials I could find made use of a...



159. [PEZ Robo Dispenser Using Arduino](#) I was strolling down the candy aisle at the supermarket and there it was: the PEZ dispenser, conjuring up sweet (literally) childhood memories served up by my favorite cartoon characters...



160. [Quality of Life Meter](#) Harsh new rules at work getting you down? Overtime sucking the life out of you? Or maybe things are great, either way now you can show your co-workers and management...



161. [RC Paper Tank – Bring your 3D models to life](#) Bring your 3D models to life! In this instructable we will custom make a remotely controlled tank. We will infuse paper-craft with an arduino based system. This tank will be...



162. [Fruit Sorter Robot Using Flexible Gripper](#) Hello Everyone, thank you for showing interest in our project. In this project, we are showing a fully automated robot that sorts fruits and vegetables based on their color. The...



163. [Barcode Reading using Roborealm Output on Arduino LCD](#) This Instructable shows how to create a Barcode Reader using only a webcam together with Roborealm and Arduino. The webcam used in this demonstration is the Logitech Quickcam and the...



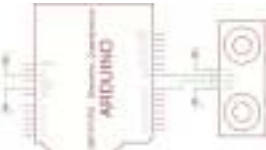
164. [Arduino Sketch ServoSweep](#) This sketch is used by Exercise: Servo Sweep. Full Source Code The full code is all in one file ServoSweep.ino. // ServoSweep - move a servo along trajectories // // Copyright (c)...



165. [\\$50 Analog Joystick \(HOTAS\) With Haptic Feedback for Flight Sim](#) The aim is to create a fully functioning USB HOTAS* joystick from low cost electronics parts. I bought Elite Dangerous when it was released for the Mac and realised very...



166. [Arduino Sketch Read Sonar](#) This sketch is used by Exercise: Read Ultrasonic Ranger. Full Source Code The full code is all in one file ReadSonar.ino. // ReadSonar - measure distance using a HC-SR04 or compatible ultrasonic...



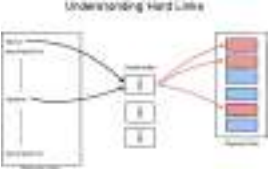
167. [Apple Gripper](#) Fruit and vegetable market is a big sector that is worth more than 200 billion euros worldwide, this is expected to grow even more in the next decade due to...



168. [Piano Metronome](#) This project was conceived of after I examined the types and styles of various off-the-shelf Metronomes. I am currently learning to play the piano and having a Metronome in order...



169. [Arduino Sketch SoftBlink1](#) This sketch is used by Exercise: Soft Blink. Full Source Code The full code is all in one file SoftBlink1.ino. // SoftBlink1 - fades the onboard LED on and off. // //...



170. [Making a Prototype With Arduino \(TIM-01 EYES\)](#) I have been designing and building a robot. It got to the stage where it was time to do a head for it, but before I did the head I...



171. [3D Printed Digital Camera](#) This is a 3D printed digital camera that you can build yourself. By making your own digital camera, it takes away some of the mystery around how such devices work,...



172. [Arduino M&M Color Sorter](#) Are you tired of sorting your m&ms by hand? Looking for a silly way to spend your time and 3D printer filament? Then this is the Instructable for you. This...



173. [Acrylic Arduino Prototyping Stand](#) I do a lot of projects with Arduino's and breadboards. Often as I work on a messy workbench, the Arduino or breadboard get jostled and the wires pop out of...



174. [Arduino OLED Spectrum Analyzer](#) Image: Today I am make an Arduino OLED Spectrum Analyzer its work with 0 to 3.3v Analog input. This is very smooth and clear Visualization of audio frequencies. This is...



175. [Fainting Goats Are Friends Not Food](#) Project by Ailey Simpson and Peter Ehvert Rooted in biomimetics, this project for Computational Design and Digital Fabrication looks to emulate one of the most useless behaviours seen in the natural world,...



176. [Mailbox Phone Alert](#) The mailbox phone alert sends you a text whenever you get mail. I remember anxiously checking my mail multiple times a day during the spring of my senior year of...



177. [Painless WiFi on Arduino](#) Communication with the outside world is a great feature for Arduino Projects and mandatory for many of them. In this instructable, we will, painlessly, create an Arduino WiFi project that...



178. [Tree Climbing Robot using Arduino](#) After I got comfortable programming and building with an Arduino, I used my newly acquire microcontroller skills to build a robot. Using a microcontroller, four high-torque DC gear motors, spiked...



179. [Music PlayBox – ITTT](#) HKU Assignment Welcome to my "If This Then That" Project. For this project I made a simple music box where you can play several chords of instruments. You can choose...




180. [Best RGB LEDs for any project \(WS2812\)](#) When we're working with LEDs, we often like to control their state (on/off), brightness, and color. There are many, many different ways of going about this, but none are...




181. [DIY Skee Ball Machine](#) The skee ball machine is a wonderful thing. The simple experience of rolling a ball into a target is so freakishly satisfying that I used to play as much as...


182.




[Morse Code Iambic Trainer and Decoder](#) In Amateur radio, Morse code is used to send messages using a series of short or long pulses which are heard by the o beeps. The short beeps...
183.




[FRICTION CALCULATOR – WITH IR LASERS](#) Friction can often seem like a 'boring' force. Something we are all familiar with from a young age, but friction does a lot more than just make objects slow down...
184.




[DIY Robotic Hand Controlled by a Glove and Arduino](#) This project idea came to me when I was sitting on a bed on a hotel room on vacation. I thought: "It'd be really neat to have a robotic hand..."
185.




[Arduino Bluetooth PC Fan Wind Sensor With RemoteXY](#) This projects is a mix of two of my main passions, Arduino and Wind. Here is a simple project that I used this OLD PC fan as a small wind generator to...
186.




[COD \(Camera on Deck\) – Motion Time Lapse](#) INTRODUCTION Hi. I've built this little device for my HNC project back in the old days (2015). Because I like photography, and my task was to make something using microcontrollers...
187.




[Android talks to Arduino](#) This project slightly modifies the Google Android sample app called "Bluetooth Chat" so you can type a message in the Android app and that same message will appear on an...
188.




[Make another Arduino LCD shield](#) In this tutorial we make an LCD shield for using 20 character by four row LCD modules with Arduino Uno. Updated 18/03/2013 In this article you can follow the process...
189.




[ITTT – Cat Laser](#) Heey my name is Rens Kuilman. For a school project (If This Then That) we had to make something using the Arduino. After a few misses I decided to make...
190.




[Touch Sensitive Interactive Music Instrument DIY / Windows Version](#) https://youtu.be/_xEfiFxLKto "Sensor Retouch" touch sensitive interactive instrument which allows to play Water, Fruit, Plants and Conductive surfaces as a musical instrument by your touch. All you need is Arduino and few upgraded touch sensitive sensors, i'll teach you...
191.



[Alastor "Mad-Eye" Moody Moving Eyeball](#) Before COVID hit my son went to a costume party dressed as Professor Alastor "Mad-Eye" Moody from Harry Potter. I made him a moving eyeball using an Arduino, servo and...
192.




[Arduino Magnetic Board](#) My first meeting with microcontrollers was a few decades ago (you might remember the first Parallax Basic Stamps) but with the Arduino platform it happened more recently, only 6 years...
193.




[12×12 LEDX From Escape From Tarkov](#) Once after Russian EFT community podcast where one of the guests said that expensive items, such as LEDX, should occupy a larger number of the slots in secure containers... It...


194.

An Arduino Uno board is connected to a small robot with two yellow wheels and a green sensor. The robot is positioned on a wooden surface with an egg in front of it.


[Arduino Based Egg Plotter](#) An Egg plotter is an art robot that can draw on spherical shaped objects such as eggs. You could also use this machine to draw on ping pong balls and...
195.

A black 4-wheel robot with a white sensor mounted on top, moving on a light-colored surface.


[Arduino 4wd robot with ping sensor "J-Bot"](#) Experience Level: Intermediate (requires soldering) Time Required: 3-5 hours depending on experience J-BOT Kit Jameco P/N 2140285 Someone mentioned that Jameco needed a robotic mascot. I have always been...
196.

A red circuit board with various electronic components, including a sensor and a small display, connected to a computer.


[Touch Sensitive Interactive Music Instrument DIY / OSX Version](#) "Sensor Retouch" touch sensitive interactive instrument which allows to play Water, Fruit, Plants and Conductive surfaces as a musical instrument by your touch. All you need is Arduino and few...
197.

A small electronic device with a green LCD screen and a red button, connected to a computer.


[*duino Keg Temp Monitor, or the Quest for the Perfect Pint](#) I was looking for a project that combined my three favorite things - working in my shop, building cool stuff for my bar and of course, drinking beer. After a couple of...
198.

A wooden Connect Four board with a red Arduino Uno board and various electronic components attached to the bottom.


[Electronic Connect Four \(arduino\)](#) Authors: Kelly Bodeman - kbodeman4@gmail.com Jack Whelan - whelanjack11@gmail.com (For more questions contact us at our emails above) Here is a link of a youtube video of our project: Connect Four...
199.

A small electronic device with a blue LCD screen and a red button, connected to a computer.


[SOCIAL DISTANCING INDICATOR](#) Social distancing indicator is used for many purpose . It is harmless and one of the social services. It will reduce the health issues and society problems. Description SOCIAL DISTANCING...
200.

A small electronic device with a blue LCD screen and a red button, connected to a computer.


[ORP / pH / Temperature Data Logger](#) As a Water Quality professional working in the drinking water field, I know how important it is to accurately monitor the disinfectant levels in the drinking water that gets served...
201.

A small blue robot with two large black wheels and a red sensor mounted on top, moving on a yellow surface.


[Wall-e, an Obstacle Avoiding Robot](#) <https://youtu.be/MDWsgSw9pog> It's not Wall-e, But it looks like Wall-e a bit. In this Instructable, I'm going to show how you can make a simple obstacle avoiding robot using Arduino in...
202.

A small black robot with two large black wheels and a red sensor mounted on top, moving on a light-colored surface.


[TWO WHEELS CRAZY RC CAR](#) About two years ago, I carried out a project involving a 2 wheel self-balancing robot from broken toy car. After upgrading it to new version, this broken toy car was...
203.

A small electronic device with a blue LCD screen and a red button, connected to a computer.


[Non-Contact Hand Washing With LED Timer Displays](#) Washing should be done even without the presence of the COVID-19 pandemic. Appropriate washing can prevent the transmission of diarrheal infections and other person-to-person illnesses. For personal health, it is...
204.

A small electronic device with a blue LCD screen and a red button, connected to a computer.


[Temperature Sensor for Arduino Applied for COVID 19](#) The temperature sensor for Arduino is a fundamental element when we want to measure the temperature of a processor of the human body. The temperature sensor with Arduino must be...
205.

A small purple robot with a large blue number '5' on its front, connected to a computer.

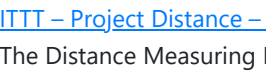
[Strive for Five: Arduino 5-Minute Classroom Exit Timer](#) Are you a teacher? Do your students leave your classroom and stay out too long? Are you tired of trying to keep track of whether someone is out of the...
206.

A small electronic device with a blue LCD screen and a red button, connected to a computer.

[Sonic Illustrations](#) Sonic Illustrations was technically born around 2013. Back then I started a little experiment in my bedroom which also served as my workshop. I used the bass reflex speaker of my...
207.

A small grey robot with a black sensor mounted on top, connected to a computer.

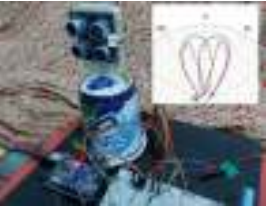
[RoboCat: a Pet Without the Mess](#) This will not be a tutorial, just me reflecting on the process and sharing it! Welcome to RoboCat, a cute pet without the mess! The RoboCat responds to any sounds...
208.

A small electronic device with a blue LCD screen and a red button, connected to a computer.

[ITTT – Project Distance – Jurre De Groot 1D](#) HKU Assignment Hello all!Welcome to my HKU ITTT - "If This Than That" Project. For this assignment I created a simple eye test. The Distance Measuring Eye will give you a score based on...



209. [Ultrasonic Mono Pulse Tracker](#) This project demonstrates the functioning of an "Ultrasonic Mono-pulse Tracker" built using two Grove ultrasonic sensors. Two sensors facing forward at a small angle from each other are placed on a...



210. [Low-tech and High-tech POV \(Persistence of Vision\)](#) Persistence of vision is an optical illusion. When we look at an object, our eyes keep seeing an image of it for a fraction of a second after the object...



211. [Contactless Switchboard](#) <https://youtu.be/o9go2oERWaQ> This is a prototype version of the contactless switchboard which helps to control the appliances (AC appliances can be controlled through relays) without touching the actual switches. This can...



212. [Arduino/Unity Car Driving Experience](#) Idea behind project Hi, I am a 12-year-old kid who loves electronics, coding, space, and building. I remember, on my 10th birthday, I began sitting in the front seat of...



213. [Contact Digital Thermometer With Deep Sleep \[Attiny85\]](#) This might seem totally useless, considering how advance current technology can be and you might even be like "Tsk! a Thermometer?" But there is a lot of experiment based on...



214. [Hack Wrist Watch LCD With Arduino || D-type LCD. || Arduino Digital Watch|| Vishal Soni](#) https://youtu.be/_IHsXlv9sZ8 Please subscribe to my YouTube channel. In this tutorial we will hack our old school digital watch which is no longer working now. So let's fix the watch Control it's LCD...



215. [Social Distancing Robot](#) This instructable was created in fulfillment of the project requirement of the Make course at the University of South Florida (www.makecourse.com). The Social Distancing Robot is a robot concerned with...



216. [Kid's Control Panel With Arduino\(s\)](#) Since getting an Arduino starter kit I was wondering what to make of all those fancy buttons, shiny LEDs, touchscreen LCD displays... I was thinking about weather station, but I...



217. [COVID-safe Useless Box](#) This instructable was created in fulfillment of the project requirement of the Makecourse at the University of South Florida (www.makecourse.com) Supplies One (1) Arduino Uno One (1) Adafruit 16-Channel 12-bit...



218. [A Shuttle Mission Control Mock-Up for Kids](#) A Mission Control Center for children was constructed to manage a pretend launch of the space shuttle. I wanted to play-out the make believe mission with nothing but LED lamps...



219. [Wizard Chess](#) Wizard Chess is a form of chess originally invented by J.K. Rowling in Harry Potter and the Sorcerer's Stone. The characters give verbal commands to the chess pieces and they move...



220. [Machine Learning With the Arduino: Air Quality Prediction](#) [Learning With the Arduino: Air Quality Prediction](#) Air Quality Prediction is a project that balances Arduino development and Machine Learning. I have always found the world of machine learning captivating but was never able to run models...



221. [Useless Box](#) Interested in making a useless box? Building this project was a really fun experience for me. Having very little prior knowledge about circuits, making this simple gadget was a great...



222. [Neo Pixel Tic Tac Toe \(Arduino Uno\)](#) Tic Tac Toe is a two player game in which the players compete to get 3 pieces in a row. In this project we constructed a Tic Tac Toe game...



223. [The CelloBot \(Robot Design Controlled by an Arduino Uno\)](#) Hello, I'm Andre and this is how you can build and design your own robot with dancing features. This robot was designed as a team project for my junior design...



224. [Wearing Your Heart on Your Sleeve](#) There are many smart devices available to us that are able to detect our heart rate and other bio data by using a method called photoplethysmography (PPG), a concept of...



225. [Over Engineered True Random Value Generator](#) Random numbers are often used in daily for example in encryption, gambling, gaming and much more. These numbers are generated by computers using complex algorithm but it can be predicated...



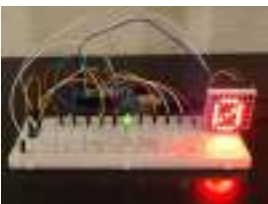
226. [DIY Wireless Pi Table Decor](#) Going through the Instructables website, I came across this fascinating "Pi Day Speed Challenge" contest. I decided to take part in the contest, as a challenge to myself of how...



227. [RC Strandbeest](#) {This instructable was created in fulfillment of the project requirement of the Makecourse at the University of South Florida (www.makecourse.com).} Inspired by the Wind powered machines built by "Theo Janse"...




228. [Carnival Lights Game](#) Welcome to an Arduino beginner project. It's a simplification of my previous instructable; it's designed to be easier to reproduce. This is a timing minigame where the active light moves back...




229. [Ultrasonic Occupancy Counter \(2-way\)](#) https://youtu.be/Ncsu_gZS-ql This simple Arduino project can be placed in the doorway of a shop or other venue to count the number of people inside. Limiting the number of people inside...




230.




[Automatic Arduino Pet Feeder – 3D Printed \(With Stepper Motor\)](#) Hi guys, I made an automatic 3D Printed Pet Feeder (or just dispenser, but I use it to feed my c that project. U can print...
231.




[How to Make Smart Obstacle Avoiding Robot Using Arduino Uno](#) https://youtu.be/tnwTIMyOL_8 Hi guys. In this instructable, I will teach you how to build an obstacle avoiding robot. The robot will be a small and simple 2-wheeled car which will move...
232.




[Flappy Bird Game Using Arduino & LCD Display](#) Hello friends welcome back to "Techno-E-solution" in this article I'll show you how to make "Flappy bird game using arduino Uno & LCD display". This is beginners level project, if...
233.




[Automatic Arduino Powered Camera Slider With Pan and Tilt](#) Are you fed up of shaky footage that ruins your video? In this Instructable I attempt to address this issue by building my own automated camera slider. I used the...
234.




[Open Theremin From Scratch: Building a PCB From Open Source Plans](#) <https://youtu.be/CKgfZY-ZhTc> This Instructable shows the steps I took to build my own open source theremin (Open Theremin) when there was none available to buy online. The lovely thing about open...
235.




[Automatic Missile Defence System](#) Automatic Missile Defence System destroys aerial targets like aircraft, high-altitude ballistic missiles, and low-altitude cruise missiles. Missile defense systems are really important for a nation like India which is surrounded...
236.




[Portable Auto Height Adjust Stand for Multipurpose](#) Height is a major concern in public places. Kids affected more in public places due to height problem. The problem places due to height concerns are 1) First place is...
237.




[Making an Alarm Clock That Asks Questions Randomly](#) Do you usually have trouble getting up? Set more than a dozen alarm clocks in the morning, but still can't wake up and turn them off in a daze. When...
238.




[TClock – Tissue Box Clock](#) In this Instructable I will show you how you can convert an empty tissue box into a cool Arduino based clock that can show the time, date, current temperature &...
239.




[Arduino Cyclone Reaction Time Game](#) In this instructable, we walk through how I made a "Cyclone" - type arcade game using an Arduino. This game also includes a reaction timer mode. Let's get started! A...
240.



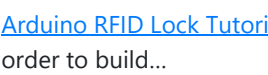
[Arduino Home Irrigation System With a 7 Segment Display](#) <https://youtu.be/lu4rbQRmRWo> In this instructable we are building a home irrigation system based on an arduino uno. I know there are tons of similiar projects / tutorials already floating the web,...
241.



[Alone Together – Plant Lamps](#) This instructable is part of the course Physical Interaction and Realization at KTH, Royal Institute of Technology. We are going to teach you how to build two, quite organic and...
242.



[Blink an LED With Arduino in Tinkercad](#) <https://youtu.be/yyG0koj9nNY> Let's learn how to blink an LED (light emitting diode) using Arduino's digital output. If you're new to Arduino, this is a great place to start. We'll connect an...
243.



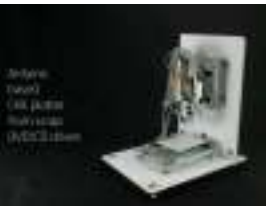
[Arduino RFID Lock Tutorial](#) Dear friends welcome to another Instructable. This is Nick from educ8s.tv and today we are going to learn how to use this RFID Reader with Arduino in order to build...



244. [6WD Shock Absorption Robot for Arduino](#) The new design of the 6WD mobile platform, the vehicle uses 2mm aluminum alloy, aluminum spray surface treatment. 6 high-speed DC motor (original 17000 rpm), with 1:34 full metal gear...



245. [Arduino Based CNC Plotter Made From Scrap DVD/CD Drives](#) Indeed, the world of web has quad trillion tons of information but when you want to build anything you need all the intricate little details. There are already a number...



246. [Cardboard Spider \(DIY Quadruped\)](#) Hello again and welcome to my new project. In this instructable I've tried to make a simple Quadruped made from materials accessible to everybody. I know to get a good...



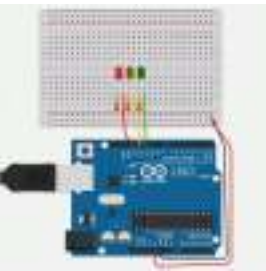
247. [Fake Dynamic Price Tag](#) Amazon's prices change constantly. If you leave items in your shopping cart for longer than a few hours, you'll likely get alerted about minute fluctuations – \$0.10 here, \$2.04 there....



248. [Line Follower Robot – Arduino Mega/uno – Very Fast Using Port Manipulation](#) Line follower robot is a useful robot that is used in ware houses, industries, and stores etc, where it follows a dedicated path. The presented robot captures line position with IR Sensors. If...



249. [Multiple LEDs & Breadboards With Arduino in Tinkercad](#) <https://youtu.be/MojSo7OtF9w> Let's learn how to control multiple LEDs using Arduino's digital outputs and a breadboard. Expanding upon the last lesson on blinking an LED, We'll connect some LEDs to the Arduino...



250. [Getting Started With Arduino: What You Need to Know](#) I have been working with Arduino and electronics for many years now, and I am still learning. In this ever-expanding world of micro-controllers, it is easy to get lost and...



251. [Motorized Window Blinds Controller](#) For this project you will be creating a device that is capable of opening and closing window blinds, both automatically and manually (via a push button), based upon a time...



252. [Music Reactive Infinite Mirror](#) Hi fellow makers! This is a project I've been working on for my Makerspace class at Collégial internationale Sainte-Anne. I truly hope you will like it! https://youtu.be/rHbPYaLJt_g *I'm sorry about...



253. [Electronic Chameleon](#) Ever wondered how the chameleon changes its colour through the changes in environmental colours? There's something called Melanocyte Stimulating Hormone or MSH. If you want to dig more into this...



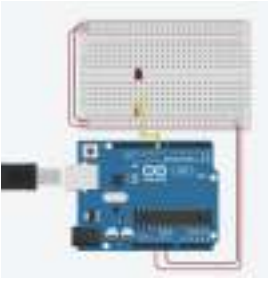
254. [Cheap and Simple Arduino Eggbot](#) In this Instructables I want to show how to make a simple and cheap arduino plotter that can draw on eggs or other spherical objects. In addition, soon Easter and...



255. [Arduino CNC Drawing Machine \(or the Road to Success\)](#) This project is based on mostly items which are easy to find. The idea is to take two unused computer disk units and combine them to create an automated drawing...



256. [Fading LED With Arduino Analog Output in Tinkercad](#) <https://youtu.be/X8dHbdhnGKY> Let's learn to adjust an LED's brightness using one of the Arduino's analog outputs. You've probably already learned how to use Arduino's digital i/o pins to send HIGH and LOW...



257. [Yes – No : an Arduino Driven Mailbox](#) In this project we're going to show you how to make your mailbox more fun and usefull. With this mailbox, if a letter is in your mail you have a...



258. [10 Useful Arduino Projects to Complete This Year](#) Whether you are new to the world of DIY electronic problems or an experienced fanatic, you will have heard of the Arduino. Arduino is the perfect source of microcontrollers; not...



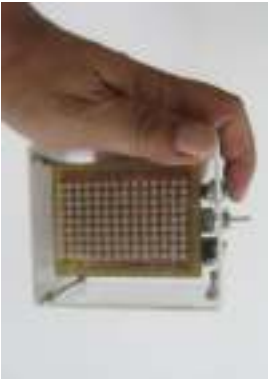
259. [Arduino Star-Finder for Telescopes](#) Space is big. Really big. Owning a small telescope can give a lot of pleasure, but it's often a struggle trying to locate specific objects in the night sky. In this...



260. [LED Cube Display](#) In this project, you will build an 8x8x8 LED cube as a display. After building the cube and learning the code basics, you will be able to write your own...



261. [GYRO & VOICE ARDUIGAMES](#) This gaming box is made from Arduino Uno R3, LoLShield, MPU6050 and Microphone module. With LoLShield, we can show a message/scrolling message or animation picture like: plasma effect, sinewave effect...With...



262. [Rob the Automated Robot](#) This instructable was created in fulfillment of the project requirement of the Makecourse at the University of South Florida (www.makecourse.com). In this tutorial you will learn how to make a...



263. [Show Winch](#) For this project, I wanted to create a winch that would be functional for use in a show in a theatre. Often, we have to fly in and out small...



264. [DMX Effect Controller](#) The goal of this project was to make a DMX-Controlled plug box which would allow on-stage effects or devices to be triggered remotely from the lighting console. This could potentially...



265. [Ultrasonic Range Finder](#) This instructable describes how to create a non-contact range-finder using an Arduino and an HC-SR04 ultrasonic module to measure distances in the range 2cm – 400cm. The accuracy is typically...



266. [Around the World Time Clock](#) Whether world trotting or just interested in knowing what time it is before making that late night call, a 5 zone world clock fits the bill. Since I got some...



267. [Magic Wand Target Practice \(IR Arduino Project\)](#) This is how I made my project for Electronic Art. This project was to focus on using an Arduino Uno to make a wearable. I did not focus so much...



268. [Squirting Scuba Helmet](#) In this project we will create a timer based water pump scuba helmet that will mist or spray every ten seconds. The original intention of this project is for the...



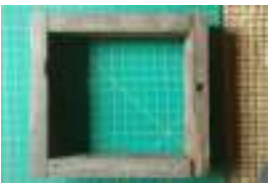
269. [HALO: Handy Arduino Lamp Rev1.0 W/NeoPixels](#) <https://youtu.be/byTgKFtpxKo> In this instructable, I will be showing you how to build HALO, or Handy Arduino Lamp Rev1.0. HALO is a simple lamp, powered by Arduino Nano. It has a total footprint of...



270. [The Artificial Plant Emotion Expressor \(A.P.E.X.\)](#) <https://youtu.be/BdaTOp6ieVo> Step 1: Introduction What is APEX? APEX is a smart (not to mention cute) plant monitoring device. Just plug it into any plant and it will display the "happiness"...



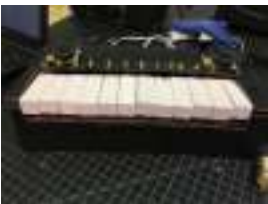
271. [Automatic Chicken Coop Door – Arduino Controlled](#) https://youtu.be/Kdt8fT_kVHE This Instructable is for the design of an automatic chicken door with manually alterable opening and closing times. The door can be opened or closed remotely at any time....



272. [Card Reading Shop Power Switch](#) This box reads any card with a magnet strip and, if you're on the registered personnel list, turn on the shop power via a relay. A sole person, to be...



273. [Electric-Analog Piano](#) Music is a big part of our culture -- everyone enjoys listening to music. But while listening to music is one thing, learning to make music is another thing. Similarly,...



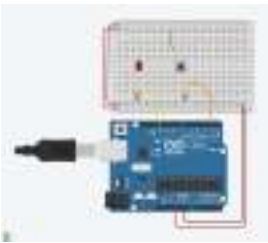
274. [Circuito Arduino Controller Pad](#) "Circuito" is a DIY controlling pad. It is a Supplementary project for my previous Robotic Arm project. The Controlling Pad is a computer controlled mechanical constructions that help to move and...



275. [LED Ukulele](#) <https://youtu.be/X27bylWzV4s> Hi, my name is Elaine. This project combines a lot of things that I enjoy so I hope you enjoy it as well! The LED ukulele we'll be building...



276. [Digital Input With a Pushbutton With Arduino in Tinkercad](#) <https://youtu.be/PC15jBx2UxI> Let's learn how to read a pushbutton using Arduino's digital input! We'll connect up a simple circuit using a solderless breadboard and use some simple Arduino code to control...



277. [Arduino Pocket Game Console + A-Maze – Maze Game](#) Welcome to my first instructable! The project I want to share with you today is Arduino maze game, which became a pocket console as capable as Arduboy and similar Arduino...



278. [3D Printed Prosthetic Hand With Capacitive Touch Sensing](#) In this Instructables I've come with an idea that can be implemented to existing 3d printed prosthetic hands. In existing electrically powered prosthesis I Couldn't find the use of capacitive touch...



279. [Phone+Arduino Controlled Teddy Ruxpin](#) In this instructable I will be demonstrating how to control Teddy Ruxpin with a phone and the help of an arduino. After this modification Teddy Ruxpin will work as Google...



280. [Anti-Social Glasses](#) You look up, they tilt down! A tilt switch controls 2 servos which open/ close shutters on a pair of custom glasses. project by Rob Faulkner and You-Wen Ji Step...



281. [Robotic Arm Controlled by Glove](#) Purpose: Gain experience, and problem-solving skills by creating a project to complete Outline- Use a glove to connect through an arduino to control a 3-D robotic printed "arm". Each of...



282. [Arduino Ultra Mega Timers](#) https://youtu.be/_PL-bci4e0s Hi! "Arduino Timer with on/off setpoint" is my most viewed instructable by far, so i got a lot of questions in the comments, inbox and youtube, about how to...



283. [RC Flight Data Recorder/Black Box](#) In this instructable I am going to be building a arduino based fight data recorder for RC vehicles, specifically RC aeroplanes. I am going to be using a UBlox Neo...



284. [Make an Illuminated Rainbow Synthesizer With an Arduino!](#) https://youtu.be/MONr_VLFBWg This Instructable shows you how to add a high-resolution touch screen to your Arduino and make a synthesizer that controls colored LEDs! The techniques you learn here can serve...



285. [TerraDome : Mini Tropical Greenhouse With Arduino](#) TerraDome is an indoor greenhouse for plants and tropical flowers shaped octagonal dome. It is driven by an Arduino Mega that regulates temperature and lighting through different sensors and an...



286. [Riding Through Walls: Google Street View Stationary Bike Interface](#) The Riding Through Walls: Google Street View Stationary Bike Interface allows you to cycle through Google Street-View from the comfort of your living room. Using some simple electronics, an Arduino,...



287. [NeoPixel Ring Kaleidoscope](#) I am pleased to offer instructions and material files for making a LightLogo Kaleidoscope! I have been thinking about doing this for many months and finally worked out a design....



288. [Arduino Serial Monitor in Tinkercad](#) Keeping track of everything going on in your program can be an uphill battle. The serial monitor is a way to listen to what's going on in your code by...



289. [OLED Tutorial | Convert SPI to I2C](#) In this tutorial, we are going to learn about OLED displays. Which can be very easily interfaced with Arduino and can display important parameters for your project, and see how...



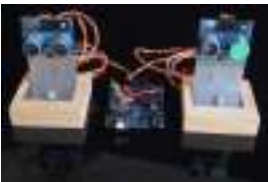
290. [Arduino Robot Arm](#) Arduino robot arms are among the most popular DIY projects. We decided to make ours out of recycled materials we found in our workshop. We hope you enjoy this build....



291. [Arduino-based LED "Bloody Red" Automatic Stairs](#) WHAT? Hi! I've made bleeding LED stairs! It's a new Instructables leveraging some hardware installation I had done already from a previous I'ble from mine. I made a RED animation...



292. [Dual Sensor Echo Locator](#) This instructable explains how to pinpoint the location of an object using an Arduino, two ultrasonic sensors, and Heron's formula for triangles. There are no moving parts. Heron's formula allows...



293. [Infinity Mirror With Ultra Sonic Sensors](#) This was my project for Hack Sioux Falls. I built it one weekend and it turned out a lot different than I thought it would. It was a lot of...



294. [Bluetooth Controlled Robot Car](#) were you always fascinated by RC cars ? Ever wanted to make one yourself ? controlled by your own smartphone ? ----> lets start <https://youtu.be/iETSrpiCAn0> So, hey guys, here in...



295. [ARDUINO BASED OIL DISPENSER](#) we all love food isn't that right? of course yes, everyone has tried cooking once in their life, and already knows the struggle to get exact amount of oil for the perfect...



296. [PIR Motion Sensor With Arduino in Tinkercad](#) Let's learn to sense movement in a room with a PIR motion sensor and Arduino's digital input. We'll connect up a circuit using a breadboard and use some simple Arduino...



297. [80s Style Melting Digital "Dali" Clock](#) This Instructable shows you how to build an 80s style digital "dali" clock with melting digits. I first came across this style of clock on the Apple Macintosh back when...



298. [Lightpipe 7-Segment Display](#) What if I told you that you could build a display out of shoe laces!? Well that is exactly what I've done! Building your own seven segment display is nothing...



299. [Light Sensor \(Photoresistor\) With Arduino in Tinkercad](#) Let's learn how to read a photoresistor, a light-sensitive type of variable resistor, using Arduino's Analog Input. It's also called an LDR (light-dependent resistor). So far you've already learned to control...



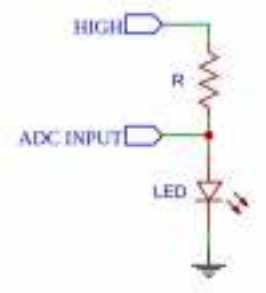
300. [ITTT – Sunlight Simulating Lightbox](#) I made a Sunlight simulating lightbox with a mountain village skyline, that I might upgrade to a wake-up light some time, for a school project. Step 1: Get the Supplies...



301. [*IMPROVED* Smart LED Candle: Reactive to Sound and Aesthetically Pleasing](#) Remember the "smart" LED candle from a few months ago? Well, the idea was nice, but the overall execution lacked some oomph. Technologically and aesthetically speaking there was a lot to improve....



302. [An LED You Can Blow Out Like a Candle!](#) LEDs are designed to emit light, but they also make surprisingly capable sensors. Using only an Arduino UNO, an LED and a resistor, we will build a hot LED anemometer...



303. [TMP36 Temperature Sensor With Arduino in Tinkercad](#) In this project, you will turn the Arduino into a thermometer! Use a temperature sensor to measure your skin temperature, and register the output with three LEDs. Even though the...



304. [Ultrasonic Distance Sensor in Arduino With Tinkercad](#) Let's measure distances with an ultrasonic rangefinder (distance sensor) and Arduino's digital input. We'll connect up a circuit using a breadboard and use some simple Arduino code to control a...



305. [Arduino Robotic Bartender – 3D Printable & Bluetooth](#) Build yourself a low-cost easy to assemble bluetooth controllable robotic bartender using an Arduino Uno. This easy Arduino based project can be 3D printed and is a cool Arduino project...




306. [Animated Spooky Pumpkin Eyes](#) A couple of years ago while looking for inspiration for a new animated Halloween prop we stumbled upon a video from YouTube contributor 68percentwater called Arduino Servo Pumpkin. This video was exactly what we were...



307. [Autostat : a Remote Thermostat](#) The question you are probably asking is "why are you making another remote thermostat?" The answer to that question is, I had to, and the market smart thermostats are too expensive. Fair...



308.



[Dropping Spider on Doorbell – Halloween Scare Prank](#) This Halloween my son Max, came up with the idea to drop a spider on anyone who tries to ring our doorbell... I immediately jumped on the idea and we...



309.

[Screaming Necronomicon](#) "Alright you Primitive Screwheads, listen up! You see this?" - Ash, Army of Darkness Each time an unsuspecting victim lifts the cover this disgusting book, a bloodcurdling scream pierces the air....



310.

[D.I.Y SMART RGB MATRIX 8×16](#) In this project, I'll show you how to make your own 8×16 RGB LED Matrix using Arduino Uno/ Nano. An LED Matrix can show scrolling messages, display animations, music spectrum...



311.

[OLED I2C DISPLAY WITH ARDUINO Tutorial](#) Hello there! Fellow electronics enthusiasts, I am quite sure we all make some or other projects, as a part of our learning experience or academics. We sure would want to display...



312.

[Spooky Teddy – Arduino Powered Self-rocking Chair & Rotating Head](#) Spooky teddy is a 2-part Halloween decor. The first part is the teddy bear that has a 3d printed mechanism that can rotate with an Arduino UNO and a solenoid....



313.

[Animated Chocolate Box \(with Arduino Uno\)](#) Once I saw a beautiful box of chocolate in a store. And the thought occurred to me to make an awesome gift out of this box - an animated box...



314.

[Remote Color Controlled Jack-o-Lantern](#) As usual, this Halloween I decided to create a project related to the season. Using Prusa I3 and Thingiverse, I printed a Halloween decoration where the color is controlled remotely...



315.

[Arduino – Piano Tiles](#) Hello internet people, This is gonna be about how to make what DEFINITELY isn't a rip off of a mobile game on an arduino uno r3. so to start, your gonna need...



316.

[Tchaibotsky \(a Piano Playing Robot\)](#) This instructable was created in fulfillment of the project requirement of the Makecourse at the University of South Florida (www.makecourse.com) Tchaibotsky is an Arduino powered piano playing robot. The motivation...



317.

[Control Your Model Train Layout With Your Mobile Phone!](#) Controlling a model train layout with a wired throttle and turnout controllers might be a good start for beginners but they pose a problem of non-portability. Also, the wireless controllers...



318.

[Arduino Polygraph Machine \(Lie Detector\)](#) In this project, We'll try to get some information from the human body by using simple sensors and Arduino. You can use this information to create a lie detector machine....



319.

[Simon & Whack-a-Mole Game Using Arduino \(also in Tinkercad\)](#) If you grew up in '80s, most likely you played an electronic toy game called Simon. In this Instructable, I will be building an Arduino kit that you can code...



320.


[How to Control Home Appliances With TV Remote With Timer Function](#) Even after 25 years of its introduction to consumer market, infrared communication is still very relevant in recent days. Whether it is your 55 inch 4K television or your car...

321.

[Connect 4 Game Using Arduino and Neopixel](#) Rather than just giving an off-the-shelf toy gift, I wanted to give my nephews a unique gift that they could put together and (hopefully) enjoy. While the Arduino code for...



322.



[Controlling a Neopixel Led Ring With a Gesture Sensor](#) In this tutorial we're going to play with a gesture sensor (APDS-9960) and a neopixel ring to learn how to combine them both using an Arduino UNO. The end product...



323.

[NES Controller Piano / Ultrasonic Therenin Mash-Up](#) I recently built a simple 8 key piano using an original NES controller and Arduino UNO board.Unlike conventional Arduino piano projects which require one digital pin for each key / button the...



324.

[Use Your NES Controller As On/Off Switch for Lights](#). Turn your NES controller's START BUTTON into an ON/OFF switch for lights with this Instructable - Other versions I have seen either gut or modify the electronics but in this project the electronics are intact...



325.

[Escape Robot : RC Car for an Escape Game](#) The main purpose of this project was to build a robot that would differentiate itself from already existing robots, and that could be used in a real and innovative area....



326.

[Brew|LOGIC – Bluetooth Enabled Arduino Brewing Controller](#) Brewing beer has become a worldwide phenomenon. Beer and wine is being crafted in ordinary kitchens in every corner of the world. One phrase that you may hear from your...



327.

[Lego Mini Memory Game](#) A year or so ago, I wrote up an Instructable about installing a bunch of LEDs in a Lego Mini Cooper. The innovation, such as it was, was that the LEDs could...



328.

[Light Sensing LEDs using Arduino](#) I was recently reserching on LEDs and I stumbled upon this page as I read it I found that LEDs are not just used to emit light but the also...



329.

[SensoDuino: Turn Your Android Phone into a Wireless Sensors Hub for Arduino](#) UPDATES Nov 23, 2013: SensoDuino 0.160 gets a face left. Nov 19. 2031: OPINION: The Amazing Synergy Between Arduino & Android. Nov 19, 2013: SensoDuino 0.159 is out. Android phone date (y,m,d) and time...



330.

[Sleep n' Tweet using an Arduino](#) Now I am lucky enough to work at the greatest company in the world as a University of Waterloo, co-op student. It might not even be a company you've heard...



331.

[3 Amazing BRAIN / MIND Control Projects Lights LedStrip LED With Arduino and Neurosky](#) <https://youtu.be/kbzIDT0Aby8> Have you ever wanted to turn the lights ON or OFF just by thinking about it? Or do you want to know how stressed you are by looking at...



332.

[Yoga Breathalyzer](#) The yoga breathalyzer is a breath visualization tool to help you understand and get in touch with your breathing. Breath is the basis of yoga and meditation, and this biofeedback...



333.

[Capacitive Touch Arduino Lamp](#) The Problem It is late night, and your cellphone rings. You can't see where it is, you blindly grope around your nightstand, trying in vain to find that illusive switch...




334.

[Music Box With Mini Monitor\(OLED\) and LED](#) My idea was a box that would play music when you open it. It also has a display with an emoji on it that awakes, greeting you. There is also...

335.

[Interactive Glowing Mushrooms](#) <https://youtu.be/z1V3YJo0Cwk> This instructable will show you how to make mushrooms that will glow in the dark. You can turn individual mushrooms off and on again by pressing the top. I...



336.  [Infinite Disco](#) In this project, I made an infinity mirror based on a dodecahedron that reacts to sound . Step 1: Materials Essential materials: Arduino Uno3mm thick 100x50cm MDF2mm thick 100x50cm plexiglass3...



337. [Arduino light seeker](#) First of all, I'm from Switzerland so please excuse my english mistakes. Here is one of my first little project I did with my Arduino Uno. It's is just a...



338. [The MicroSlice | A tiny Arduino laser cutter](#) A few years ago I saw an Instructable where Groover had used a pair of DVD-RW drives to make a pocket laser engraver. Inspired by the idea, driven by the recent purchase of...



339. [Secret Compartment Chess Set](#) I play chess pretty poorly and have always wanted to get better, but I don't even own a chess set. I decided I wanted to make my own set, but...



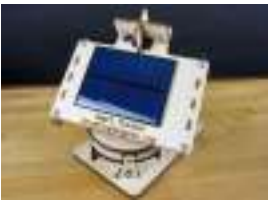
340. [Arduino Projects on a breadboard \(no serial com\)](#) Intro: If you've got an Arduino Uno and want to start duplicating projects without having to buy an Uno every time... get ready to live! This instructable will show you...



341. [Timelapse Panning controller for GoPro Cameras](#) This instructible will show you how I built (and you can also build) an Arduino Timelapse Panning controller for GoPro cameras. There are obviously some refinements that can be made...



342. [Interactive Touchless Light](#) Hi everyone! I'd like to share the project I have been working on here. I got inspired to experiment with capacitive touch sensing through a project in my university. I...



343. [Dual Axis Tracker V2.0](#) Way back in the year 2015 we designed a Simple Dual Axis Tracker for use as a fun student or hobby project. It was small, noisy, a little complicated, and provoked a...



344. [Sky on the Wall \(Mood Lighting-IR remote\)](#) I love LED and stars, and after saw another instructables about star constellation and some mood lighting that was very inspired and I decided I wanted to take that idea...



345. [Arduino Chessclock](#) I could not find instructions on a good Arduino chess clock so instead I built my own which I will describe here. Step 1: Parts list [box color="#985D00" bg="#FFF8CB" font="verdana"...



346. [Laser Triggered Countdown](#) This is a simple arduino based project that consists of a laser tripwire that, when triggered, will begin a countdown sequence on red, orange and green LEDs. I designed this...



347. [Smart Heart Monitor](#) No longer will you have to pay hundreds of dollars for a heart rate monitor! The Smart Heart Monitor will be able to do all of your cardiac measuring needs...



348. [Phone Controlled Mood Lighting](#) Dorm rooms are notorious for their dreadful lighting, so I wanted to make a cool alternative light source for my room at school. I made it phone controlled so there...

349. [Smartphone Controlled RC Car Using Arduino](#) This Instructable shows how to make a Smartphone controlled Arduino Robot Car. Update on 25th Oct 2016 Step 1: Youtube Video Link <https://youtu.be/cC2crT941wQ> Step 2: Parts and Tools Required 1....



350. [How to Make a Makeblock Music Robot with the Music Robot Kit \(NEW\)](#) Makeblock is an aluminum extrusion based construction system that provides an integrated solution for aspects of mechanics, electronics and software design. With Makeblock you can make professional robots, toy machines...



351. [Accelerometer Dice with 123D Circuits](#) This is the project that got Autodesk's CEO Carl Bass a little extra attention from the TSA on his way to MakerFaire Tokyo. Here's an article about that... We made this as...



352. [5X5 dot matrix on Arduino](#) With this you just type the text you want on your computer and your 5x5 dot matrix shows the message. Used: ~25 leds ~Arduino uno ~5x 100ohm resistor ~and a...



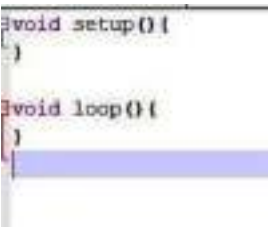
353. [Arduino Noise Machine Jacket](#) As a project for one of my college classes, we were asked to create something using the Arduino. After a few different ideas, I settled on putting an Arduino noise...



354. [Arduino PWM enabled high power shield or non-shield on the cheap](#) Micro controllers are great, but have you ever wanted to control something bigger then, lets say an LED? If you have, look no further (unless you want more then 0.6Amps...



355. [LOG Arduino Sketches 101](#) So this Lazy Old Geek (LOG) gets bored sometimes and wants something to do. Actually, sometimes I get tired of trying to solve hardware problems, which are sometimes software problems....



356. [Occupational Therapy Dexterity/Cognitive Aid](#) The Need: Occupational Therapy Device Occupational therapy is used in treating Traumatic Brain Injury during many phases of recovery and rehabilitation. As the patient's condition improves, occupational therapy helps them regain skills ranging from...



357. [Motion Control Slider for Time Lapse Rail](#) This instructable explains how to motorize a time lapse rail using a step motor driven by an Arduino. We will mainly focus on the Motion Controller that drives the step motor assuming...



358. [Diorama, Bat in the cave using Arduino](#) The purpose of this instructable is to outline our development of this bat in the cave as well as provide instructions and tips for future engineers hoping to complete a...



359. [Keyfob Deadbolt using an Arduino Board](#) The key to my apartment never worked quite right because it is a copy of a copy of a copy. I am fairly certain that the dead bolt is original...




360. [LED Candle – Lights, Flickers, Blows Out, Smokes, and Smells](#) About This Candle & How to Read This Instructable Here's my take on a LED candle that offers the full experience of a real candle. Start to finish. Be sure to watch...




361. [For Newbies at Arduino Programming: Telling the Direction of Fire in 3 Seconds WITH PIXEL LIGHTS!](#) During my high-school sophomore year, the 3rd floor of our house lighted on fire due to a short circuit. Fortunately, my family was away on vacation for Christmas. But if...




362.




[Voice Controlled Smart Key Holder](#) Are you the kind of person who’s not good with managing keys and always have to try each key for every other lock? Well don’t worry, just grab a little...
363.




[Ultrasonic Theremin \(Teach Sound\)](#) <https://youtu.be/i9N0bSRXOZ8> The Ultrasonic Theremin is an Arduino project that uses a cheap theremin to teach sound waves. By changing the distance of my hand to the device, I am changing...
364.



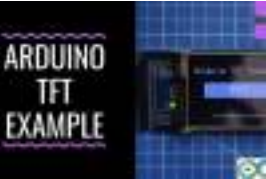
[How to Make a Picoballoon](#) <https://youtu.be/KjPzfzLEluY> What is a picoballoon and why would I want to build it?! I hear you ask. Let me explain. You all probably know what a HAB (High Altitude Balloon) is. It's...
365.




[Security Check RFID System Based on Arduino and RS485 Data Bus](#) In this DIY guide I will show you how to make your own security check system based on Arduino! You can use this system in areas with security guards (e.g....
366.




[Interactive Dandelion](#) <https://youtu.be/BhkrtQ5O1Rk> This project shows how to make an interactive picture of a dandelion. It starts as a yellow flower with LED's for petals then changes into a white dandelion clock,...
367.




[Arduino TFT Interfacing Basics](#) TFT touchscreens are the amazing graphical interface which can be used with microcontrollers such as Atmel, PIC, STM, as it has a wide color range, and good graphical ability and...
368.




[Arduino Based Wireless \(RF\) Weather Station Network](#) In this DIY guide I will show you how to make your own wireless weather station! My communication protocol will allow you to have up to 10 sensor stations in...
369.




[Rory the Robot Plant](#) Rory is a funny looking robot in the form of a plant, interact with some inputs by sensors, play music and detect any human movements around, in addition, to snap...
370.




[Arduino Powered, Sensor Controlled Fading LED Light Strips](#) https://youtu.be/mzeA3yxu_Ig <https://youtu.be/jH2gEoB5x1w> I recently had my kitchen updated and knew that lighting would ‘lift’ the look of the cupboards. I went for ‘True Handleless’ so I have a gap under...
371.



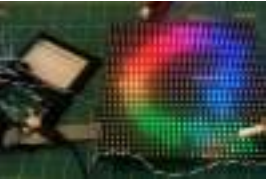
[Arduino Bluetooth Camera](#) Today you can hardly surprise anyone with a mobile phone with a camera, wireless gadgets and other technical advances. Thanks to the Arduino platform, millions of people have discovered the...
372.




[Self Irrigating Planter \(with Moisture Sensor\)](#) The problem we picked was - Growing plants in limited space by amateurs. Many people would like to grow plants (basic vegetables, herbs for the kitchen, etc) but do not...
373.



[Arduino Controlled Robotic Arm W/ 6 Degrees of Freedom](#) I am a member of a robotics group and each year our group participates in an annual Mini-Maker Faire. Beginning in 2014, I decided to build a new project for each year's event....
374.



[Using a LED Matrix As a Scanner](#) <https://youtu.be/9F9EUaXhj5M> Ordinary digital cameras work by using a large array of light sensors to capture light as it is reflected from an object. In this experiment, I wanted to see...
375.



[CNC Arduino Plant Growing Machine](#) <https://youtu.be/Sidcq555B-8> I designed a CNC Arduino Plant Watering machine for my local high school science and engineering fair. I ended up getting second place in the maths and engineering category,...
376.

[Wipy: the Overly Motivated Whiteboard Cleaner](#) https://youtu.be/_uObXbdwi4w Introduction Did you ever get tired of cleaning the whiteboard? Have you ever wondered how much your life would improve if a robot could do this for you? You...



377. [BotTender](https://youtu.be/p6wJBZe1YVg) <https://youtu.be/p6wJBZe1YVg> BotTender, a bartender assistant that pours the perfect shot! BotTender is an autonomous robot that is designed with the aim of automatising bars. It is placed on top of...



378. [Magic Feeler](https://youtu.be/_IEu2h-2iWs) https://youtu.be/_IEu2h-2iWs The project conducted as part of the Computational Design and Digital Fabrication seminar in the ITECH masters program. A Project by: ShuChuan Yao, Jeongwoo Jang, Zijie Tan Arduino UnoServo...



379. [Slapstick](https://youtu.be/g1-p7gsNzpk) <https://youtu.be/g1-p7gsNzpk> The project conducted as part of the Computational Design and Digital Fabrication seminar in the ITECH masters program. <https://icd.uni-stuttgart.de> The Idea Exam period is coming. And you already feel sleepless...



380. [The Moral Compass](#) The project conducted as part of the Computational Design and Digital Fabrication seminar in the ITECH masters program and was brought to you by Vanessa Costalonga, James Hayward and Christo...



381. [Arduino Digital Clock Synchronized by the 60Hz Power Line](#) This Arduino based digital clock is synchronized by the 60Hz power line. It has a simple and inexpensive common anode 4 digit 7 segment display which shows hours and minutes....



382. [Tilt Compensated Compass](https://youtu.be/PY_17f5RByI) https://youtu.be/PY_17f5RByI This instructable explains how to make a tilt compensated compass using an Arduino UNO R3, an LCD display, and an IvenSense MPU-9250 multi-chip-module that contains an MPU-6050 accelerometer /...



383. [Temperature Controlled Vaccine & Insulin Cooler](#) Keeping cool saves lives In the developing world, vaccines are the front line of defense against dangerous illnesses such as Ebola, Influenza, Cholera, Tuberculosis and Dengue to name a few....



384. [Arduino RC Robot](https://youtu.be/ytwDgwwSEc0) <https://youtu.be/ytwDgwwSEc0> Description A durable, 3D printed, remote controlled Arduino based robot with several hundred meters range. A modular quick-connect motor scheme lets you rapidly prototype different robot designs without any...



385. [EqualAir: Wearable NeoPixel Display Triggered by Air Pollution Sensor](https://youtu.be/WUYE5HS9Gtc) <https://youtu.be/WUYE5HS9Gtc> The aim of the project is to make a wearable t-shirt that displays an evocative graphic when air pollution is above a set threshold. The graphic is inspired by...



386. [Arduino-controlled DIY Coffee Roaster](#) In this Instructable we will have a look at modifying a hot-air popcorn machine to turn it into a fully automatic and temperature-controlled home coffee roaster. Roasting coffee at home...




387. [Motion Tracking Face](https://youtu.be/Nqh3Ej8qfTU) <https://youtu.be/Nqh3Ej8qfTU> Meet Chartreuse! Chartreuse's face follows you when you walk by. When she sees you, her eyes turn yellow and she gets a happy expression in her eyes. As you...




388. [Arduino Water Cycle Diorama](https://youtu.be/JqdOQ7wjEsQ) <https://youtu.be/JqdOQ7wjEsQ> We'll be making a diorama presenting the water cycle, using Arduino and some motors to add movement and lighting. It has a school feel - because it is actually...



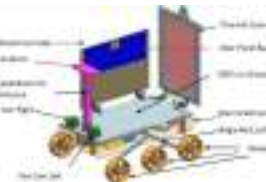
389.




[Old Man and the Arduino GPS](#) So this Lazy Old Geek (L.O.G.) hasn't been able to do an Instructable for a few years. At 70 years old, the brain doesn't work as well as it used...
390.




[Tim's Cybot Arduino NANO Remote Control](#) This project is to create an Infrared Remote Control to control the Original Cybot received with the magazine Ultimate Real Robots, started back in 2001. Reason for making the remote:(a...
391.




[IOT Lunar Rover Raspberypi+Arduino](#) <https://youtu.be/mcdEGQTxE88> This project is inspired by the Indian moon mission Chandryaan-2 Which will take place in September 2019.This is a special mission because they are going to land on the...
392.




[DIY Arduino Starter Kit Shield](#) In this guide I will show you how to make your own Arduino learning shield. This learning shield can be useful at schools, universities and to everyone that want to...
393.




[Betta Fish Feeder](#) I'm setting up a betta fish tank and wanted to make an automatic fish feeder so he never misses a meal. I've seen other DIY fish feeders that just shake...
394.




[Cat Whisker Sensory Extension Wearable \(2.0\)](#) This project is a continuation and reimagining of my former colleague's (metaterra) "Whisker Sensory Extension Wearable". The purpose of this project was to focus on the creation of novel, computationally-enriched...
395.




[DIY Smart Dustbin With Arduino](#) Here we will make a Smart Dustbin by using arduino and ultrasonic sensor.I hope you guys enjoy learning this project. Supplies: Arduino UnoUltrasonic SensorServo MotorDustbin Step 1: Preparing the Opening...
396.




[Bicycle Speedometer Display](#) What Is It? As the name suggests, in this project you will learn how to create a display for your bike that consists of both a speedometer and an odometer....
397.




[Alexa Controlled Dog Feeder](#) This is our dog Bailey. She's part Border Collie and Australian Cattle Dog so sometimes she's smarter than her own good, especially when it comes to telling time and knowing...
398.




[Monster Catcher Night Light](#) <https://youtu.be/iJaVelyJZwk> This nightlight doubles as a trap to catch monsters under the bed! Before you go to sleep at night, place it under your bed and it will catch any...
399.




[Weather Based Music Generator \(ESP8266 Based Midi Generator\)](#) Hi, today I'll explain how to make your own little Weather based Music generator. It's based on an ESP8266, which is kind of like an Arduino, and it responds to...
400.



[MAX7219 LED Dot Matrix Assembly and Testing](#) <https://youtu.be/DLC6FyxNayo> A Dot-Matrix Display is a display device which contains light emitting diodes aligned in the form of matrix.This Dot matrix displays are used in applications where Symbol, Graphic, Characters, Alphabets, Numerals...
401.



[Popsicle Stick Robotic Arm](#) <https://youtu.be/bP358pV-vVY> Here's how to build a simple robotic arm with a gripper using popsicle sticks, an Arduino, and a few servos. Supplies: Feel free to use similar materials or whatever...
402.



[Infinity Gauntlet Controlled Home Automation](#) <https://youtu.be/-H7YejeUWbl> In my previous project i have made an infinity gauntlet that control a light switch. I wanted to use six stones and each stone can control appliance, door lock, or...

403. [Arduino Magnetometer](#) What are we building? Humans can't detect magnetic fields, but we use devices that rely on magnets all the time. Motors, compasses, rotation sensors, and wind turbines, for example, all...



404. [Unsafe Noise Level Alert System](#) The Oshman Engineering Design Kitchen (OEDK) is the largest makerspace at Rice University, providing a space for all students to design and prototype solutions to real-world challenges. To serve this...



405. [The Brachistochrone Curve](#) <https://youtu.be/1BdO8J0iynY> The brachistochrone curve is a classic physics problem, that derives the fastest path between two points A and B which are at different elevations. Although this problem might seem simple it...



406. [RS485 – ARDUINO AND INDUSTRIAL DISTANCE SENSOR](#) I have in my hand a distance laser sensor with high precision and speed. It is used in industrial environments for object positioning or detection applications. According to technical documents,...



407. [ARDUINO PH METER](#) In this project, we will be making a benchtop pH meter using the gravity analog pH circuit and probe from Atlas Scientific and an Arduino Uno. Readings will be displayed...



408. [Playing Chess Against Arduino](#) This project has been developed with the “Games” contest in my mind, I hope you’ll like it and give your vote 😊 The idea of this project is quite simple....



409. [DIY Low Cost Air Hockey Table](#) <https://youtu.be/nLU8pFqxcTU> A professional air hockey setup is usually available only in arcades due to the sophisticated systems that are required to operate it. Our goal was to build a DIY...



410. [Ultrasonic Mapmaker Using Arduino and MatLab](#) Vision is one of the most exciting senses you can endow on your robot. The ability to perceive obstacles allows a robot to make an educated decision regarding further movements....



411. [Solar Power Data Logger](#) Ever wanted to know how much solar power you could yield by putting PV cells in a specific place on or around your house? This Instructable shows you how to...



412. [Arduino Based Smart Home IOT System](#) Hello, I am Michalis Vasilakis from Arduomotive.com and in this Instructables guide I will show you how you can easily make your own smart home system based on Arduino uno and an...



413. [Arduino – LCD 1602A I2C – PASSWORD PROTECTED DOOR ACCESS With Relay – KY-019](#) <https://youtu.be/GnYi9Y2Eloc> Hello world! Today i made a simple code to control a electric strike lock with a Password/ Access Code using a 1 channel relay. I don't have such a...




414. [How to Make the Knock Lock for Arduino Starter Kit](#) In this instructable i will be showing you a video on how I made a knock lock using the arduino uno starter kit. I did run into a few problems...




415. [The Simplest Buzzer Tutorial: Using Arduino](#) <https://youtu.be/pq3YFhjS-Wc> Hey Makers, Lets make a Simple Quiz Buzzer using Arduino! Step 1: What We Can Do With It? What we can do with it? >Quiz Game Buzzer >Play Tunes...




416.




[Joystick Controlled Robot Arm Using an Arduino](#) Purpose and description of this guide This instructable is a hand-in for a school project that we made. The purpose of this project was to create a robot arm control...
417.




[Arduino Countdown Timer With Setup Buttons](#) In this Instructables guide I will show you how to make your own Arduino two digit countdown timer. I made my own circuit by using the ATmega328 micro controller but...
418.




[Easy Arduino LED Dice](#) This instrcutable will show you how to hook up LEDs to show a face of a dice when a pushbutton is pressed. Step 1: Supplies For this project you will...
419.




[Arduino Robot Catapult](#) <https://youtu.be/6cXrxevZAPs> <https://youtu.be/K3U2OlnTnME> Hello there fellow makers, This instructable is my attempt to make a robot for the 'ROBOTICS CONTEST' competition in instructables. So here it is 😊 I'll start this...
420.




[Arduino Bluetooth Car Controlled by Labview](#) This is a Arduino RC car, originally based off of a project made by Owen_soo. It is very maneuverable, able to do quick turns, go backward and forward with just a...
421.




[Temp & Humidity Sensor With LCD Disp & LED Indicator](#) In this instructable, I have used the DHT11 Temperature & Humidity sensor & Arduino UNO to display the current temperature & humidity readings into a 16 x 2 LCD Display. Alongside, I have also created...
422.




[Automated Greenhouse](#) We decided to design a greenhouse as subject for our electronic project. The goal was to regulate the temperature inside the greenhouse thanks a lamp, a servomotor to open a...
423.




[Control LED Using IR Remote : Simple](#) Hello everyone, In this instructables we will control LED using IR remote. Step 1: Gather the Parts A breadboardA LEDA 220ohm resistorAn Arduino UNOA TSOP382 IR receiverSome jumper or hookup wires...
424.




[Sunlight Detection Alarm](#) Most technology Instructables are fun to construct, and often easy to build. This is one that shares those features, but also solves a practical problem we had. To prevent fading...
425.




[Arduino 8x8 LED Matrix](#) In this instructable I'm going to show you how to Interface with LED matrix using an Arduino and MAX7219 IC, this project can be used to make low resolution images...
426.




[Arduino: How to Build an Obstacle Avoiding Robot](#) This instructable is the written version of my "Arduino: How To Build An Obstacle Avoiding Robot" Youtube video that I've uploaded recently. I strongly recommend you to check it out....
427.




[Using ESP-01 and Arduino UNO](#) In our previous tutorial, we learned how to set up the ESP8266 ESP-01 and establish communication with other devices. In this tutorial we are going to show how to use the ESP-01 module to give...
428.



[Getting Started With the ESP8266 ESP-01](#) The ESP8266 ESP-01 is a Wi-Fi module that allows microcontrollers access to a Wi-Fi network. This module is a self-contained SOC (System On a Chip) that doesn't necessarily need a microcontroller to manipulate inputs and outputs as...
429.




[Sending Data From Arduino to Python Via USB](#) For several projects you might want to acquire some data from an Arduino board. There are several options and the one that I chose here uses the USB connection. I...
430.




[Read a Potentiometer With Arduino's Analog Input](#) <https://youtu.be/-EDYMQ9IcZA> Let's learn how to read a potentiometer, a type of rotating variable resistor, using Arduino's analog input! We'll connect up a simple circuit using a solderless breadboard and use...


431.




[DIY – Automated Garden Irrigation – \(Arduino / IOT\)](#) This project will show you how to build an irrigation controller for a home garden. Capable of measuring soil moisture readings and activating irrigation from a garden tap if the...
432.




[Peggy – Arduino Portable RF Rain Tracker](#) My country mild climate lets the sun to shine for the greatest part of the year, then tumble driers are not widely used and so we often use to drain...
433.




[Home Automation Using Arduino With Wifi, Bluetooth and IR Remote Control](#) This is a tutorial to show how to build a home automation system using arduino with Wifi [ESP8266-01], bluetooth (HC-05) and IR remote control. Home automation results in a smarter...
434.




[DIY Smart Follow Me Drone With Camera \(Arduino Based\)](#) Drones are very popular toys and tools these days. You can find professional and even beginner drones and flying gadgets in the market. I have four drones (quadcopters and hexcopters),...
435.




[How to Use Water Flow Sensor – Arduino Tutorial](#) In this tutorial you will learn how to use one water flow sensor with an Arduino board. The water flow sensor consists of a plastic valve body, a water rotor...
436.




[Arduino Password Unlock Door Security System](#) Hello! In this Instructables guide I will show you how to make your own password unlock door system by using the Arduino uno board. I made my own circuit by...
437.




[The Interactive Donation Box](#) Donation boxes can be much more interesting and attractive when you combine them with electronics and a little bit of programming. This instructable will show you how to. As the...
438.




[Tracked Robot Bluetooth Controlled by Arduino Via Android Application](#) <https://youtu.be/J3DwgZvD2js> After trying to remote tracked robot by IR remote control.I have proceed to control same robot platform by Bluetooth Arduino controller via Android application.This method is more reliable,longer distance,pretty...
439.




[Connecting “stuff” Via Bluetooth / Android / Arduino](#) A very good wireless local area network (and personal) is undoubtedly the Bluetooth (BT). Today in our day-to-day is common to find us using cell phones, stereos, cameras, etc., interconnected...
440.




[Voice to Arduino: Control LEDs Using MIT Speech Recognizer](#) Hello, everybody!!! It has been some time I had not updated my post here. Today I would like to share with you guys an experiment I made. I am going...
441.



[Drawing Robot](#) <https://youtu.be/bkCg6-8Zuf0> https://youtu.be/Laz_4UWLW6Q Please vote for Drawing Robot on this link. Thanx in advance Fixing my drawing incapability with my robotics skills and to me results were not that bad. Now...
442.

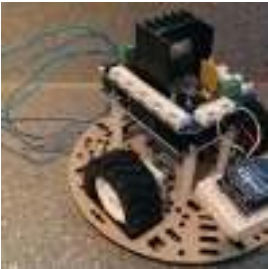


[Mini BillBoard](#) Designing a Mini BillBoard using LED Lights(different colors) , Arduino and Bread Board. Thought of creating a mini billboard, that could display my name ("Josh") . This is for one...
443.



[How to Make a Remote Controlled Robotic Hand With Arduino](#) <https://youtu.be/efO-ooyS-mo> This is my school project for the 5th year of high school (I'm Italian, we have 5 years of high school). It consists in an artificial hand controlled by...

444. [Remote Controlled Robot](#) The purpose of this final project was to create a small mobile robot and control it via a wireless controller. To accomplish our goal, we decided to use the Arduino...



445. [Das Blinken Bonken! an Arduino Ball Throwing Game Platform.](#) <https://youtu.be/UPtVqJkY8N8> This is a fun and pretty easy project that I built as a Christmas present for my kid who loves throwing things. Watch the video to see what it...



446. [KeySampler](#) This instrument was build by Lieven Menschaert and Danny Leen using an Arduino Uno and some hardware components (rotary encoder, potentiometer and simple iron bolts). The software running the...



447. [Arduino Uno Xylophone](#) This xylophone uses the Arduino Uno and a multiplexer to identify when one of eight keys are struck, and play that sound via midi sound on a computer. An optional...



448. [How to Make a Cheap Attiny Arduino Board](#) Well most of time i get troubled when i need Arduino in some projects where i need few I/O pins Well thanks to Arduino-Tiny platform Arduino program can be burned into the...



449. [DIY Arduino 3D Laser Scanner](#) FabScan is an open-source, do-it-yourself 3D laser scanner. It started out as a Bachelor's thesis by Francis Engelmann, supervised by René Böhne. You can find official project here. I made my own...



450. [Control TV With Any Phone \(Even Phones Without IR Blaster\)](#) Do you want to control your TV and several other gadgets that are IR controlled? Ya but my phone doesn't support it because it doesn't have an IR blaster. Don't worry...



451. [A Levitating Sphere Rotates Glows and Blinks With Arduino](#) A levitating little Death Star in Instructables invited me to the new project with Arduino. Three policies were decided and kept to differentiate it from the forerunner. Do it myself with...



452. [Program Your Arduino With an Android Device Over Bluetooth](#) Hello world, in this Instructable I want to show you, how to program your Arduino Uno with your Android device over Bluetooth. It is very simple and so cheap. Also...



453. [Arduino Mosquito Repeller](#) In this instructable I'm going to show you how to build a mosquito repeller using an Arduino. The repeller is in the form of a shield that plugs into the Arduino...



454. [DIY Standalone Weather Station Powered by Arduino](#) Hello Makers out there Again this is not a Step by step Instructable. Like always i forgot to take take snaps since the inception of this project. The idea of...



455. [DIY CNC for 60\\$ \(Large Work Area\)](#) Hi there I've been here after a long time, and this time I've made a huge project as compared to my earlier ones. This is a full-sized 250 mm X...



456. [The MicroSlice V1 | a Tiny Arduino Laser Cutter](#) A few years ago I saw an Instructable where Groover had used a pair of DVD-RW drives to make a pocket laser engraver. Inspired by the idea, driven by the recent purchase of...



457. [How to Make a Cheap Arduino MIDI Controller](#) I'm a huge fan of technology and music, but when I decided to start making my own electronic music, I was discouraged by the high price of MIDI keyboards and...



458. [DIY Multi Featured Robot With Arduino](#) This robot was mainly built for understanding Arduino and combining various projects of Arduino to form a Multi Featured Arduino Robot. And further, who doesn't want to have a pet...



459. [DIY Bare Minimum Arduino Mega 2560](#) [2017 Update] Eagle files please click here. The objective of this project is to create a version of Arduino Mega 2560 board that has lower component count and smaller board size...



460. [Arduino Radio](#) <https://youtu.be/3WbK-S2WDLQ> Update 16.04.2015 just thought how would a "cool" kit look a like, so I get an altoids tin box eat all the thinks inside and put all necassary parts...



461. [Arduino Laser Harp](#) A couple of weeks ago I presented my culmination project, framed laser harp, at New York City College of Technology. Work on it was so interesting for me, that I...



462. [Arduino Simple Memory Game](#) This project is all about creating a simple game to test your memory. I'll be using a Teensy 3.0 board. (If you want to know more about this board please click...



463. [Salvaging Liquid Crystal Displays \(LCDs\)](#) Almost all electronics have some sort of human interface, from blinking lights and beeping speakers to seven segment alphanumeric and Liquid Crystal Displays. This Instructable is about salvaging and testing...



464. [Datalogger With Temperature Sensor and Photoresistor](#) In this project I'm going to create a simple Datalogger with my Arduino and an Ethernet shield.I'll be using a photoresistor and a temperature sensor and all the information will...



465. [Use Arduino Code on a TI Launchpad MSP430](#) You can now use Arduino sketches to program your TI Launchpad MSP430. The video show me programming an Arduino Mega 2560 and a TI Launchpad MSP430 with the same Arduino...



466. [Wearable Wireless Gesture Control With PHIRO Pro + Arduino + Pocket Code Smartphone App \(JEDI MODE\)](#) Once again, here we are with another tutorial to "Awaken the Force" within you! With the new Star Wars movie just around the corner, we thought it would be fun to use...



467. [Arduino Lock Bar...sorta](#) This project was tough but nothing worth doing is easy and i am ver proud that i was able to accomplish what i did. To know that my skills are...



468. [Arduino Self Balancing Robot](#) In this project I will describe the construction of robots standing in equilibrium with Arduino.We explained in our previous version of the android controlled project. In this project we will...



469. [Arduino Insight -Beginner LED'S and \(Binary Counter 16 Bit\)](#) Hello friends...!!! This is my first tutorial on Instructables, in this tutorial I'm going to show you* Write a simple program for glowing LED* Group of LED program* Explain analog...



470. [Arduino Thermometer](#) Its hot here in Los Angeles! Besides the massive drought California is in, Its not as cool around here lately. I wanted to build something to see just how hot...



471. [Controlling a MIDI CC in Ableton Live With an Arduino Uno](#) <https://youtu.be/rx75N4OZCsk> In this instructable we will use a potentiometer on an Arduino Uno to control a MIDI CC in Ableton Live. A MIDI CC stands for Continuous Controller, i.e. a number in...



472. [Arduino Ethernet Camera](#) I will introduce a Arduino ethernet Camera. You can take a picture inside of house which have a this arduino ethernet camera by just opening the web site if you...



473. [Arduino Robot](#) first of all, i am sorry if i have grammar mistakes, i am asian and i am 13 years old, i study arduino by my self (mostly my self) and...



474. [Control Your Home Appliances Using Arduino and Relay](#) Hello everyone, In this instructable we will be using Arduino And Relay module to control home appliances. This instructable covers: Basics of Relays.Connecting Relays with Arduino.Controlling AC appliances using Relays....



475. [The Maven Box: an Arduino Controller for Software Developers](#) Every job has it's routine. I am a software developer who works with a Git/Maven based workspace everyday. So when I start working, my daily routine is to update and...



476. [Simple Arduino-based Thermometer](#) Building an Arduino project isn't just about making all the components talk to one another. It's about creating an actual object or prototype out of your small creation, and giving...



477. [VU Meter – LED Noise-o-Meter for Classrooms](#) I built this a short while ago as an idea to use in a primary classroom setting. Poster displays are often used by primary teachers wanting to control the noise...



478. [Arduino Uno R3 Battery Tester](#) This simple project is intended to help you in answering the lifelong question "Does this battery have any juice left?". Although popularity of single cell batteries (such as AA, AAA,...



479. [Program Arduino Pro Mini Using Arduino Uno](#) Hello everyone. Today I am going to show how to program arduino pro mini using arduino uno. If you already had a arduino uno and you newly buy arduino pro...




480. [Arduino Nano to Arduino Uno Adapter](#) Arduino Nano is a nice, small and cheap member of the Arduino family. It is based on the Atmega328 chip, what makes it as powerful as the biggest his brother...




481. [Arduino LED Exploration](#) Arduino LED ExplorationMy program shows you all of the data on your Led from the first light to the normal operation light. From that data you can pick an RS...




482.




[Arduino Voting Machine](#) This instructable will teach you to build a simple Arduino based Voting machine using simple components such as push buttons and LCD. The highlighting feature of this system is that...
483.




[Arduino-Controlled 12V Battery Charger](#) The circuit presented here can automatically charge a 12V, 7Ah battery, or above. Special features of the charger are as follows. It automatically controls the charging current as per the...
484.




[12-Multi National Digital Clock on Arduino UNO](#) The presence of 12-Multi-National Digital clocks is very common at the lobby / front desk of star hotels, showing time & dates of several countries where from most of the...
485.




[Arduino-Based Coil Winding Temperature Recorder and Alarm Generator](#) Monitoring the temperature of a transformer or electric motor winding involves data acquisition. This project is developed to monitor the temperature of an electric motor and a transformer with high...
486.




[Arduino-Based MOSFET Terminal Identification System](#) Metal oxide semiconductor field effect transistor (MOSFET) is a semiconductor device widely used for switching applications and amplifying electronic signals. While the facility to determine the type and pin configuration...
487.




[DC Panel Meter using Arduino](#) Panel meters in regulated power supplies are used to display electrical parameters like voltage and current. Presented here is a circuit to display DC voltage and current of power supplies,...
488.




[Image Processing Based Fire Detection & Extinguisher System Using Arduino](#) This is an image processing based fire detection and extinguisher system using Arduino. It is basically the system is divided into two parts: Fire detection 2. Fire alert and extinguisher...
489.




[Light Animations Using Arduino and MATLAB](#) Light animations are visually appealing and hence widely used for advertising purposes. In this project, we present a MATLAB-based graphical user interface (GUI) approach to control the glowing pattern of...
490.




[Gesture-Controlled Robot](#) A gesture-detecting wearable sleeve that can direct a robot in different directions. Things used in this project Hardware components Arduino MKR1000 × 1 Arduino Motor Shield × 1 Arduino UNO...
491.




[BLUE P: Wireless Arduino Programming Shield](#) Many times we make projects using Arduino, while working with it we need to connect it with PC to upload program using USB cable. In this tutorial, I'm going to...
492.



[Interfacing a Laser LED with Arduino](#) This project turns on and turns off a laser LED after every second. It can also monitor its own supply voltage level. The circuit can be extended for use as...
493.














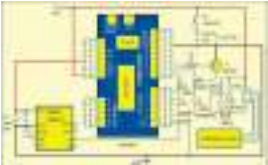
[Multi-Sensor Data Plotting using Arduino IDE](#) Monitoring of various process variables such as temperature, pressure, viscosity, humidity, pH and flow-rate is very important in steel plants, petrochemical and other such industries. The human-machine interface (HMI) at...
494.



[Teleoperated Robot for Sensing the Toxic Gases](#) Remotely operated ground vehicle for sensing the toxic gases which is helpful for firefighters and researchers. Things used in this project Hardware components Arduino Yun × 1 Arduino MKR1000 ×...
495.

[GPS Clock using Arduino](#) Global positioning system (GPS) synchronised clocks give accurate time. These clocks are universal and commonly used at railway stations, bus stands and airports. These are widely used for military purposes...

		
496.		Optical Theremin Musical Instrument Using Arduino Uno Board Theremin is an early electronic musical instrument controlled without physical contact by the thereminist (performer). It is named after the Russian inventor, Léon Theremin, who patented the device in 1928....
497.		Arduino-based Front Office Visitor Alarm This Arduino based visitor alarm is useful for offices, clinics and shops. It alerts you to the entry of a visitor by producing a beep sound every time the door...
498.		Arduino Projects: Audio VU Meter Presented here is an Arduino based audio meter that uses a liquid crystal display (LCD). A VU meter or standard volume indicator (SVI) is a device that displays a representation of signal...
499.		Control your Human-Like Robot from Anywhere you Are! Buto is my 'real steel' robot project. Now, BuTO has been connected to the Internet and can be controlled remotely. Things used in this project Hardware components Arduino MKR1000 ×...
500.		DC Motor Starter Using Arduino Uno Board Motor starter reduces the load, torque and current surge of a motor during startup. On starting, the motor takes more than five times the normal running current. This overheats the...
501.		Interfacing Multiple LCDs With Arduino Here we describe interfacing of three 16×2 LCDs with common data lines to an Arduino Uno board. Four data lines of all the three LCDs are connected to digital pins...
502.		Arduino Based Digital IC Tester Using MATLAB Testing of digital electronic systems generally involves applying a set of test stimuli to inputs of the device-under-test (DUT) and analyzing responses of the system using a response analyzer. If...
503.		Home Temperature while you're on holiday ... When you are out of your home for Christmas Holiday you can visualize the Temp and Humidity values by your smartwatch using ArduinoMKR1000. Things used in this project Hardware components...
504.		Controlling A Linear Actuator With An Arduino There is a wide application of linear actuator where one wants to move something but they do not want to physically get involved in moving it. There are quite a...
505.		Arduino based Smartphone Controlled Robot Car Nowadays smartphones can be used to control a host of electrical and electronic devices including motors, music systems and lights. Here we present an Arduino based robot car, which can...
506.		RFID Based Access Control Using Arduino RFID is a non-contact, automatic identification technology that uses radio signals to identify, track, sort and detect a variety of objects including people, vehicles, goods and assets without the need...



507.

[Arduino Based Programmable Digital Data Display](#) LCDs are widely used in applications like token-display machines in smalls and supermarkets, order number displays in restaurants and café, and so on. The project presented here demonstrates the working...



508.

[Arduino Based RGB Colour Code Generator](#) Red, green and blue (RGB) are the basic colours for generating various other colours by mixing colours in a particular proportion. This technique is used in TVs, mobiles etc. Similarly, Web...



509.

[Wi-Fi Controlled Robot Using Arduino UNO And Blynk](#) This Wi-Fi controlled robot can be controlled from anywhere using the ARMA IoT shield for UNO and the Blynk App which provides the user interface. Overview Simple...



510.

[Arduino as AVR Programmer](#) For my project I need two Arduino boards, but I have only one Arduino Mega 2560 board (refer Fig. 1). I can either buy an Arduino Uno board (that costs...



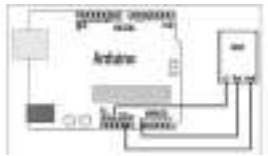
511.

[Arduino-Based Shadow Alarm](#) Shadow alarms are usually used for protection against theft. A shadow alarm is a device that sounds an alarm when a shadow falls on it. Described here is a simple...

Test Points	
Test point	Details
TP0	5V ground
TP1	5V power supply
TP2	5V power supply
TP3	High when shadow is detected
TP4	High when shadow is detected
TP5	High when shadow is detected (LED1 glows)
TP6	High when shadow is detected

512.

[Arduino Piggyback on Raspberry Pi](#) Arduino is a perfect mindless slave. Give it a job and it performs the task endlessly without defaulting even for a nano second. On the other hand, Raspberry Pi, or...



513.

[My XL Wireless Photo Wall – PictureLED](#) A project utilizing the mkr1000 and 960 ws2812b to display a picture on the wall, you take a photo with the smartphone and you can see it! Things used in...



514.

[Logging Sensor Data in MS EXCEL through MATLAB GUI](#) The measurement and analysis of process parameters such as temperature, flow, conductivity, speed, viscosity, and stress play a crucial role in providing information about the process/system under consideration. Parameter values...



515.

[Smart Irrigation System](#) This project is based on the AEIOU heuristic framework of Design Engineering Approach. Design for Performance, Safety and Reliability is ensured in terms of segregation of the low voltage and...



516.

[Control MeArm Robot With MKR1000 And Your Smartphone](#) This project allows you to control a MeArm Robot with your smartphone, as if you had many potentiometers in your hands. Things used in this project Hardware components Arduino MKR1000...



517.

[Tiny Wi-Fi Switch for \\$3](#) Out of curiosity, I ordered the tiny ESP8266 relay switch from aliexpress.com but never knew it could be so embarrassing to find the right way to operate. The vendor said...



518.

[Arduino Mkr1000 and Java Swing Shooting Game](#) Arduino Mkr1000 + Uno + Leonardo + Java = Christmas shooting game. Things used in this project Hardware components Arduino UNO & Genuino UNO × 1 Arduino Leonardo × 1...



519.

[Vehicle Tracking System Based on GPS and GSM](#) Presented here is an Arduino-based vehicle tracking system using global positioning system (GPS) and global system for mobile communication (GSM) modules. GSM modem with a SIM card used here uses...



520.

[Arduino MKR1000 Weather Station](#) Weather station monitors temperature, pressure, light, dust, soil moisture values and displays on the OLED screen and Cayenne dashboard. Things used in this project Hardware components Arduino MKR1000 × 1...



521.

[Temperature Monitoring on Smartphone](#) This article describes a temperature monitoring system on an Android smartphone. Temperature is sensed by a temperature sensor installed in the circuit and is sent over Bluetooth to the smartphone....



522.

[Build Your Own Digital Weighing Machine](#) This article describes how to build a simple and low-cost digital kitchen weighing machine, which can measure weight of up to five kilograms. This digital weighing machine is easier to...



523.

[Microcontroller Projects: Fridge Temperature and Humidity Indicator](#) We can measure temperature and humidity inside the fridge using a normal temperature-humidity indicator but relative humidity (RH) could be inaccurate in that case. The moment the fridge door is...



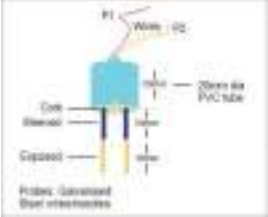
524.

[Automatic Railway Gate for Unmanned Railway Crossing](#) The aim of this project is to save lives of people who are crossing unmanned railway crossings; by providing an automatic railway gate solution. There are many accidents occurred and...



525.

[Digital Soil Moisture Meter](#) A digital soil moisture meter is used for indicating the water content of a given soil sample. [caption id="attachment_31551" align="alignright" width="300"] Soil moisture sensor head[/caption] As crop production requires water...



526.

[Short-Range FM Radio Station](#) This article shows you how to build a small radio station at home and share music with others. The station can also be used for making announcements in colleges, industries,...



527.

[Line Frequency Meter Based On Reciprocal Counting](#) Precise measurement of line signal frequency is very important in many applications, especially in the management of power grid systems. Tasks like calibration of governors of engines that run generators...



528.

[RGB Color Detector Using TCS3200 Sensor Module](#) This is a simple Color Detector using Arduino Uno R3 and TCS3200 color sensor module. It can be useful for color identification and detection for food-processing units, color printer applications,...



529.

[LDR Based DC Motor Speed Control](#) A light-dependent resistor (LDR) whose resistance is inversely proportional to the intensity of light is often used as a sensor in electronic projects that involve the use of light. This...



530.

[IoT-Enabled Air Pollution Meter With Digital Dashboard On Smartphone](#) Presented here is a IoT enabled air pollution meter to monitor air quality on your smartphone using Blynk application and Arduino board. Blynk is an Internet of Things (IoT) platform...



531.

[Controlling A Robotic Car Through MATLAB GUI](#) This project presents the implementation of a MATLAB based graphical user interface (GUI) to control the movement of a robotic car. The commands to move the car in forward, reverse,...



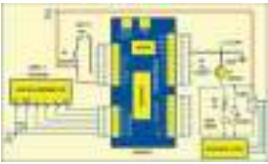
532.

[Microcontroller Projects: Sonar Water-Level Meter](#) Three-fourths of the earth is water, out of which 97 per cent is saline (in oceans, seas and groundwater). The remaining 2.5 per cent to 2.75 per cent is fresh...



533.

[Sequential Tilt-Motion Lock](#) Here is a project for locking and unlocking with a tilt sensor by tilting it in a defined sequence. It uses an accelerometer module to detect the tilt motion. If...



534.

[Serial LCD Module](#) In most electronic systems, it is necessary to provide information in the visual form for a convenient user interface. The most commonly used displays in electronic systems are LED, LCD...



535.

[RGB LED Cube with Sound to Light Capabilities](#) The objective of our final project was to build a 5x5x5 RGB LED cube that can display a certain color depending on the frequency of music playing. There are two...



536.

[Smart Aquarium](#) The goal of our project is to display the status of a previously implemented smart aquarium. The previously implemented system includes an external power supply, Arduino Uno, Ethernet Shield, ULN2803...



537.

[8 Best Arduino Starter Kit for Beginners](#) Best Arduino Starter Kit Arduino Starter Kit from Arduino Elegoo Uno Project Super Starter Kit with Tutorial for Arduino Vilros Arduino Uno 3 Ultimate Starter Kit SunFounder Project Super Starter...



538.

[Interfacing Flame Sensor with Arduino to Build a Fire Alarm System](#) In this article we interface Flame Sensor with Arduino and learn all the steps to build Fire Alarm System by using Arduino and flame sensor. Flame sensor module has photodiode to detect the light and op-amp...



539.

[DIY Arduino Motor Driver Shield](#) In this DIY session, we make an Arduino Motor Driver Shield to drive DC motors, stepper motor and Servo Motor. Compatible with Arduino UNO and Arduino Mega, this motor driver shield can operate...



540.

[Automatic Water Dispenser using Arduino](#) Automatic Water Dispenser using Arduino About 71% of earth is covered with water, but sadly only 2.5% of it is drinking water. With rise in population, pollution and climate change,...



541.

[Arduino Based Real-Time Oscilloscope](#) Arduino Based Real-Time Oscilloscope The Oscilloscope is one of the most important tools you will find on the workbench of any electronics engineer or maker. It is primarily used for...



542.

[Controlling Arduino with Raspberry Pi using pyFirmata](#) Controlling Arduino with Raspberry Pi using pyFirmata Although Raspberry Pi and Arduino are two different hardware in terms of their applications and structure, but they both are considered as two competing open source...



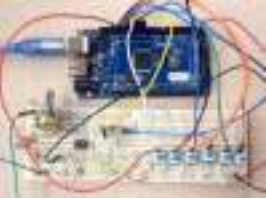
543. [DIY Self Balancing Robot using Arduino](#) After being inspired by RYNO motors and other self balancing scooters from Segway, I always wanted to build something similar. Thinking for while, I decided to build a Self Balancing Robot...



544. [LC Meter using Arduino: Measuring Inductance and Frequency](#) All embedded lovers are familiar with multimeter which a great tool to measure voltage, current, resistance etc. A multimeter can measure them easily. But sometimes we need to measure inductance...



545. [Arduino Based Guitar Tuner](#) Hi guys, during the last few weeks, I've been working on reconnecting with my love for the guitar. Playing the box guitar was how I relax few years back before...



546. [IoT Based Patient Monitoring System using ESP8266 and Arduino](#) IoT based Patient Monitoring System using ESP8266 and Arduino Health monitoring is the major problem in today's world. Due to lack of proper health monitoring, patient suffer from serious health...



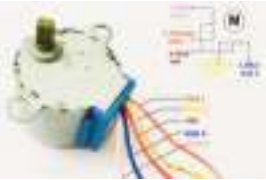
547. [Interfacing nRF24L01 with Arduino: Controlling Servo Motor](#) Arduino NRF24L01 Tutorial to Control Servo Motor While Internet of things (IoT), Industry 4.0, Machine to Machine communication etc are getting increasingly popular the need for wireless communication has become...



548. [DC Motor Control Using MATLAB and Arduino](#) In this tutorial, we will show you how to control DC motor using MATLAB and Arduino. If you are new with MATLAB then it is recommend to get started with simple LED...



549. [Stepper Motor Control using MATLAB and Arduino](#) Stepper motors is a brushless DC motor that rotates in discrete steps, and are the best choice for many precision motion control applications. Also, stepper motors are good for positioning, speed...



550. [Interfacing LabVIEW With Arduino](#) Interfacing LabVIEW With Arduino In previous article of Getting Started with LabVIEW, we have seen about LabVIEW and how it can be graphically programmed and executed in computer (software level). Now...



551. [GUITAR TUNING PROJECT WITH ARDUINO UNO](#) Arduino Uno kit on the Board at the entrance of the TL082 opamp used Guitar Tuning circuit audio audio input and frequency to detect the "Arduino-Frequency-Detection" software used. According to...



552. [ARDUINO UNO ROBOTIC ARM PROJECT](#) The Robot arm is controlled with the computer 6 servo motor used robotic arm system, built on the Arduino Uno is not more complex, additional links to make the robot...



553. [ARDUINO UNO WITH INTERESTING CLOCK PROJECT](#) I've shared this with different time interesting projects carried out with the Arduino Uno this time, I think the most interesting thing isn't debatable kullanışımı project but the idea as...



554. [SPECTRUM ANALYZER CIRCUIT ARDUINO UNO](#) the Arduino Uno module held with MAX7219 8x8 LED matrix display module graphic equalizer spectrum analyzer and the filter driver in the project 2 integration of MSGEQ7. In addition, with...



555. [Domotic Greenhouse](#) Electronic greenhouse controlled real-time, because the environmental conditions change continuously, so we need an efficient monitoring. Things used in this project Hardware components Arduino MKR1000 × 1 Arduino UNO &...



556. [USB CNC PROJECT ARDUINO UNO](#) Arduino uno USB module is controlled via the circuit built on a CNC, which supports the SVG image format in post format, used CNC motor driver L298N motor driver Arduino...



557. [Alexa Controlled Door Sign Demo](#) Use Alexa to tell your door sign what message to display. Things used in this project Hardware components Arduino MKR1000 × 1 Waveshare 200x200, 1.54inch E-Ink display module × 1...



558. [DRAWING ROBOT MATLAB ARDUINO UNO PROJECT](#) Drawing robot Arduino Uno module is built on a parts kit that was used for the mechanical part of servo motor 3 except that the toy is being used. Generate...



559. [Make SMART Your Washing Machine](#) If also you, like me, put your vest on the washing machine and wait the best moment for wash the clothes... make SMART your Washing Machine. Things used in this...



560. [ARDUINO UNO FM AM TRANSMITTER CIRCUIT SI4713](#) The most important part is the construction of a functional sample of a Arduino Uno software-defined one transmitter. After agreement with the supervisor and current options, she was elected concept...



561. [GESTURED CONTROLLED SMART HOME](#) Not only this project has all the Smart Home features but it also includes MYO gesture control, allowing control of lights with your arm. Things used in this project Hardware...



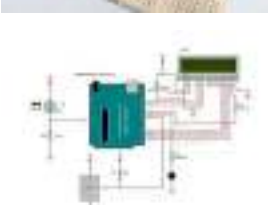
562. [ARDUINO LIBRARY FILES PROTEUS](#) The Proteus simulation program works especially well for testing microcontroller projects, but at least it gives some insight. Proteus libraries for Arduino Arduino Proteus Models Proteus Arduino Mega1280 Proteus Arduino...



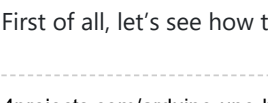
563. [BALANCE ROBOT ARDUINO UNO](#) Previously shared " Analog Balance Robot "project using Arduino Uno . Motor drive SparkFun Ardumoto this module is based on the L298 motor drive integration SMD materials are used because...



564. [ATMEL ARDUINO COLORED CONNECTION CHART](#) Projects or schematics, drawings that will work when preparing pcb Atmel AVR Microprocessors Information Tags for "Share" drawings directly on Atmel microcontrollers. Colored linking expansions are more comprehensible for those...



565. [DID YOU EVER WANT TO HAVE A VIDEO DOORPHONE?](#) Recycle your old cellphone to build one and connect it by a browser to your new phone, PC or tablet! Things used in this project Hardware components Arduino MKR1000 x...



566. [DIY ARDUINO RELAY DRIVER SHIELD](#) In this DIY project we make a 3-Channel Arduino Relay Shield Circuit for relay based applications. We designed an isolated PCB for 3 relays. By using this Arduino Relay Shield, we can operate 3 AC...



567. [IOT BASED ELECTRICITY ENERGY METER USING ESP12 AND ARDUINO](#) We all know about Electricity energy meters which are installed in everyone's house or offices to measure the electricity consumption. At last of every month, many of us get worried...

568. [WHAT IS ROTARY ENCODER AND HOW TO USE IT WITH ARDUINO](#) A Rotary encoder is an input device which helps the user to interact with a system. It looks more like a Radio potentiometer but it outputs a train of pulses...


569. [REED SWITCH INTERFACING WITH ARDUINO](#) Reed switch is used in many of the real-life applications such as magnetic door switch, laptops, smartphones etc. In this article, we learn about Reed Switch and guide you to...

570. [SMART LCD BRIGHTNESS CONTROL USING ARDUINO AND LDR](#) Smart LCD with Automatic Brightness Adjusting Using Arduino and LDR Sensor Here is a simple Arduino project that focuses on adjusting the brightness of an LCD screen whenever there isn't sufficient...


571. [ARDUINO REAL TIME CLOCK USING DS1307 RTC MODULE](#) In this article, we are going to build an Arduino Real Time Clock using DS1307 RTC Module and 16x2 LCD module for display. First of all, let's see how to interface...




572.




[DIY Arduino Weather Station using Nokia Display](#) Learn to Build Arduino Weather Station using DHT11, Soil Sensor, and Nokia Display In this project tutorial, we are going to make an Arduino weather station using 2 sensors; FC-28 soil...
573.




[Adaptable Sensor and Notification System](#) A easy to use adaptable sensor and notification system that is designed to be used as a temporary change of state notifier. Things used in this project Hardware components Arduino...
574.




[Rain Sensing Wiper using Arduino and Servo Motor](#) Automatic Rain Sensing Wiper Using Arduino This project is designed to build a car wiper that automatically detects the rainfall intensity and regulates the frequency of wiper operation. It is...
575.



[Arduino Gear Motor Interface Using IC L293D](#) In this article, we are publishing a project which explains different aspects of Arduino-Gear motor interface. Gear motor is a specially designed DC motor whose gear assembly helps in increasing...
576.




[Smartphone Controlled Atomic Weather Station](#) This project combines Atomic Time keeping with local weather station, and additional cool projects using Arduino and Raspberry Pi. Things used in this project Hardware components Arduino UNO & Genuino...
577.




[Arduino Nano Tutorial – Pinout & Schematics](#) Arduino Nano Pinout The Arduino Nano, as the name suggests is a compact, complete and bread-board friendly microcontroller board. The Nano board weighs around 7 grams with dimensions of 4.5 cms...


578.



[Arduino Alcohol Detector Circuit Board](#) In this project, I am going to Interface an Alcohol Sensor with Arduino. Here I have designed an Arduino Shield PCB using EASYEDA online PCB simulator and designer. Arduino Alcohol...
579.




[Automatic Pet Feeder using Arduino](#) Today we are building an Arduino based Automatic Pet Feeder which can automatically serve food to your pet timely. It has a DS3231 RTC (Real Time Clock) Module, which used...
580.




[Amazon DRS Promise: Never Miss Coffee Break Again!](#) Amazon Dash Replenishment Service Automatic coffee ordering robot using Arduino MKR1000. Never miss another coffee break again! Things used in this project Hardware components Ultrasonic Distance Sensor × 1 LED...

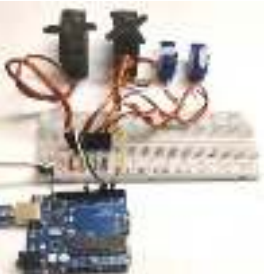
581.



[Interfacing Graphical LCD \(ST7920\) with Arduino](#) There are many types of LCDs used in Electronic Projects. We have already used 16X2 LCD in many of our projects and also used TFT LCD with Arduino. You can find...
582.




[TVOC and CO2 Measurement using Arduino and CCS811 Air Quality Sensor](#) Sadly, in the name of progress, we have polluted the air, water, soil and the food we eat". So monitoring the air quality is very crucial now days because of...
583.




[Controlling Multiple Servo Motors with Arduino](#) Using one or two Servo with Arduino is Easy but what if we want to use more than one Servo Motors? Here, we are going to show you that how...

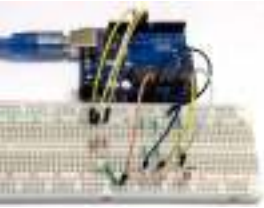
584.




[Arduino Uno Rev3](#) Arduino Uno is a microcontroller board based on the ATmega328P (datasheet). It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog inputs,...
585.




[Eggzact Science](#) Entry for the "World's Largest Arduino Maker Challenge" - An IoT Project with Windows10, the Arduino MKR1000, and Chickens. Story Completed App - Home Page Completed App - Connection...
586.




[Arduino Color Mixing Lamp using RGB LED and LDR](#) What if we can generate different colors using a single RGB led and make our room's corner more attractive? So, here is a simple Arduino based color mixing lamp which...
587.




[Voice Controlled LEDs using Arduino and Bluetooth](#) Controlling LEDs with voice command seems to be a difficult task, but it's easy and you can quickly build it. We just need an Arduino UNO to serially communicate with...
588.




[Auto Intensity Control of Power LED using Arduino](#) Be a bright spark, lights off till it's dark!" sometimes we forget to turn off the lights and waste electricity and you must have also seen street light turned on...
589.




[Arduino RFID Door Lock](#) You have seen RFID Door Lock Mechanism in some Hotels and other places, where you don't need a key to unlock the room. You are given a card and you just need...
590.




[Arduino Based Piano with Recording and Replay](#) Arduino has been a boon for people who are not from the electronics background to build stuff easily. It has been a great prototyping tool or to try something cool,...
591.




[TIA Weak Artificial Intelligence IoT Assistant](#) IoT security/environment monitoring device with NFC & fingerprint authentication devices and a Weak Artificial Intelligence Assistant. Things used in this project Hardware components Arduino UNO & Genuino UNO ×...
592.




[DC Motor Control using XBee & Arduino in Proteus](#) Hello friends, I hope you all are doing great. In today's tutorial, we are gonna design a project named DC Motor Control using XBee & Arduino in Proteus ISIS. I...
593.




[IoT Smart Socket Arduino And Cayenne](#) A really smart IoT socket. Switch ON/OFF your device by the smartphone using Cayenne Dashboard and Arduino MKR1000. Things used in this project Hardware components Arduino MKR1000 × 1 RobotGeek...
594.



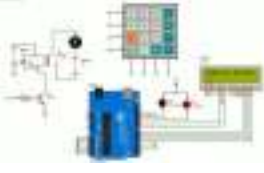
[MKR1000 Universal Remonster!](#) WiFi connected universal remote with smart phone webapp. Things used in this project Hardware components Arduino MKR1000 Arduino Nano R3 General Purpose Transistor NPN Triggers the PNP transistors of IR...
595.




[Temperature and Humidity monitoring with DHT22 sensor Arduino Uno R3](#) The objective of this tutorial is to learn how to use the DHT22 sensor with Arduino uno. The room temperature and humidity will be printed to serial monitor and also...
596.



[Controlling RGB LED using Arduino and Wi-Fi](#) In last tutorial, we explained controlling a Robot using Wi-Fi and Arduino, and in this article we are with our next IOT Based Project- RGB LED Flasher using Wi-Fi. Here we have used...
597.




[Password Based Door Lock System Using Arduino SIMULINO UNO](#) Security is the main challenging things in this modern world . Any one can enter your private home at any time to stole your property . To protect your home...
598.

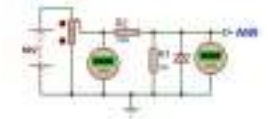


[Getting Started with Arduino Due](#) ARDUINO DUE is an ARM controller based board designed for electronic Engineers and Hobbyists. ARM architecture is very influential in modern electronics. We are using the ARM architecture based controllers...


599.




[PWM with Arduino Due](#) Arduino Due is an ARM controller based board designed for electronic engineers and hobbyists. ARM architecture is very influential in modern electronics, we use them everywhere like our mobiles, iPods...
600.



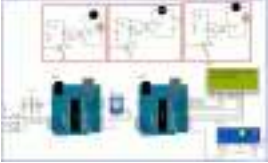
[Digital voltmeter using Arduino UNO Range:0-50 volt Using SIMULINO UNO](#) This is a simple project showing you how to make a digital voltmeter using Arduino where the readings are displayed in a Liquid Crystal Display LCD20x4. The proposed voltmeter design...
601.




[Servo Motor Control with Arduino Due](#) As discussed earlier, Arduino Due is an ARM controller based board designed for electronic engineers and hobbyists. This DUE board can be used for making CNC machines, 3D printers, robotic...
602.



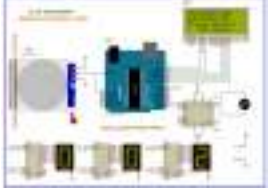
[Make Arduino Based Home Automation Part-1 Using ARDUINO UNO R3](#) Hello every one welcome back . In this project tutorial I will show you how to make arduino based home automation , this means you can control all of your...
603.




[Make Arduino Based Home Automation Part-2 \(wireless\) Using ARDUINO UNO R3](#) Hello welcome back . This is second part of the wireless home automation . In previous part we have connected home appliance with relay and controlled with arduino . In...
604.



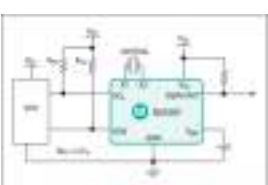
[AUTOMATIC DOOR OPEN SYSTEM WITH VISITOR COUNTER PART-1 Using ARDUINO UNO R3](#) Hello every body welcome back . In today's arduino blog I am going to show you how you can make a automatic door opening system when some one wants to...
605.




[Automatic Door Open System With Vistor Counter Part-2 Using ARDUINO UNO R3](#) Hello welcome back . In previous part we have made a visitor detector by using PIR sensor . This application can be used on night because PIR sensor gives output based...
606.




[WATER LEVEL MEASUREMENT USING ARDUINO UNO R3 AND WATER SENSORS](#) Hello , Welcome back , In this tutorial we are going to show you how to make a water level indicator using arduino uno and some water sensors . There...
607.




[Real Time Home Automation Using Arduino Uno R3 and DS1307 RTC \(Part-1\)](#) Hello every one , welcome back . In this new arduino tutorial series I'm gonna show you how to control every thing in your home on time basis . After...
608.




[0-24v 3A Variable Power Supply using LM338](#) Batteries are generally used to power up the Electronic Circuit and Projects, as they are easily available and can be connected easily. But they drained off quickly and then we...
609.




[Connecting multiple I2C device on Arduino Uno R3](#) Hello every one ! welcome back ! It's nice to show you my new tutorial after long time .Today we will learn how to connect multiple I2C device (typically for...
610.




[Arduino Based Vehicle Accident Alert System using GPS, GSM and Accelerometer](#) In our previous tutorials, we have learned about How to interface GPS module with Computer, how to build a Arduino GPS Clock and how to Track vehicle using GSM and GPS....
611.




[Interfacing SSD1306 OLED Display with Arduino](#) Most of us would be familiar with the 16x2 Dot matrix LCD display that is used in most of the projects to display some information to the user. But these...
612.



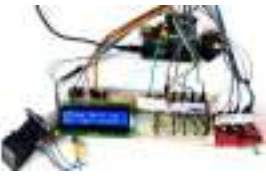
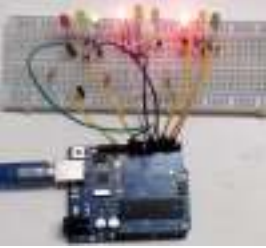








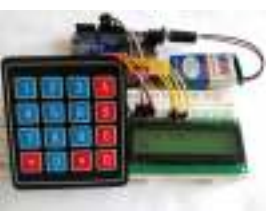


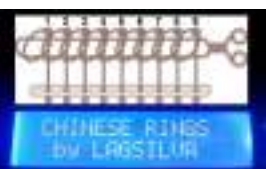
[Simple Arduino Audio Player and Amplifier with LM386](#) Adding sounds or music to our project will always make it looks cool and sounds much more attractive. Especially if you are using an Arduino and you have lots of...
613.



[Arduino Data Logger \(Log Temperature, Humidity, Time on SD Card and Computer\)](#) As Engineers/Developers we always rely upon the data collected to design or improve a system. Recording data and analyzing them is a common practice in most of the industries, here...
614.



[Smart Knock Detecting Door Lock using Arduino](#) Security is a major concern in our day to day life, and digital locks have become an important part of these security systems. There are many types of security systems...

615.  [Fingerprint Based Biometric Voting Machine using Arduino](#) We all are quite familiar with Electronic Voting Machines, where your vote gets registered electronically to use ballot paper to vote in election. Today security is...
-
616.  [Arduino Based 3-Way Traffic Light Controller](#) We all know about Arduino. It is one of the most popular open source micro controller board which is highly useful for doing DIY projects. This Arduino based 3-Way Traffic...
-
617.  [Fingerprint Based Biometric Attendance System using Arduino](#) Attendance systems are commonly used systems to mark the presence in offices and schools. From manually marking the attendance in attendance registers to using high-tech applications and biometric systems, these systems have...
-
618.  [Arduino Motion Detector using PIR Sensor](#) Detecting motions or movements has always been important in most projects. With the help of the PIR Sensor it has become very easy to detect human/animal movements. In this project...
-
619.  [DC-DC Buck Converter Circuit – How to Step Down DC Voltage](#) In this project we are going to make a Buck Converter Circuit using Arduino and N-Channel MOSFET with a maximum current capacity of 6 amps. We are going to step...
-
620.  [Arduino Based Digital Ammeter](#) Ammeter is used to measure current flow through any load or device. Here in this Arduino Ammeter, we will explain about measuring of current by using ohm's law. It will...
-
621.  [Arduino DC Motor Speed and Direction Control using Relays and MOSFET](#) In this project we control direction and speed of a 24v high current motor using Arduino and two relays. No power switches are needed for this circuit, just two push buttons...
-
622.  [Arduino Based Fire Fighting Robot](#) According to National Crime Records Bureau (NCRB), it is estimated that more than 1.2 lakh deaths have been caused because of fire accidents in India from 2010-2014. Even though there...
-
623.  [Temperature Controlled AC Home Appliances using Arduino and Thermistor](#) Suppose you are sitting in a room and feeling cold and you want your heater to be automatically turned on, and then off after some time when room temperature is...
-
624.  [Measure Sound/Noise Level in dB with Microphone and Arduino](#) Noise pollution has really started to gain importance due to high population density. A normal human ear could hear sound levels from 0dB to 140dB in which sound levels from...
-
625.  [Arduino Calculator using 4x4 Keypad](#) Programming is always fun and Arduino is a wonderful platform if you are just getting started with Embedded programming. In this tutorial we will build our own calculator with Arduino....
-
626.  [Temperature and Humidity Data Logger using Arduino](#) In this project, we are going to make a temperature and relative humidity data logger. Arduino is the brain of this project. DHT22 sensor is used for sensing temperature and...
-
627.  [Digital Thermometer using Arduino and DS18B20 Sensor](#) In this project, we are going to make a Digital Thermometer using Arduino Uno. We will use DS18B20 temperature sensor to sense the temperature and Nokia 5110 LCD to display...
-
628.  [Chinese Rings Puzzle With Arduino](#) Introduction Hello all, The Chinese Rings Puzzle with Arduino is my version of a centennial Chinese puzzle. It is very simple to play and it is an example of a...
-

629.

[ATTiny85 EMF Detector](#)

Story This is a simple tutorial to create an EMF detector. You can use Arduino for this job, but is better use a microcontroller called Attiny85. It is possible program...



630.

[IoT Pet Feeder: Use circuito.io to build a smart food dispenser for your pet](#)

Story This IoT pet feeder is our first IoT project with circuito.io! We are happy to share it with our community to demonstrate how simple it can be to make...



631.

[DIY Voltmeter with Arduino and a Nokia 5110 Display](#)

Story In this tutorial I am going to show you how to build a Voltmeter with a big Nokia 5110 LCD display using Arduino. Building a voltmeter is a great...



632.

[Using Nokia 3310 84x48 LCD with Arduino](#)

Story The Nokia 5110 is a basic graphic LCD screen for lots of applications. It was originally intended to be used as a cell phone screen. This one is mounted...



633.

[Fidget Spinner RPM Counter](#)

Hi everyone! This is my next project, Fidget Spinner RPM Counter or Arduino Tachometer with Hall-Effect Sensor. 1: Requirements Parts Required: Fidget Spinner neodymium magnet Arduino Uno LED + resistor...



634.

[Controlling Robot Over Bluetooth Using Xbox Steering Wheel](#)

So I'm guessing that I'm like a large amount of people on this site that are low key hoarders, keeping anything they could turn into a project or salvage for...



635.

[Why does the Uno work but the Micro doesn't?](#)

[Can I Use an Arduino Uno for This?](#) So back when I first started working with micro controllers, Arduinos mainly the most annoying this ever was when i would follow someones tutorial for a project and they would...



636.

[Distance Measurement Vehicle via Websocket](#)

Story When you measure distance between two point general way is to use a ruler. But you can use a lot of other ways: by laser, map, foot or walking...



637.

[Reducing Arduino Power Consumption](#)

Story When it comes to portable electronics, one of the most important features is how to maximize the battery life. The ATmega328P, used on popular boards like the SparkFun RedBoard,...



638.

[Arduino on Internal Oscillator Crystal as Clock Source](#)

Story I have been working out ways to make a minimal Arduino to fit in the smallest space possible, and limit the power consumption of the microcontroller. (You can go...



639.

[Back-Saver: Backpack-carrying follower robot powered by Wunderbar](#)

Hardware components: SparkFun RedBoard × 1 DC Stepper Motor 28-BY-J-48 × 1 MB 1010 LV-Max-Sonar EZ1 × 1 WunderBar × 1 Story A Sparkfun Red-Board utilizes a LV-Max Sonar component...



640.

[Easy Serial on the ATtiny](#)

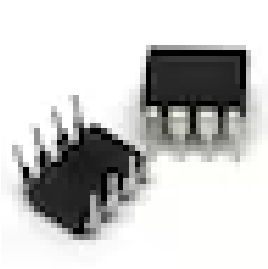
Introduction The Atmel tinyAVR MCU's are great little chips for projects but can prove difficult to debug. Some ATtiny chips do not have direct support for hardware based serial and...



641.

[PicoDuino = Digispak + RGB LED + Button + Relay Driver](#)

Hardware components: Atmel ATTiny85 × 1 DigiSpark × 1 Software apps and online services: Arduino IDE STORY StartFragment How to get FREE board Order 1pc Picoduino board Create project max...



642.

[IR Thermometer, Stopwatch, Cooking Timer, Inactivity Tracker](#)

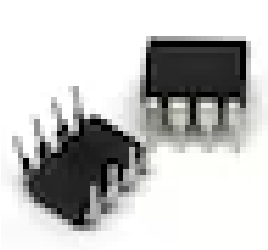
Hardware components: Arduino UNO & Genuino UNO × 1 Adafruit MLX90614 × 1 Atmel AVR for Arduino 328P/168P/8A × 1 SparkFun 7-Segment Serial Display - Red 3 digit display used...



643. [Attiny85/84 with Bluetooth](#) Hardware components: Capacitor 10 μ F \times 1 Atmel ATTiny85 \times 1 Arduino UNO & Genuino UNO \times 1 LED (generic) \times 1 Jumper wires (generic) \times 1 HC-05 \times 1...



644. [Hot Wire Foam Cutter – Arduino PWM](#) Hardware components: Arduino UNO & Genuino UNO \times 1 Atmel ATTiny85 \times 1 DigiSpark \times 1 Plastic box for electronics \times 1 Jumper wires (generic) \times 1 IRF530 \times 1...



645. [Easily run your ATtiny at 16MHz, without an external clock, from the Arduino IDE](#) Hardware components: Atmel ATTiny85 \times 1 SparkFun Tiny AVR Programmer \times 1 Software apps and online services: Arduino IDE STORY Introduction The Atmel tinyAVR MCU's (ATTiny) are a series of...



646. [Persistence Of Vision](#) Persistence of vision is an optical illusion, it works on a simple phenomenon how our day to day television works. MY first pov was six months before with arduino uno...



647. [Programming the ATtiny85 \(Using an Arduino Uno\)](#) Today, we are going to build a circuit to program an ATtiny85 with our Arduino. Supplies We are going to need the following: Some jumper wires 1 x 10 micro...



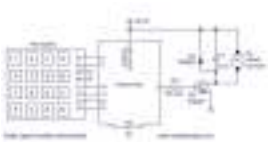
648. [nRF24L01+ with ATtiny85 3 Pins](#) This would be the continuation of my previous project Programming ATtiny85 with Arduino Uno. Now with cheaper ATtiny85 in place I was looking for cheaper ways to transmit the sensor...



649. [ESP32 Hands-On: Awesome Promise](#) The ESP32 is looking like an amazing chip, not the least for its price point. It combines WiFi and Bluetooth wireless capabilities with two CPU cores and a decent hardware...



650. [Long Distance Remote Light Sensor With RFM95W/RFM98W LoRa](#) There are many wireless communication options when connecting Arduino boards. One of the most popular ones is the Wi-Fi. It works well at small distances, and around Wi-Fi hotspots, however...



651. [PWM motor speed control using Arduino](#) PWM or pulse width modulation is a very common method used for controlling the power across devices like motor, light etc. In PWM method the power across the load is...



652. [Interfacing LCD to Arduino – Display Text and Characters on LCD Screen using Arduino](#) A Liquid Crystal Display commonly abbreviated as LCD is basically a display unit built using Liquid Crystal technology. When we build real life/real world electronics based projects, we need a...



653. [Interfacing RFID with Arduino – How to Read RFID Cards using Arduino](#) In this tutorial, we are dealing with yet another interfacing technique. This time we are interfacing an RFID Reader which can read RFID Tags to Arduino. RFID is Radio Frequency...



654. [Interface Arduino and Color Sensor – RGB Sensor TCS230](#) In this article, we are going to read the colors using the TCS230 color sensor (RGB Sensor) and Arduino Uno. The TCS 230 color sensor senses the color light by...

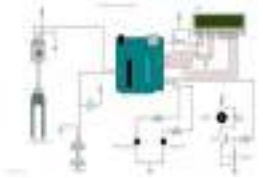
655. [Interfacing Accelerometer to Arduino](#) In this article, we are going to interface the GY-521 accelerometer with Arduino. The GY-521 has an InvenSense MPU6050 chip which contains a 3-axis accelerometer and a 3-axis gyro meter. This...



656. [Robot using Arduino and Bluetooth Module \(Obstacle Avoidance Robot\)](#) This project is designed to build a robot that automatically detects the obstacle on its path and guides itself whenever an obstacle comes ahead of it. This robotic vehicle is...



657. [Arduino Irrigation and Plant Watering using Soil Moisture Sensor](#) This project is about a moisture-sensing automatic plant watering system using Arduino UNO. The system reads the moisture content of the soil using soil moisture sensor and switches ON the...



658. [Arduino Weather machine](#) Arduino is a great hardware platform when comes to prototyping and building cool stuffs. Using this i have designed and developed a simple Arduino Weather machine which measures three important...



659. [Bluetooth enabled Door locker using Arduino](#) DIY Arduino based lockers can be found plenty in the internet where keypad was used to feed lock input. But this Bluetooth enabled Door locker uses Bluetooth as a medium...



660. [Remote controlled light effects using Arduino](#) Christmas is just around the corner and its time to start planning things to lighten up this festive season. Today you are about to see building of Remote controlled lights...



661. [Reflex test for your brain using Arduino](#) Arduino based games and consoles are quite popular around the web. And this article is going to bring out the Design, working and code part of a simple Reflex test...



662. [Keyless piano using Arduino uno](#) Keyless piano using Arduino is sort of sequel to the DIY fun piano i have published in this website. In this project i have eliminated the need of buttons involved...



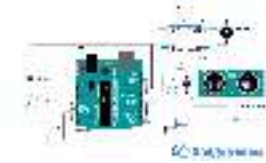
663. [Project X – Smart home control using Arduino](#) Project X – Smart home control using Arduino is all about automating your home smartly. Imagine your home responding to external condition by altering itself and that's exactly what this...



664. [Electronic Spinet – Musical instrument using Arduino](#) Spinet it is a vintage musical instrument which has similar looks of a keyboard. It always get better when Technology touches the vintage stuffs. So we decided to build a...



665. [Smart Vehicle using Arduino Uno](#) Everything around us is getting smart shoes, watches glasses. Even you might have come across news regarding smart vehicles in newspaper. Likewise we attempted to create a prototype of smart...



666. [Automatic Plant watering and Happiness monitoring system](#) The main motto of this project is to provide automatic water supply to plant when it feels thirsty. We intend to automate the watering of plants and deploy Arduino to...




667. [Gesture controlled car using Arduino](#) Who doesn't love playing with RC cars and Robots. Not only playing, engineers and enthusiasts like us love to build and experiment with these stuffs. Also its fair to...




668. [The Zambroombi: Roomba's Next Ultrasonic Competitor](#) The Zambroombi is the next step up from your neighbor's fancy Roomba. Set it and forget it! "It changed my life. I don't know where I'd be today without it..."




669.




[The BIG Arduino Piano! Use Pulse Width Modulation to Dance like Tom Hanks](#) This BIG piano will help exercise the mind and body! All you need is a few buttons, a speaker, and some dancing shoes. BOM: Arduino Uno CUI 8 ohm speaker...
670.




[Arduino 4-Digit 7-Segment LED Display](#) 7 Segment LED displays are used in many applications as front panel number indicators. The most common applications are calculators, microwave ovens, electronic lab equipment like function generators and frequency...
671.




[Remote Controlled Robot Using Arduino and T.V. Remote](#) This remote controlled car can be moved around using practically any kind of remote such as TV,AC etc. It makes use of the fact that the remote emits IR(infrared). This...
672.




[Robot "Cheaper"](#) The aim is to build cheapest possible Arduino-robot Step 1: Components Arduino UNO R3 x1 USB cable x1 Mini solderless breadboard x1 IR sensor x1 Continuous rotation servo x2 Battery...
673.




[Make Your Own GPS Transmitter with the HC-12 Transceiver](#) The first article in this two-part series, Understanding and Implementing the HC-12 Wireless Transceiver Module, uses the HC-12 to create long-distance data transmission between two Arduino Unos. This article uses...
674.




[Flash Freeze Photography with an Arduino](#) Freeze moments in time to easily produce extraordinary close-up pictures with your digital camera, an Arduino, and these simple circuits. I have always been impressed by high-speed photography. The photographic...
675.




[Quark D2000 I2C Interfacing: Add a Light Sensor and an LCD](#) Get acquainted with using I2C with the Quark D2000 development board by interfacing an ambient light sensor and an LCD. Previously, we presented a general overview of the Quark D2000...
676.




[The Santa Cam! An Arduino PIR Motion-Activated Camera System](#) The Santa Cam is sure to catch who is stealing your milk and cookies this holiday season! You can even use it for a photo booth this New Year's Eve!...
677.




[MCP9802 temperature sensor and Arduino](#) MCP9802 is a digital temperature sensor from Microchip that measures temperatures between -55°C and +125°C to a digital word. It provides an accuracy of ±1°C (maximum) from -10°C to +85°C....
678.




[Step-by-step guide for making a very simple temperature and humidity meter with 7-segment LED displays](#) In this blog post, I am providing you step by step instructions to build a very simple temperature and relative humidity meter for indoor use. All you need to build...
679.




[PC-based heart rate monitor using Arduino and Easy Pulse sensor](#) The heart rate, also referred to as pulse rate, has been recognized as a vital sign since the beginning of medicine, and it is directly related to a person's cardiovascular...
680.




[Arduino measures heart beat rate from fingertip](#) The PIC16F628A based heart rate meter is one of the most popular projects published on Embedded Lab. In this article, I am going to show how to replicate the same...
681.



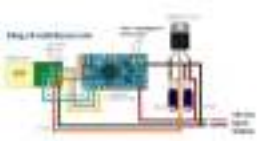
[Using BMP180 for temperature, pressure and altitude measurements](#) The BMP180 is a new generation digital barometric pressure and temperature sensor from Bosch Sensortec. In this tutorial, we will briefly review this device and describe how to interface it with an...
682.



[Arduino Crowtail and Easy Pulse Plugin](#) Arduino Crowtail is a modular and ready-to-use building block set from Elecrow for rapid prototyping with Arduino. It consists of a base Arduino Uno shield to which various sensor and I/O modules...
683.




[Serial seven segment LED display shield](#) Seven segment LED displays are brighter, more attractive, and provide a far viewing distance as well as a wider viewing angle compared to LCD displays. This project describes a serial...
684.

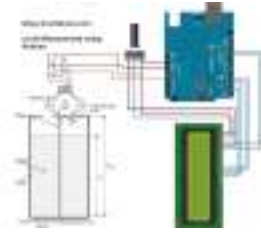


[Wireless Serial using nRF24L01](#) This project is very useful in many application where wireless reliable serial communication is required. It give bidirectional communication, You need to have same code in both arduino, no need...


685.




[pH sensor arduino](#) In this project, step by step tutorial we are discussing about how to interface pH sensor with Arduino. In chemistry, pH is the negative log of the activity of the...
686.




[Low cost continuous prcision liquid level measurement using arduino](#) The purpose of this tutorial is to demonstrate an innovative approach for low cost continuous liquid level monitoring based on MPX5010DP differential pressure sensor. Most of the traditional measuring systems were...
687.




[DIY Music Keyboard: How to Make Sounds With Arduino](#) Making cool things with an Arduino is something, but making musical instruments out of an Arduino is something else! So behold, here comes the Musical-duino, an Arduino keyboard. To see what...
688.




[How to Shrink Your Arduino Projects: Making a Permanent Circuit Board](#) When you make a project using Arduino, it usually contains a lot of jumper connections on the breadboard and the project will not be a permanent one. If you want to make any...
689.




[Interfacing: How to Make an Arduino Uno UltraSonic Range Finder!](#) A range finder is a device used to find the distance from a point to the nearest obstacle. This device uses ultrasonic technology to measure the distance. You can consider...
690.



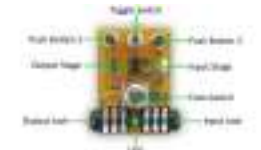
[How to Make an Audio Player with Speaker Using the Arduino Uno!](#) This Arduino project is a simple and fun project you can build in 10-15 minutes. The result of this make will be an Arduino audio player that plays ".wav" files. It...
691.




[Arduino Weather Station](#) How cool would it be to have your own Arduino weather station right in your backyard? Sounds fun? Geeky? Having your own weather station means that you don't need any...
692.




[How to make a Smart Cane for the Visually Impaired with Arduino](#) I wanted to make something for them to help the visually impaired become independent, so I created an open source Arduino project for a Smart Cane. This Arduino smart cane...
693.




[How to Make a Programmable Guitar Pedal With Arduino!](#) This DIY Guitar Pedal project is for guitarists, hackers, and programmers that want to learn about digital signal processing, effects, synthesizers, and experiment without deep knowledge of DSP, electronics, or...
694.




[DIY Arduino Tutorial: How to Automate a Lamp for Ceremonial Inaugurations](#) "Knowledge removes ignorance, just as light removes darkness", as it is wisely said. In India, the ancient tradition of lighting oil lamps has a special significance. Almost all auspicious ceremonies...
695.




[Create a Christmas Light Show with Arduino](#) The Christmas light show with Arduino is a project that controls a number of lights according to a song in sync with the music. It can be used to control...
696.




[Arduino Servo Catapult: DIY Catapult using Arduino](#) Use an Arduino and a servo to shoot food to your cat! (Also works with other animals). Check out the video below to see how this Arduino Servo Catapult works. While maybe...
697.



[Arduino Wheelchair Project: Motorized Controller Mount](#) This was an Arduino wheelchair project we developed for Principles and Practices of Assistive Technology (PPAT) in Fall 2016 at MIT. We made an Arduino-based motorized wheelchair controller mount for...
698.




[Arduino and Processing IDE Communication Tutorial](#) In this tutorial, we will make the communication between the Arduino and Processing. We will make the communication in both the ways, from the Arduino to Processing and from Processing...
699.




[How to Make an Arduino Temperature Data Logger](#) In this project, we are going to make an Arduino Temperature logger that will get the temperature value from the LM35 temperature sensor and the time from the DS3231 Real...


700.




[Digital Door Lock using Arduino](#) As thefts are increasing day by day security is becoming a major concern nowadays. In this project we will make a digital door lock system with keypad using Arduino Uno. It...
701.




[Home Automation using Arduino and ESP8266 Module](#) In this project we are going to make a home automation system using ESP8266 WiFi module and Arduino Uno. Using this we will be able to control lights, electric fan...
702.




[IoT Data Logger using Arduino and ESP8266](#) Today we are going to make an IoT WiFi data logger using Arduino, ESP8266 WiFi module and DHT22 temperature humidity sensor. Arduino is reading temperature and humidity sensed by DHT22 and sending...
703.



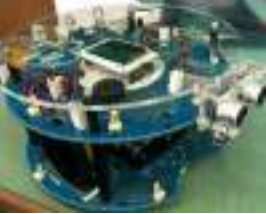
[Arduino Weather Station Web Server](#) In this tutorial we are going to make a weather station that will tell us temperature, humidity and heat index of a particular location. It will show these values in a...
704.




[Temperature Controlled Fan using Arduino](#) Here we are going to make a temperature controlled DC fan. DHT22 sensor is used to sense the room temperature and then we adjust speed of a DC fan/motor accordingly using...
705.




[Arduino DC-DC Boost Converter Design Circuit with Control Loop](#) This post will cover how to use an Arduino Uno to easily control a 10W+ boost converter. A discrete boost converter can be built by using just a few parts,...
706.




[Johnny 6 is alive!](#) Designing a custom plate for the Arduino Robot, adding jumbo LEDs and displaying readings from an ultrasonic distance sensor to the LCD. My previous post on the Arduino Robot described...
707.




[The Evolution of a Light Theremin](#) I started out a little over two years ago on work experience, before going on to become a trainee engineer, having decided that I would like to pursue a career...
708.




[Wireless Motor Speed Control System with Arduino](#) ICStation team introduce you the NRF24L01 Wireless Motor Speed Control System.This system works under DC 5V voltage. It uses the NRF24L01 Wireless Module to transmit speed control data and the...
709.




[Track and Control Your Car Remotely](#) Actually, many of us may suffer or afraid from being his car stolen. In this project, I will try to help you to protect your cars and even control them...
710.




[Build a smart "Clapper" with SmartThings and Arduino](#) When my colleague @thegibertchan first set up his homemade "Clapper" in our office, I knew immediately that I had to learn how it was made. The way it works is...
711.




[Bike Across the Country While in Your Basement](#) About this project This is a very simple and easy-to-build project that provides a sensor on the pedal crank of any exercise bike and generates keyboard output triggering Google Maps Street...
712.



[Arduino Weight Measurement using Load Cell and HX711 Module](#) Today we are going to Measure the Weight by interfacing Load Cell and HX711 Weight Sensor with Arduino. We have seen weight machines at many shops, where machine displays the...
713.



[Live Temperature and Humidity Monitoring over Internet using Arduino and ThingSpeak](#) Humidity and Temperature are very common parameters for measuring at many places like farm, green house, medical, industries home and offices. We have already covered Humidity and Temperature Measurement using...
714.



[Arduino Based Digital Thermometer](#) Thermometers are useful apparatus being used since long time for temperature measurement. In this project we have made an Arduino based digital thermometer to display the current ambient temperature and temperature changes...
715.

[Frequency Counter using Arduino](#) Almost every electronic hobbyist must have faced a scenario where he or she must measure the frequency of signal generated by a clock or a counter or a timer. We...



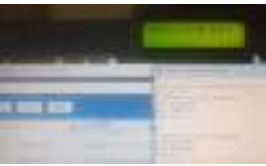
716. [Interfacing Arduino with Raspberry Pi using Serial Communication](#) Raspberry Pi and Arduino are the two most popular open source boards in Electronics Community. They are not only popular among Electronics Engineers but also among school students and hobbyists, because...



717. [How to Send Data from Arduino to Webpage using WiFi](#) Wireless communication between Electronic devices and modules is very important, to make them 'Fit' in the World of Internet of Things. HTTP protocol and HTML language have made it possible...



718. [Sending Email using Arduino and ESP8266 WiFi Module](#) We are moving towards the World of Internet of Things (IoT). This technology plays a very important role in the Electronics and Embedded system. Sending an Email from any Microcontroller...



719. [Wireless Notice Board using GSM and Arduino](#) Wireless notice board is very selective term for this project, as it has a very wide scope rather than just being a simple notice board. First we should understand the...



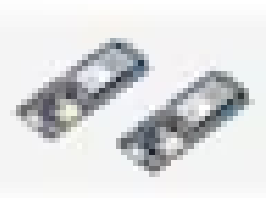
720. [Pressure Sensor BMP180 Interfacing with Arduino Uno](#) In this tutorial we are going to design a Barometric Pressure Measuring System using BMP180 and ARDUINO. First of all for interfacing BMP180 to ARDUINO, we need to download a library...



721. [Arduino-based Ultrasonic Radar System via IOT](#) Abstract RADAR is an object-detection system which uses radio waves to determine the range, altitude, direction, or speed of objects. Radar systems come in a variety of sizes and have...



722. [IoT Controlled Snow Machine](#) The most homemade snow machine you've ever seen. Made from a hairdryer, polystyrene and MKR1000. Controllable from anywhere in the world* Things used in this project Hardware components Arduino MKR1000...



723. [Humidity Display of Date, Time and Temperature](#) Story Have you ever wanted to make your own interface that can display the time, date, along with the temperature and the humidity? Well it's a lot easier than you'd...



724. [Complete Digital Clock including Alarm and Motion Sensor](#) I have done several designs of digital clocks for Arduino using LEDs and LCD displays, but this one is more special because I added other features like alarm and motion...



725. [Digital Dice using Arduino](#) We all are familiar with dice and often played LUDO or SANP SIDI (Snake & Ladders) game by using dice. Dice is a squire type solid box which contains 6...



726. [Automatic Door Opener using Arduino](#) You must have seen automatic door openers in shopping malls and other commercial buildings. They open the door when someone comes near the entrance and close it after sometime. A...



727. [Computer Controlled Robot using Arduino](#) After designing this line follower robot using arduino uno, I have developed this computer controlled robot. It can be controlled via the computer and we can use specific keyboard keys to...




728. [DTMF Controlled Robot using Arduino](#) In present time almost all the people are familiar with robots. Robots play a very important role in human life. Robots are a machine which reduces the human efforts in heavy...



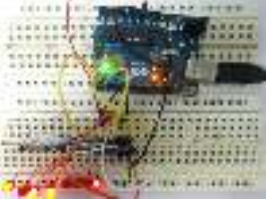
729. [DC Motor Control using Arduino](#) Here we are going to interface a DC motor to Arduino UNO and its speed is controlled. This is done by PWM (Pulse Width Modulation). This feature is enabled in...




730.




[Arduino Based LED Dimmer using PWM](#) This LED DIMMER is an Arduino Uno based PWM (Pulse Width Modulation) circuit developed to get variable voltage over constant voltage. The method of PWM is explained below. Before we get start building a...
731.




[How to Use Shift Register 74HC595 with Arduino Uno?](#) In ARDUINO we have 20 I/O pins, so we can program 20 pins of UNO to be used as either input or output. Although there are more pins on ATMEGA328P...
732.




[Temperature Controlled Fan using Arduino](#) In this arduino based project, we are going to control DC fan speed according to the room temperature and show these parameter changes on a 16x2 LCD display. It is accomplished by the...
733.




[Interfacing 16x2 LCD with Arduino](#) To establish a good communication between human world and machine world, display units play an important role. And so they are an important part of embedded systems. Display units - big...
734.




[7 Segment Display Interfacing with Arduino](#) In this tutorial we are going to interface a seven segment display to ARDUINO UNO. The display counts from 0-9 and resets itself to zero. Before going further, let us...
735.




[Accelerometer Based Hand Gesture Controlled Robot using Arduino](#) Robots are playing an important role in automation across all the sectors like construction, military, medical, manufacturing, etc. After making some basic robots like line follower robot, computer controlled robot, etc,...
736.




[How to Use ADC in Arduino Uno?](#) In this tutorial we are introducing concept of ADC (Analog to Digital Conversion) in ARDUINO UNO. Arduino board has six ADC channels, as show in figure below. Among those any one...
737.




[Humidity and Temperature Measurement using Arduino](#) Humidity and temperature are common parameters to measure environmental conditions. In this Arduino based project we are going to measure ambient temperature and humidity and display it on a 16x2...
738.




[Color Detector using Arduino Uno](#) In this project we are going to interface TCS3200 color sensor with Arduino UNO. TCS3200 is a color sensor which can detect any number of colors with right programming. TCS3200 contains...
739.




[Automatic Room Light Controller with Bidirectional Visitor Counter](#) Often we see visitor counters at stadium, mall, offices, class rooms etc. How they count the people and turn ON or OFF the light when nobody is inside? Today we are...
740.




[Electronic Voting Machine using Arduino](#) We all are quite familiar with voting machines, even we have covered few other electronic voting machine projects previously here and here using RFID and AVR microcontroller. In this project,...
741.




[Arduino Based Heartbeat Monitor](#) Heart rate, body temperature and blood pressure monitoring are very important parameters of human body. Doctors use various kind of medical apparatus like thermometer for checking fever or body temperature,...
742.



[Arduino Based LED Chaser using Rotary Encoder](#) In this project we are going to interface a ROTARY ENCODER with ARDUINO. ARDUINO UNO is an ATMEGA controller based development board designed for electronic engineers and hobbyists. In ARDUINO...
743.




[Keypad Interfacing with Arduino Uno](#) In this tutorial we are going to interface a 4x4 (16 key) keypad with ARDUINO UNO. We all know keypad is one of the most important input devices used in electronics...
744.



[Magnetic Field Strength Measurement using Arduino](#) In this project we are using the concept of ADC (Analog to Digital Conversion) in ARDUINO UNO. We are going to use a Hall Effect sensor and Arduino uno to measure...


745.




[RFID Interfacing with Arduino](#) In this tutorial we are going to design a system to read the ID of RFID cards. RFID stands for Radio Frequency Identification. Each card has a unique ID embedded...
746.



[Servo Motor Control using Arduino](#) In this tutorial we are going to control a servo motor by ARDUINO UNO. Servo Motors are used where there is a need for accurate shaft movement or position. These...
747.




[Automatic Water Level Indicator and Controller using Arduino](#) In this Arduino based automatic water level indicator and controller project we are going to measure the water level by using ultrasonic sensors. Basic principal of ultrasonic distance measurement is based on ECHO...
748.



[Working of Force Sensor with Arduino](#) In this project we will be developing a fun circuit using Force sensor and Arduino Uno. This circuit generates sound linearly related to force applied on the sensor. For that...
749.




[8x8 LED Matrix using Arduino](#) In this project we are going to design an 8x8 LED matrix display, for that we are going to interface an 8x8 LED matrix module with Arduino Uno. An 8x8 LED matrix contains...
750.




[RGB LED with Arduino](#) In this project we are going to interface 5 RGB (Red Green Blue) LEDs to Arduino Uno. These LEDs are connected in parallel for reducing PIN usage of Uno. The...
751.




[Servo Motor Control by Flex Sensor](#) In this tutorial we are going to develop a circuit using FLEX sensor, Arduino Uno and a Servo motor. This project is a servo control system where the servo shaft position...
752.



[Variable Power Supply By Arduino Uno](#) In this tutorial we will develop a 5V variable voltage source from Arduino Uno. For that we are going use ADC (Analog to Digital Conversion) and PWM (Pulse Width Modulation)...
753.




[PC Controlled Home Automation using Arduino](#) This project explains designing a home automation system which is controlled by a computer to switch On and switch Off various electrical and electronics devices. For demonstration we have used 3...
754.



[Arduino Based Tone Generator](#) In this project we will develop a tone generator using Arduino Uno. We will have buttons interfaced with the UNO and each one of them generates different intensity of tone. The frequency of...
755.




[Snake Game on 8x8 Matrix using Arduino](#) Snake Game has been very popular since the beginning of the Mobile phones. Initially it was come in Black and white cell phones, and soon became very famous. Then with...
756.




[Digital Code Lock using Arduino](#) Security is a major concern in our day to day life, and digital locks have become an important part of these security systems. One such digital code lock is imitated...
757.



[GSM Based Home Automation using Arduino](#) Mobile phone is a revolutionary invention of the century. It was primarily designed for making and receiving calls & text messages, but it has become the whole world after the...
758.



[Prepaid Energy Meter using GSM and Arduino](#) Prepaid Electricity Energy Meter is a good concept in which you can recharge its balance, like we do in our mobile phones. In this project we are building a automated...
759.



[Clap Switch using Arduino](#) In this project we are going to make Clapper circuit using the concept of ADC (Analog to Digital Conversion) in ARDUINO UNO. We are going to use a MIC and...
760.



[IR Remote Controlled Home Automation using Arduino](#) Previously we have covered many types of Home automations using different technologies like DTMF Based Home Automation, PC Controlled Home Automation using Arduino, Bluetooth Controlled Home Automation. In this project,...



761. [Bluetooth Controlled Toy Car using Arduino](#) After developing few popular robotic projects like line follower robot, edge avoiding robot, DTMF robot, gesture controlled robot, etc. in this project we are going to develop a bluetooth controlled robo...



762. [Servo Position Control with Weight \(Force Sensor\)](#) In this tutorial we will develop a circuit using Force sensor, Arduino Uno and a servo motor. It will be a servo control system where the servo shaft position is...



763. [How to establish UART communication between ATmega8 and Arduino Uno?](#) Here we are going to establish a communication between an ATmega8 microcontroller and Arduino Uno. The communication established here is UART (Universal Asynchronous Receiver Transmitter) type. It's serial communication. By this...



764. [WiFi Controlled Robot using Arduino](#) There are many types of Robots, from the simple ones like a Toy car to the advanced ones like industrial Robots. We have already covered many types of Robots using...



765. [Capacitance Meter using Arduino](#) When we come across circuit boards which are previously designed or we take out one from old TV or computer, in attempt to repair it. And sometimes we need to...



766. [GUI Based Home Automation System using Arduino and MATLAB](#) We all are familiar with the word 'Automation', where the human interaction is minimal and things can be controlled automatically or remotely. Home automation is very popular and demanding concept...



767. [Arduino GPS Clock](#) There are many GPS satellites around the Earth which are used to provide the exact location of any place. Along with the location coordinates (Latitude and Longitude), it also provide...



768. [Arduino Propeller LED Display](#) You have seen Propellers in Aircrafts or in marine ships, if not in real then in movies for sure. In this session we are going to design a Propeller Display...



769. [DIY LED VU Meter as Arduino Shield](#) VU Meter or Volume Meter is very popular and fun project in Electronics. We can consider the Volume Meter as an Equalizer, which is present in the Music systems. In which we can...



770. [Call and Message using Arduino and GSM Module](#) Sometimes people find it difficult to use the GSM Module for its basic functions like calling, texting etc., specifically with the Microcontrollers. So here we are going to build a...



771. [Track A Vehicle on Google Maps using Arduino, ESP8266 & GPS](#) Vehicle Tracking System becomes very important now days, especially in case of stolen vehicles. If you have GPS system installed in your vehicle, you can track you Vehicle Location, and...



772. [Make Your Own Homemade Arduino Board with ATmega328 Chip](#) Arduino is an open-source development platform for engineers and hobbyists to develop electronics projects in an easy way. It consists of both a physical programmable development board (based on AVR series of microcontrollers) and...



773. [Frequency Counter using Arduino](#) Almost every electronic hobbyist must have faced a scenario where he or she must measure the frequency of signal generated by a clock or a counter or a timer. We...



774. [Arduino Solar Tracker using LDR and Servo Motor](#) In this article we are going to make a Solar Panel Tracker using Arduino, in which we will use two LDRs (Light dependent resistor) to sense the light and a...



775. [Smoke Detector using MQ2 Gas Sensor and Arduino](#) Smoke Detectors are very useful in detecting smoke or fire in buildings, and so are the important safety parameters. In this DIY session, we are going to build a Smoke Detector Circuit which...



776. [Heart Beat Monitoring over Internet using Arduino and ThingSpeak](#) In this project we are going to make a Heart Beat Detection and Monitoring System using Arduino that will detect the heart beat using the Pulse Sensor and will show...



777. [Arduino based Automatic Plant Irrigation System with Message Alert](#) Whenever we go out of town for few days, we always used to worry about our plants as they need water on regular basis. So here we are making Automatic Plant...



778. [IOT based Air Pollution Monitoring System using Arduino](#) In this project we are going to make an IOT Based Air Pollution Monitoring System in which we will monitor the Air Quality over a webserver using internet and will...



779. [Scrolling Text Display on 8x8 LED Matrix using Arduino](#) In this tutorial we are going to design an 8x8 LED Matrix Scrolling Display using Arduino Uno, which will show scrolling alphabets. 8x8 LED Matrix contains 64 LEDs (Light Emitting...



780. [IOT Based Dumpster Monitoring using Arduino & ESP8266](#) In this DIY, we are going to make an IOT based dumpster/garbage Monitoring System which will tell us that whether the trash can is empty or full through the webserver and...



781. [DIY 3X3X3 LED Cube with Arduino](#) In this project we are going to design a 3x3x3 LED CUBE and connect it to Arduino UNO to get different patterns. For a beginner we will start with a simple...



782. [Mobile Phone Controlled Robot Car using G-Sensor and Arduino](#) In this article, we are going to Control the Robot Car through the G sensor of our mobile phone and you will be able to move the Robot just by...



783. [LM35 and Arduino – Temperature Measurement and Display on LCD](#) In this article, we are presenting a tutorial on how to interface LM35 and Arduino along with its program. Once we successfully interface arduino and lm35, we will go on...



784. [Programming an ATtiny w/ Arduino 1.6 \(or 1.0\)](#) This tutorial shows you how to program an ATtiny45, ATtiny85, ATtiny44 or ATtiny84 microcontroller using the Arduino software. These are small, cheap (\$2-3) microcontrollers that are convenient for running simple...



785. [Temperature logger using arduino](#) Simple temperature logger using arduino (°C & °F). This project is about a simple USB temperature logging system using arduino uno and the serial monitor function in the arduino IDE. The...



786. [Arduino-based Graphical Heart Rate Monitor](#) Introduction: Like many out there, I enjoy a good exercise session, whether it be indoors or outdoors. As part of that I purchased a Polar branded heart rate monitor, which...



787. [Knock Detector](#) Introduction For the third assignment, we decided to make a 'knock-detector' that is capable of informing the user/owner of specific events. We designed our system such that it can detect...



788. [Tutorial 18: Two Wire Arduino Knight Rider](#) This tutorial shows how to interface eight LEDs to an Arduino using only two Arduino pins. This is made possible by using a PCF8574 I/O expander IC. A "Knight Rider"...



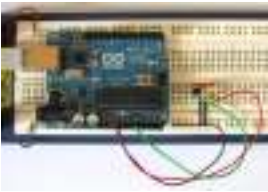
789. [Weather Monitor](#) This Instructable shows you how to build a micro-controller based weather monitoring device. Built on the Arduino Uno board it can easily be extended and modified should you have additional...



790. [Clear polycarbonate enclosures using Arduino](#) So about a year ago I decided that I wanted to get into AVR microcontrollers. After ordering an AVR pocket programmer from Sparkfun , I soon realized that it was...



791. [Tutorial 15: Arduino Serial Thermometer](#) The Arduino reads temperature from a MCP9700 temperature sensor IC and displays the temperature in the Arduino IDE serial monitor window. Also see the Arduino LCD thermometer tutorial (tutorial 14)....



792. [Make Telecran with Arduino](#) I came across a bunch of stepper motors and I have since been looking for a project to do with the kids. An old Telecran (French for Etch-a-Sketch) later, we...



793. [Speech Controlled Quadropod](#) This is my first post on Instructables and I am super excited to share my knowledge! My original robot post is here: Spryo SpoonTail which is just my robot showing...



794. [Rotary Emotiphone using Arduino](#) Introduction The Rotary Emotiphone is a vintage rotary phone that tweets mood emoticons. It has a predefined list of 10 emoticons, each assigned to a digit, so that when you...



795. [Talking Pumpkin](#) So my boss came to me one last week and said he wanted to scare the trick-or-treaters who came to his home, and the kids who would come to work...



796. [Super Amazing Button using Arduino](#) Hello Everyone. This is my very first Instructable so please go easy on me. This was more or less a test project to see if my new arduino board worked....



797. [How to tweet from an Arduino using the wifi sheild](#) Hey, I am a big fan of Instructables. I have consistently used it for the past 3 years and now its time for me to write one myself.Here we go. This instructable...



798. [Interactive Child's Mobile using Arduino](#) What can you make with fluorescent acrylic as the inspiration? We chose to make a glow-in-the-dark baby mobile, with an accompanying toy. This project was completed as a part of...



799. [Datura 6 home automation – 2015 improvements](#) News: In this latest months I've made some important fixes and improvements to the code and to the webserver of the project. See datura_mega_v19.ino for the latest code. The most...



800. [Arduino Alphabet](#) This project is very interesting because it shows the sequence of all letters of our English alphabet. That is, the project generates capital letters from the A to the Z...



801. [Arduino based Tic Tac Toe with TV Remote](#) This was my first time attending the Internet of Things Pune Group. It was such a fun learning experience! At today's meetup, Dhiraj and Nishant started out by introducing the...



802. [RaspiDuinoRover – \(Yet another\) iPhone driven moving Raspberry Pi and Arduino rover](#) Architecture RaspiDuinoRover is made of three main parts: A Raspberry Pi which receives commands from a remote device through a TCP connection, and sends these commands to an Arduino Uno...



803. [Gesture controlled robot using Arduino](#) This gesture controlled robot uses Arduino,ADXL335 accelerometer and RF transmitter-receiver pair. We will divide the entire robot into 3 parts the transmitter,the receiver and the robot. The different gestures that...



804. [Computer controlled RC car with two Arduinos](#) Required Parts: This project requires two Arduino boards which can be bought from <http://www.adafruit.com/category/17> This project uses two Arduino Uno compatible boards. An L293D or other Dual H-Bridge Motor Driver...



805. [Using an Arduino Uno R3 as a Game Controller](#) Naturally, the Uno does not natively support keyboard strokes, unlike it's Leonardo brother. Most of Google will tell you you need to do some firmware workarounds and ATMEGA reprogramming just...



806. [Arduino Sew Easy Wearable Shield](#) Wearable computing, e-textiles, soft circuits or whatever you want to call it, is a growing field of applying technology to garments or accessories like bags, shoes or backpacks. It is...



807. [Hard Disk Clock \(HDD Clock with Arduino Uno\)](#) This is a fun project that can be done easily and also cheaply. In this instructable we will explain step by step how to make this beautiful POV clock. Used...



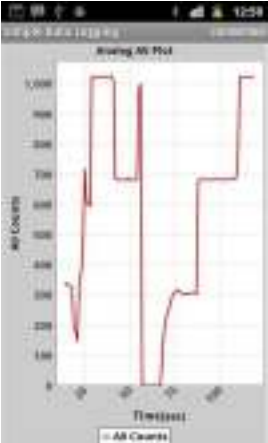
808. [Microcontrolled Farm Equipment](#) Modified BaleScoop(for picking hay bales out of the field) from manual levers to arduino controlled functions. This eliminates the need for 3 sets of hydraulic hoses to only one set and operator can...



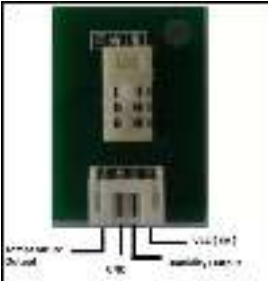
809. [Arduino Ultrasonic Parking Spotter](#) For my first instructable, I'd like to present The Parking Spotter. This is not a new concept, I know. However, this build was done specifically to suit my needs/wants/materials already...



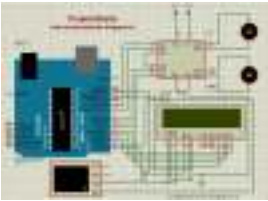
810. [Simple Remote Data Plotting using Android / Arduino / pfodApp](#) Simple Remote Data Plotting using Android / Arduino / pfodApp This Instructable shows you how to plot Arduino sensor data on your Android mobile and capture it for later downloading...



811. [HSM-20G Interface with Arduino Uno](#) The HSM-20G is an analog humidity and temperature sensor that outputs analog voltage respects to relative humidity and temperature. However from this sensor relative humidity is found along with temperature....



812. [How To Make a PC Control Robot](#) Do you ever tried to control your robot using your PC or laptop? Controlling a robot using PC or laptop is often being a fun for the student or hobbyist....



813. [Build a big crane game using Arduino](#) How to build a whole room crane game. Based on the arcade style 'Crane Game' or 'Claw Machine'. This is a continuation of a previus instructable titled CRANE GAME in which we built a...




814. [Beacon](#) In this tutorial you will learn how to turn any conductive surface into a capacitive touch sensor. This project illustrates how to use capacitive touch to turn on a motor...




815. [Servo Motor Simulation via Arduino UNO](#) Hey everyone. I hope you will be fine. As you know that last time, we had started Arduino UNO course and given you a brief introduction how to simulate the...




816.




[Arduino – Theremin with 7 Segment LED Display](#) In this instructable, I will show you how to make a simple toy that combination of the LEDs flash and Theremin. some basic electronics built on top...
817.




[Arduino Binary Clock \(hours, minutes and seconds\)](#) Hello everyone; I was looking for this project for a long time. Finally I it it together with a lot of effort. For this project you will need: [box color="#985D00"...
818.




[Diverting surplus PV Power](#) As mentioned on the Contents page, two different hardware platforms have been successfully used to support Mk2 PV Routers. [Update at 7/3/14: Since writing this article, I have developed a...
819.



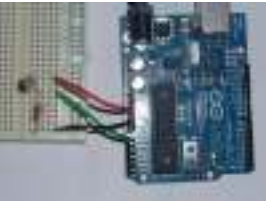
[Arduino Laser Show \(adapted from NothingLabs' Instructable\)](#) This project uses an Arduino, a pair of speakers, and a laser pointer to create a laser projector able to trace out designs in a dark room. To power it...
820.




[How to Deal with Noisy Neighbors with Arduino device](#) My next door neighbors have recently been playing their music really loud so that I can hear it through the walls. I've gotten tired of having to bang on the...
821.




[A Simple Bat Detector based shield for the Arduino Uno](#) I've built a number of projects that have interfaced the output of the Simple Bat Detector with a microprocessor. The most recent was the BatLogger II. But I hadn't come...
822.




[Arduino UNO Tutorial 8 – NightLight](#) In this Arduino UNO tutorial, we are going to use a Light Dependent Resistor (LDR) to create a simple childrens bedroom nightlight which turns on automatically when it gets dark...
823.




[1 LED Game with Arduino Uno and an RGB LED](#) Sometimes I just have those days where I really want to make something neat with the Arduino I have lying around, but I know I don't have the patience for...
824.




[Arduino ISP – LOG](#) Arduino ISP - LOG So this Lazy Old Geek (LOG) has had a lot of trouble getting Arduino bootload on Atmega chips. I couldn't get either of these to work...
825.




[Orange mePod](#) Firstly, why would I make a music player when one can be purchased for so little and Apple iPods are so great? Well, I'll tell you. After several cheap MP3...
826.




[Introduction: T.A.B.U. A Robot using Arduino](#) To all other teens (I'm 16) who have begun to pick up an intrest in robotics and electronics the following project will give you a great user-system to get started...
827.



[DIY- G-force measurement system](#) So this time around, it's another fun and functional microcontroller based DIY, a g-force measurement system with data logging to SD card. HARDWARE USED: 1) Arduino UNO w/ATmega328P 2) 3-axis...
828.




[Arduino UNO Tutorial 6 – Rotary Encoder](#) We have written a tutorial for Rotary Encoders using a Microchip microcontroller but now would be a good time to make an Arduino UNO version. With a rotary encoder we...
829.




[Arduino LEDs](#) Description In this tutorial you will set up and turn on a single LED. Note that this code can actually be executed with just the Arduino and no other components...


830.




[Servo powered peristaltic pump controlled by Arduino](#) This instructable shows you how to make a pump using a servo motor and an Arduino Uno to transfer sn
The pump is a peristaltic pump which...
831.




[DIY Microscope](#) This Project Is A Part Of The Afrimakers Event <http://www.afrimakers.org/> Introduction We used a simple cheap webcam to make a microscope. In short, a small hack to the optics of...
832.




[PhysComp: Mid-term Project – Instagram TUI – prototyping the interactive elements using Arduino](#) The physical interface will consist of a 3×3 grid of push buttons that will correspond to a 3×3 grid of images in the Processing program. Instead of a creating a...
833.



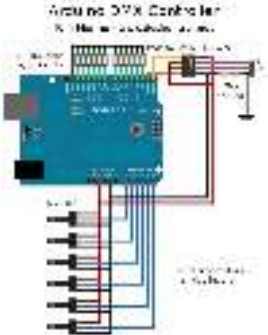
[Digital to Analogue Converter \(DAC\) DAC Theory](#) A digital to analogue converter takes a series of digital inputs (a string of 1s and 0s, in our case there will be 8 of them like 10011001) and converts...
834.




[Remote Controlled Switching](#) Vision The aim of our project is to be able to control a electrical switching process using a remote.The idea is to come up with an alternative to the conventional...
835.




[Mobile Controlled Automation Using Arduino](#) By this mobile controlled automation using Arduino you can perform switching operation of any load or device which is connected with the circuit. Before some days i posted about DTMF...
836.




[Small Arduino DMX controller](#) In this post we show you how to make a small and useful Arduino DMX512 controller, which can use by example to handle a smoke machine with DMX, or as...
837.




[Arduino Tri-colour LED Flasher Circuit](#) This simple tri-colour LED flasher circuit is great for beginners. The three pin tri-colour LED is controller by an Arduino Uno and changed between three colours. This video shows the...
838.




[Tutorial 4: Arduino Knight Rider](#) In this tutorial, eight LEDs are interfaced to the Arduino Uno board. This is not complicated – it is just like interfacing a single LED to the Arduino as done...
839.



[Tutorial 16: Arduino Clock](#) In this tutorial, the Arduino displays the time and date on a LCD (optional) and in the Arduino IDE serial monitor window. A PCF8563 real time clock (RTC) IC is...
840.



[The Arduino Microprocessor Miniterm Project Pages: keattsd](#) Navigation LCD_driver.c LCD_driver.h LCD_driver.h.out ball12d.php bojia.c bojia.c.out chenb.php doyer.php ellwangerk.php foo.txt frickd.php gamblec.php hurleyg.php keattsd.php littletonj.php panuskip.php parsonstc.php schrodere.php Here is keattsd Bluetooth SNES Controller Supplies I used the following...
841.



[Arduino Tiny Relay Shield Project](#) In this Arduino project, you will build a small relay shield from stripboard. The shield can have one or two relays fitted to it. Connect the Arduino and relay shield...
842.

[Open Source Home Automation Project using Arduino UNO + Ethernet Shield](#) This is Open Source Home Automation Project based on Arduino Uno and Arduino Wiznet based Ethernet shield. How Does it Work The main brain for this project is Arduino UNO...



843. [Arduino Buzzer Circuit](#) This article and circuit diagram show how to connect a buzzer to an Arduino when the buzzer operates at a different voltage to the Arduino. The buzzer may operate at...



844. [Thermal Camera: Arduino UNO + MLX90614 IR Thermometer](#) I did the following steps: 1) Hardware: Connect the MLX90614 (refer to the datasheet) as follows: Pin 1 on MLX (SCL) connect to ANALOG pin 5 on Arduino Pin 2...



845. [Real Time GPS Tracker with Integrated Google Maps](#) This project describes how you can build a mobile real time GPS tracker with integrated Google Maps. I began this project mainly to see if I can integrate all the...



846. [ArduDroid: A Simple 2-Way Bluetooth-based Android Controller for Arduino](#) UPDATES October 30, 2013 - 7PM (GMT+2) The new official name for this app is ArduDroid and it can be installed from Google Play. I changed the name to avoid...



847. [General Purpose Input Output Arduino Shield](#) This example shows technique for calibrating sensor input and shows the sensor outputs by controlling LEDs and SSD, also shows how to monitor the state of a switch. Hardware Required...



848. [Stage 4: Complete Beginner's Guide For Arduino Hardware Platform For DIY](#) Contents 1. Background 2. Setting up Arduino Development Environment 3. Arduino Power Management 3.1 Powering Up Arduino Board 3.2 Output Power of Arduino 4. Indicators And Switches 4.1 LED 4.1.1...



849. [Arduino project: USB foot-operated mouse switch](#) This foot pedal plugs into the Arduino case which plugs into your PC via microUSB cable. Arduino microcontrollers can easily be used to power fun projects like robots and even...



850. [Technical Details of Logging Seawater Temperature](#) Block Diagram This diagram shows the basic components required for collecting temperature readings from seawater and transmitting the data to a base station where it can be collated into a...



851. [Arduino Projects: Wireless Arduino](#) Long-time readers will know I'm not one to promote trendy marketing phrases and certainly 'Internet of Things' or 'IoT' is right up there with the best (worst) of them. But...



852. [Arduino Project 6: Web-controlled music player](#) Our NetPlay project is built on a standard breadboard. In our previous Arduino masterclass we briefly introduced the Ethernet Shield an Arduino expansion board that adds Ethernet connectivity plus microSD...



853. [Arduino Project 8: Stompy the robot \(part 1\)](#) Our first Arduino robot called Rolly in our February issue proved to be a popular project. Powered by an Arduino Uno board it was easy to put together and cost...





854. [Store Arduino data to Firebase database \[Howto\]](#) The last few weeks I was playing with Firebase mostly because I wanted to get familiar with this technology. So at some point I thought that it will be a...





855. [Arduino Projects: Digital Audio Recorder](#) Being able to capture sound, store it and play it over and over again never fails to leave me in awe of its pioneers, from Thomas Edison to Alan Blumlein,...





856.  [Arduino Weatherstation](#) At University, Alexander Zenger and I decided to realise a weatherstation with an Arduino Microcontroller. We wanted to measure temperatur, pressure and humidity. It should be also possible to get...


857.  [Arduino Event-Driven Universal AV Remote](#) TL;DR - I wanted all of my AV components to turn on and change inputs as soon as I started Airplaying music to my Apple TV from my iPhone, so...


858.  [Arduino Distance Detector with a Buzzer and LED's](#) This is a simple guide on how to make a distance detector using an Arduino, a HC-SRO4 Ultrasonic Sensor, a Buzzer, and some LED's. The ultimate goal of this tutorial...


859.  [Displaying Arduino data](#) Arduino temperature display I've had an Arduino-based weather station since June 2009, but one problem with it has been that there hasn't been any easy way to display the data...


860.  [\[FTC\] Open Feathercoin ATM](#) Open Fethercoin ATM is an open-source automated teller machine for education and experimentation. Based on John Mayo Smith's OpenBitcoinATM which can be seen in action here A "voucher" is printed...


861.  [Web Server with Two Temperature Gauges](#) This project consists of two temperatures that are measured by the Arduino using two MCP9700 temperature sensors An Arduino Uno and Ethernet shield are set up as a web server...


862.  [How to Text Yourself when your DSC PC1550 Home Security System Alarms](#) I have a home security system that was installed when my home was built in the early 1990's. It is, or was until I modified it, a wired perimeter system...

863.  [A lightning flash counter](#) Many years ago, I think it was in 1997, I stepped into an interesting circuit on a book about high voltage [1]. It was the diagram of a simple "lightning...

864.  [Using an Arduino as a garage car parking sensor](#) "M-my lord, it-it's impossible to locate the ship. It's out of our range." – Nute Gunray We recently moved into a new house and as always the first problem to...

865.  [Gesture control car\(robot\) with Arduino and Android\(bluetooth\)](#) Hi folks, Here's an interesting project for all you creative minds out there. We are going to build an android phone controlled RC car. Nothing could be more fascinating than...

866.  [GSM Home Security Alarm System with Arduino](#) This project deals with the design & development of a theft control system for home, which is being used to prevent/control any theft attempt. The developed system makes use of...

867.  [Arduino RFID Reader RC522 + Access Control System](#) I just received my RC522 RFID reader and made this simple Arduino access control system that uses the reader, a buzzer for the alarm and a relay shield for the...

868. [Fun With The Arduino Esplora: A Digital Picture Frame](#) With this article I kick off my series on the Arduino Esplora board. Today's project is a nice (and cheap!) little digital picture frame that uses the Esplora's TFT Screen...



869. [Rotary Encoder & Arduino](#) I am not sure, but it was in year 1999, a non-stop (360 degree rotation) potentiometer found in a stereo music system confused me a lot. At that time, I...



870. [Polargraph Drawing Machine](#) This machine, a variation on the hanging-pen plotter is a conspicuous and wilfully naive attempt to break out of the pristine, pixel perfect, colour-corrected space that exists inside our computers....



871. [Make a swimming Robo-Snake](#) Sneel is the name of my snake / eel swimming robot. This is documentation of hardware, software and mechanical design of Sneel_003. urethane flex tubing, microcontrollers, Zigbee wireless radio, hose...



872. [Arduino-Controlled Robotic Drum](#) For years I have been telling anyone who listens that I was going to build a robotic drum. Most people kind of shrugged indifferently. Even as I built it, most...



873. [SITWAY](#) You are never to old to learn and try new things. I think one of the best days in my life was the day I discovered the Instructables web site....



874. [Drawing on a 7x5 LED matrix with Arduino in C](#) In my component drawers I have a LTP-7357AG, which is a matrix of 35 green LEDs conveniently packaged in a 12-pin display. I wanted to play with it so I began to...



875. [The Viciously Simple Clap-ON Clap-OFF Circuit For Arduino](#) Hi Everyone! I've had a few people ask about creating a simple clap-on/clap-off circuit using Arduino. Well those who are interested are now in luck. The software in this instructable...



876. [Automatic Home surveillance system using arduino\(simple and cheap\)](#) The goal of my project is to achieve Automatic home surveillance system without any manual interference. In general other surveillance system it is necessary to power ON TV and camera...



877. [GESTURE VOCALIZER FOR DUMB PEOPLE INTERACTIn ION](#) To establish a communication or interaction with Deaf and Mute people is of utter importance nowadays. These people interact through hand gestures or signs. Gestures are basically the physical action...



878. [Accelerometer Controlled Robot](#) Most of industrial robots are still programmed using the typical teaching process, through the use of the robot teach pendant. In this paper is proposed an accelerometer-based system to control...




879. [Bluetooth Controlled Robot](#) In this proposed system we going to construct a basic DC motored robot which we are going to control with android app easily available on google play store named bluecontrol....




880. [Arduino Motor Party](#) In this instructable I will show you how to throw an Arduino motor party. I will also be giving away an Arduino Mega, Arduino Uno, and an Arduino Pro Mini....




881.




[Send SMS from Arduino over the Internet using ENC28J60 and Thingspeak](#) This Instructable explains how to send an SMS from an Arduino using the Internet. There are many ways to approach this and I will explain one of the different methods...
882.




[Converting infrared to RF signals with Arduino](#) In this project we will show you how to switch on and off the power sockets box with an IR remote. Not only the power sockets box, but other RF...
883.




[Project Suite Bros: Voice Activated LED Friendship Photoset \(Arduino, Bluetooth, Crafts\)](#) (and partner-in-crime, Abbie). Now, I'm off to the next stage of my life, so I decided to build this friendship photoset for Kevin and Briton to remember our golden era...
884.



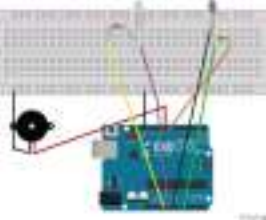
[Arduino Garage Controller](#) Although there are many garage door projects on Instructables using Arduinos, I needed/wanted something different. Last year, we had a warm summer and when I would come home after work,...
885.




[Project: Cleaner robot using Magician Chassis, Arduino, distance sensor and hand sweeper](#) This is a cleaner robot so you can give to your mommy or just use to clean your bedroom =P. Material List: 1x Arduino UNO R3 1x Magician Chassis 1x...
886.




[Arduino-Based Shadow Alarm](#) Shadow alarms are usually used for protection against theft. A shadow alarm is a device that sounds an alarm when a shadow falls on it.Described here is a simple circuit...
887.




[ARDUINO Burglar Alarm Using Infrared Emitter-Detector pair](#) In this tutorial i will show you , how to make a simple Inexpensive Intrusion Detection(Burglar alarm) using an Arduino Uno board . This project uses the Infrared Emitter-Detector pair...
888.



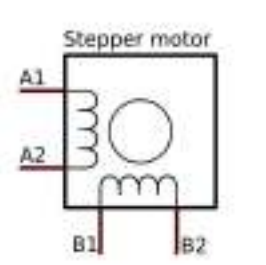
[Arduino Automatic Watering System](#) INTRODUCTION & OBJECTIVES: I is a simple system, using Arduino to automate the irrigation and watering of small potted plants or crops. This system does the control of soil moisture,...
889.




[Arduino Compatible apc220 Wireless rf Module with Graphics LCD](#) 16 node mesh, up to 1000m between nodes, sample two analog voltages per node, link any node to any other node, display data on any node with either graphics or...
890.




[Arduino DS1307 Clock](#) 1) Introduction and Images Hello friends, today I am going to build a Digital Clock using Arduino UNO and famous DS1307 Real Time Clock IC. Before we begin, here are...
891.



[Arduino Bipolar Stepper Motor](#) It is a well known fact that Stepper motors are awesome! The only downside is that they can be a bit trickier to get going than servos and plain old DC...
892.



[Temperature Sensing with Arduino](#) As part of the CanSat Primary Mission, we need to measure temperature. For this our starter kit has given us an Arduino Uno R3 micro-controller, as well as some resistors...
893.



[Arduino Basics #5 – Add SD storage to Arduino](#) Arduino Uno’s microcontroller board is great, but the one thing it’s not overly generous with is storage. Having 32KB of program flash storage, 2KB of RAM and 1KB of programmable...

894. [GSM Based Wireless Notice Board](#) ABSTRACT: There are several places which require vital notice to be displayed like colleges, railway stations, share-market, restaurants, hospitals etc. Looking into the present trend of information transfer, it is...



895.

[Sinewave Inverter Circuit Using Arduino](#) The post explains how to build a simple sinewave inverter circuit using PWM feed from an Arduino Uno board, the article also discusses a sinewave 3 phase inverter using the...



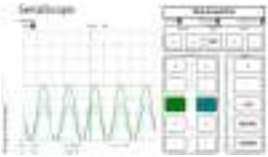
896.

[Arduino Digital Voltmeter 0V to 30V](#) Here is a useful circuit for Arduino lovers and experimenters. It is a simple digital voltmeter, which can safely measure input dc voltages in 0 to 30V range. The Arduino...



898.

[Arduino Project # 1 – Make an Ultrasonic Distance Calculator](#) Arduino Project – The distance calculator I have been playing with Arduino (micro-controller) for about 2 years now and I am becoming more and more passionate about circuits. For those...



899.

[Wireless Arduino Oscilloscope](#) In this guide I will explain how to use a Windows 8.1 phone, Arduino Uno board, and HC-05 Bluetooth module to build a wireless oscilloscope. The phone application has the...



900.

[Arduino 3.3V](#) This Lazy Old Geek (L.O.G.) loves Arduinos. I have noticed that a lot of sensors, like GPS, LCDs, magnetometers are 3.3Vdc sensors. But the standard Arduinos, Uno, RBBB are 5Vdc...



901.

[Arduino Fridge Magnet](#) Do you have a habit of leaving notes on the fridge, now take it digital and add an Arduino to it. In this instructable I'm going to show you how...



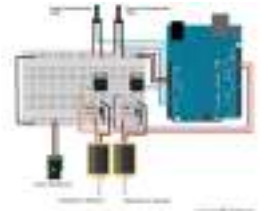
902.

[Ultrasonic Range detector using Arduino and the SR04 Ultrasonic sensor](#) his is a preliminary instructable that will take you through the steps I took to get the SR04 ULTRASONIC SENSOR connected and working to the Arduino. It will then be...



903.

[Kid-friendly PuppyDuino 0.31](#) OK, this is not a fully autonomous "get you a beer, open it for you and then tweet about it" robodog (yet 😊 but if you're itching to get past...



904.

[David Bynoe works in progress](#) For an upcoming project I needed a pneumatic ram with a closed loop control system so I could position it accurately. Didn't have the budget for an off the shelf...



905.

[Arduino passive IR trigger for Canon EOS](#) The other day I wanted to experiment with external triggers for my Canon EOS 550D camera. I stumbled upon a nice open source project called Arduino Camera Control from Oleg...



906.


[Line Follower Robot using Arduino](#) A line follower robot using 8051 microcontroller is already published here and this time the same thing is done using arduino. This line follower robot is basically designed to follow...




907.

[Interface single and Dual IR Infrared sensor with Arduino and LCD](#) Interface single and Dual IR Infrared sensor with Arduino and LCD Introduction- Multiple Sensor Interface to Arduino In this another tutorial on sensors for beginners, we are going to interface...


908.




[Getting Started with Arduino – LED Blinking](#) Arduino Uno is the best development board for beginners in the field of embedded systems. We can program Ardu technical knowledge and programming skills. This tutorial is intended...
909.




[Interfacing LCD with Arduino Uno](#) 16×2 character LCD display is a very basic LCD module which is commonly used in electronic projects. 16×2 means it can display 2 rows of 16 characters (columns). Its other...
910.




[Analog to Digital Conversion in ARDUINO](#) Analog to digital conversion module of ARDUINO UNO has 6 input ports. The number of the port varies with your ARDUINO model but the coding remains the same. The analog reading in the analog...
911.




[Touch-less Switch](#) Arduino Project – Touch Me Not I modified the Arduino project from the Arduino Starter Kit (Touch Sensor Lamp). Now it lights up an LED when your hand is close...
912.



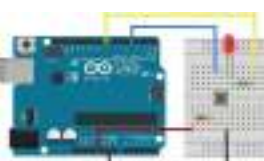
[Make an Ultrasonic Distance Calculator](#) Arduino Project – The distance calculator I have been playing with Arduino (micro-controller) for about 2 years now and I am becoming more and more passionate about circuits. For those...
913.




[Arduino automatic watering system](#) [caption id="attachment_19540" align="alignright" width="210"] Fig. 1: Author's prototype[/caption] During summers, most people are too lazy to water the potted plants on their rooftop gardens every day. Explained in this section...
914.




[Arduino Chandelier from Jars](#) E-Edit: Thank you very very much for voting for me in Featured Author, Glue and Battery Powered Contests! Cheer up and wait for my project so special is coming... Edit: If you...
915.




[Using Push Button Switch with Arduino Uno](#) In this tutorial you will learn how to read the status of a digital pin of Arduino. I hope that you already go through our first tutorial, Getting Started with Arduino Uno –...
916.




[Two Wire Arduino Knight Rider](#) This tutorial shows how to interface eight LEDs to an Arduino using only two Arduino pins. This is made possible by using a PCF8574 I/O expander IC. A "Knight Rider"...
917.




[Arduino Serial Thermometer](#) The Arduino reads temperature from a MCP9700 temperature sensor IC and displays the temperature in the Arduino IDE serial monitor window. Also see the Arduino LCD thermometer tutorial (tutorial 14). Prerequisites Complete Tutorial...
918.




[Using the Arduino Serial Port](#) The Arduino Uno can send data (such as a text message) to the PC over the USB cable. The Arduino IDE has a serial monitor window that can be opened...
919.




[Arduino Melody](#) A very easy tutorial that uses only two components. The Arduino plays a short melody on a loudspeaker. The program to load to the Arduino is one of the programs...
920.



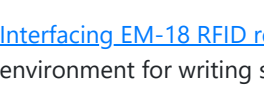
[Arduino Knight Rider](#) In this tutorial, eight LEDs are interfaced to the Arduino Uno board. This is not complicated – it is just like interfacing a single LED to the Arduino as done...
921.



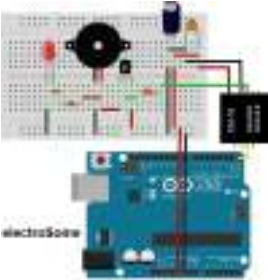
[Arduino LCD](#) In this tutorial you will connect a LCD (Liquid Crystal Display) to the Arduino Uno and then run the Arduino LCD example programs that are built into the Arduino IDE...
922.



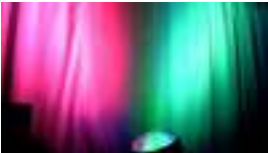
[Arduino LCD Thermometer](#) In this tutorial, a temperature sensor (MCP9700 linear active thermistor IC) and LCD are connected to the Arduino. The Arduino reads the temperature from the MCP9700 on analog pin A0...
923.



[Interfacing EM-18 RFID reader with Arduino Uno](#) Arduino Uno is an opensource physical computing platform based on ATmega328 microcontroller and provides a development environment for writing software for the board. It can be used for a variety...



924.

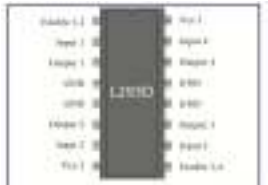


[Arduino + WiFi, Music Responsive LED Light Fixture using arduino](#) This instructable gives instructions for constructing a Saiko5 WiFi enabled LED light fixture based on the Arduino hobbyist platform. It includes step-by-step instructions from board design to soldering to case...



925.

[Trinket Audio Player using arduino](#) Overview We usually think of the Adafruit Trinket as a tiny subset of a “real” Arduino; less RAM, less code space, less I/O. But this little chip has a couple...



926.

[ARDUINO based IR remote control robot using arduino](#) Hi everyone. This my new project IR remote control robot using arduino. This is a simple design robot you can easily build it. Step 1: Requirements: Project requirements: Arduino uno...



927.

[Build Your Own Arduino & Bootload an ATmega Microcontroller – part 1](#) There are many reasons to build your own Arduino circuit on a protoboard or a custom-designed printed circuit board. At the heart of the Arduino platform is an AVR microcontroller,...



928.

[Arduino PWM Led Control using arduino](#) Looking for a simple circuit to control the light intensity of Light Emitting Diodes (LEDs) or similar lighting sources? Here is an Arduino based circuit with three independent pulse width...



929.

[Arduino project: Stereo Peak Program Meter using arduino](#) Previously, we introduced the Arduino’s analog-to-digital converter (ADC) in detail, looking at successive-approximation A-D conversion and how it’s the best compromise between speed and cost. This time, we start putting...



930.

[New Arduino WiFi Shield \(Testing\) usign arduino](#) The WiFi Shield was delivered by Amazon. The Arduino UNO Rev 3 was found at RadioShack... First you need to load the last Arduino IDE (Ver 1.0.2) it has the...



931.

[Light Meter Using I2C Level Converter, LCD, and TSL2561using arduino](#) I recently needed to measure how different materials affect light transmission for a gardening project. I decided this was the perfect opportunity to try out the new logic level converter...



932.

[Ollie- a DIY autonomous robotic blimp using arduino](#) Ollie is an open source blimp-based autonomous and ambient robot that dwells in human habitats. Ollie is observant, often flying in a manner suggesting curiosity for the world around him....



933.


[Shaun The Noisy Sheep using arduino](#) Make A "doorbell" using an Arduino Uno, a Wave shield from Adafruit, a small speaker, a plug, a Sharp distance sensor and a Shaun the Sheep. Our Shaun is used...




934.

[Telecran \(Etch a Sketch\) + Arduino = Telecranduino ! using arduino](#) I came across a bunch of stepper motors and I have since been looking for a project to do with the kids. An old Telecran (French for Etch-a-Sketch) later, we...


935.




[Car No. 06 Programmed Automatic Driving Car using arduino](#) Hi! Kaeru no Ojisan is back with Car No.06. Car No.06 is a Programmed Automatic Driving Car with following procedure;
- Simulate the Car Trajectory based on the Target Passing...
936.




[Light and obstacle detecting bot using arduino](#) Introduction For our ECSP project we have made a bot that senses and follows light and at the same time avoids obstacles. Rationale We wanted some hands on experience in...
937.




[8 LED Chaser with 74HC595 8 Bit Shift Register using arduino](#) Have you wanted to make a sweet Cylon/Knight Rider (Larson) Scanner effect? But you don't want to use up all of your Arduino IO pins? Well, you can make a...
938.




[3D LED Cube using arduino](#) The 3D LED Cube is a really cool device that enables you to see in three dimensions, get some depth perception and has 512 LED's or 512 pixels. It is...
939.




[Surfin' Bird \(Arduino Style\) using arduino](#) I just hope every body's heard. The Bird is the Word! This is a simple device to play Surfin Bird really loudly when someone trips off the motion sensor. If...
940.




[Voice Recognition System using arduino](#) Contents 1 Team Members 2 Mentor 3 Concept 4 Softwares Used 5 circuits 5.1 Pre Amp circuit 5.1.1 Circuit Diagram 5.1.2 Working 5.2 EEPROM circuit 5.3 Led Matrix display circuit...
941.




[Arduino powered Haunted Pumpkin using arduino](#) This is a cute little project that takes a pumpkin, motion sensor, and some parts from Radio Shack. It was fun to create and build. This project was sponsored by...
942.




[VOICE CONTROL CAR USING ARDUINO AND ANDROID](#) Hello friends,Welcome to ElectroPLUS . This is a post to show how to make voice control car using arduino and android. COMPONENTS REQUIRED: 1.Arduino uno or Induino R3 board. Hello...
943.




[Arduino-enabled Patron Interaction Counting using arduino](#) Using the Arduino development board (<http://arduino.cc>) has become a very popular way to create hardware prototypes that bridge the divide between the physical world and the Internet. This article outlines...
944.




[SPI Interfaces using Arduino](#) Update (6/7/2012) – I've had to disable comments on this post, because it is being targeted by spam bots for some reason. Please use the contact page if you have...
945.




[Arduino RFID Card Reading](#) Finally! It's been about 3 months since my last arduino tutorial – I've been keeping busy as usual. I've been working on this one for some time. I got the...
946.



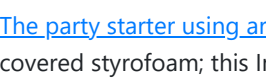
[LilyPad Arduino – the wearable technology using arduino](#) Introduzione LilyPad Arduino is one of the many Arduino microcontrollers, but unlike the more well-known Arduino UNO, MEGA and Yun, this little board has very specific characteristics that make it...
947.



[USB Biofeedback Game Controller using arduino](#) Building upon our last tutorial, which taught you how to build a muscle sensor, we've decided to give you a project that really showcases the power of our muscle (EMG)...
948.




[Making 1×10 LED Array with Random Patterns](#) This will teach you how to make a very simple 1x10 array of LEDs on a breadboard controlled by an Arduino Uno to make the LEDs blink and flash in...
949.



[The party starter using arduino](#) A desktop motorized musical disco ball. Great for holiday parties, impromptu dance-offs, and Tuesday afternoons. Bling, Music, Arduino, and glitter covered styrofoam; this Instructable has got what you need to get...



950.  [Arduino ISP \(In System Programming\) and stand-alone circuits](#) We use an Arduino to program other ATmega without bootloader . This technique allows you to use all flash memory for code and make boards using new ATmega, cheaper than those...



951. [Digispark RGB LED Fader](#) Forward: This instructable was roiginally posted at <http://www.instructables.com/id/How-to-make-LED-Fader-using-Digispark/> My students and I developed it into this exemplar, for wich they received a very good mark. Viewing the following video may...



952. [Telemetry with solar cell using an Arduino](#) *NOTE* THIS PROJECT IS DONE BY A GROUP OF STUDENTS FROM SINGAPORE POLYTECHNIC. Telemetry - Solar Cells Our project is using Arduino with the ZigBee to transmit and receive data...



953. [BARC Jeep – An XBOX Controlled Power Wheels](#) Make a power wheels jeep that is controlled by an XBOX controller. This particular build is using Power Wheels® Jeep® Hurricane with Monster Traction™ but should be usable across many different types...



954. [\[OoB\] Shooting paintball maker with relay, Arduino and .NET WinForms](#) [OoB] Shooting paintball maker with relay, Arduino and .NET WinForms My first Arduino based project was Sonar with C#, JS and HTML5. Now I continue the "Out of Boredom" series...



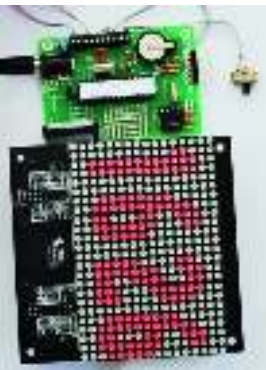
955. [Arduino Controlled RGB LED Dot Matrix Board](#) This project is a relatively straightforward and simple DIY music board. The Dot Matrix Board will allow any aged person to create their own music and beats. All you need...



956. [5x5 rgb lpd6803-led matrix arduino controlled](#) what: a 5*5 rgb led matrix, made with arduino and lpd6803 based leds from adafruit. with an pir sensor, it goes on if it detects movements and a ir distace...



957. [Self-contained 16-Digit display – Arduino & Attiny85](#) Ever wanted a 7-segment display for around the house? Here's your chance to make one! It can even be interactive based on the programming.Parts: (\$7.60) 16 Digit TM1640 based display...



958. [An Open Source, hackable Digital Clock](#) Andrew O'Malley, an amazingly creative maker, created this fanstastic Open Source Arduino-based clock that can display the time in many different ways: if not enough, one can also add his...

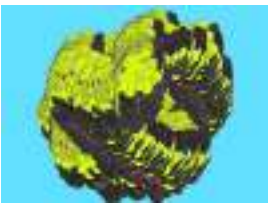


959. [IR Harp using arduino](#) Contents 1 Team Members 2 Mentor 3 Introduction 4 Components Used 5 Idea 6 Arduino Uno Board (ATMega328P) 7 Approach to Project 8 Sound Synthesis 8.1 Delay() 8.2 Interrupts 8.3...

960. [Arduino animatronics- make your awesome costumes more awesome](#) Here's how to add lights, sound and action to your favorite Halloween project using the open source Arduino microcontroller. Arduino is easy to learn to use and it opens up...



961. [Read analog data directly in Processing using arduino](#) This instructable presents a fast an easy way to use data received from an analog sensor in Processing. You will learn to utilize the Arduino and prototype electronic boards to...



962. [The Arduino Noise Machine](#) Okay, okay, I know you all were wondering what I am up to now. I love synths and so, I built this. There are three things that can catch my...



963. [Connect the arduino and make the speaker play](#) To make your Arduino to play a melody you need thes accessories. One 5 ohm speaker One Arduino uno board One Push buttom One 10 kohm resistor 8 leds And a...



964. [Team 1 Final Project Report & Video: Arduino Video Game System using arduino](#) Introduction We built a video game system that can play either Snakes or Pong. We saw a project called "Arduino Pong" and wanted to recreate it with our own twist...



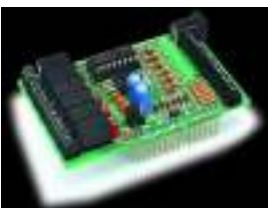
965. [Arduino Robotic Arm](#) In this instructurable I will show you how to make a simple robotic arm controlled by 4 servos , 2 analog joysticks, and an Arduino UNO. It is very similar...



966. [The Versatile Arduino Robot using arduino](#) This is my first arduino robot, and I am quite happy with the outcome. What I came up with is a robot that with modifications can do just about anything...



967. [A useful and simple IO Shield for Arduino](#) In order to "visually" highlight the behavior of Arduino programs you must connect a device to the I/O pins, which gives you tangible signals. Normally, if you want to check...



968. [Using an Arduino to Control or Test an SPI electronic device](#) There are many electronic devices that use the SPI bus, or Serial Peripheral Interface bus, for communications (e.g. various sensors, LCD displays, digital potentiometers, D/A and A/D converters, wireless transmitters...



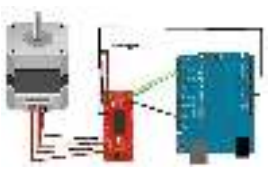
969. [Airmonica – a free-air musical instrument](#) improvise + harmonize + customize The airmonica is a easy-to-learn tweakable musical instrument that you can use to perform harmonic musical ditties by accompanying a tri-tone arpeggiator. There are endless...



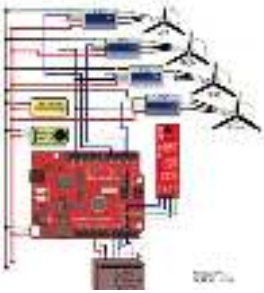
970. [Ardusumo: an Open Source Platform for Fighting Robots using Arduino](#) The idea Ardusumo is a universal platform to build robots on wheels that can move around avoiding obstacles using infrared sensors and follow routes marked with dark lines on a...




971. [Stepper Motor drive from Arduino](#) Stepper Motor drive from Arduino In this tutorial we will show you how to connect a bipolar stepper motor to an Arduino Uno board. The stepper motor we are using...




972. [UVic Quadcopter using arduino](#) Hardware Controller The Arduino platform is selected for this project, mainly due to its open software and hardware nature which has resulted in availability of extensive technical information. As a...




973.  [MenZ-DECK](#) About a year ago, we drunk beer in The-MenZ Lab. When Zagan said "I want PCDJ controller, So next project is make controller!". The project began at this time. ***MenZ-DECK...



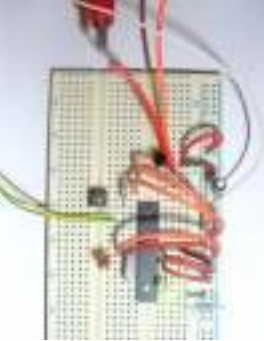
974.  [Team 12 – Prototype I Final Report: Home Automation Project using arduino](#) Introduction The Home Automation Framework project is a web application that can remotely control the electronic devices in one’s home using a web interface on a smartphone, tablet or desktop...



975.  [Infinite Loop – Prototype I Final Report: Hazardous Weather Warning System using arduino](#) Introduction: The LED warning system notifies local residents of emergency withing the area. The difference in the color of the LED will allow residents to differentiate between different warnings. Each...




976. [Arduino ATmega328 – Hardcore](#) Ok, you've completed your prototype using an Arduino Uno board, perhaps using a shield or a breadboard for any additional components, but now you want to finalise your design and...



977. [Bicycle North Indicator using Arduino](#) Magnetoception is the ability of some animals to detect magnetic fields as a means of orienting themselves. Although humans do not seem to posses the same biological mechanisms that allow other...



978.  [Shade Technologies – Prototype I Final Report: Motorized Wheelchair Canopy using arduino](#) Introduction Our Motorized Wheelchair Canopy intends to help those people with disabilities that confine them to their motorized wheelchairs and need shelter at times of inclement weather, such as rain...



979. [Fab Lab Barcelona SuperNode /Fab Lab Sevilla /Jose Perez de Lama](#) Retablillo de las Maravillas v1.0 Developed july> >august 2013 4./ Interactivity & electronics 4.1/ Switches / characters 4.2/ Screen / interface 4.3/ Motor controller 4.4/ I/O controller & interface [4./ electronics]...



980. [Arduino powered 7seg led display with Port Manipulation](#) Time for something a little more advanced. Direct Port Manipulation. Normally when using Arduino software, the actual logic behind changing the values in pins is abstracted away with digitalWrite and...



981. [Temperature-Sensitive Infinity Mirror using arduino](#) As per an assignment in my digital multi-media class, I’ve combined two Arduino-related tutorials into a functional object! The result is a pair of infinity mirrors that flash red and...



982. [High Power RGB LED Moodlamp which syncs with Philips Hue](#) In this instructable the main focus lies on the software which I've created - not so much on the hardware side. You needn't to use a high- power led for...



983. [Buggy Wheelchair Robot using an Arduino](#) This is a Modification of an electric wheelchair. I called it "Buggy" for two reasons. #1 My kids can still ride it around because I left the seat intact. #2...



984. [FOBO bipedal walking robot](#) FOBO is the fourth prototype from Project Biped. It is a 3D printed, self-contained, statically balanced, bipedal robot. It has 8 DOF (degrees of freedom) and can walk around its...



985. [CatBot: Automated Cat Laser using an Arduino](#) The CatBot is an autonomous laser toy for your cat. You may say "But Joe, isn't the laser pointer the best toy for the lazy cat owner?" I'd have to...



986. [Arduino compatible Luna Mod Looper](#) The Luna Mod Looper, basically lets you record a sequence using a potentiometer to control the pitch of the note, and then play it back and add affects. Ever since...



987. [Athena: The Global Car Tracking System\(3D Images\)](#) Bring out your 3D glasses and enjoy viewing in a novel way! I have added a new dimension to my instructable. If you do not have 3D glasses, then you...



988. [Piano Stairs with Arduino and Raspberry Pi](#) Who doesn't love music? These Piano Stairs are an interactive, relatively portable, musical installation that can be applied to basically any stairwell. I built them for HackPrinceton and won 2nd...



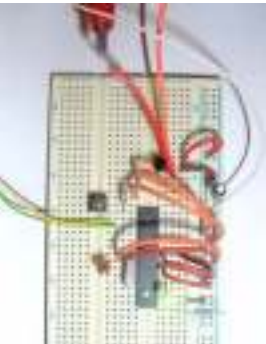
989. [Solar theremin with Arduino using arduino](#) materials: arduino uno 3 photoresistors 4 buzzers 3 10k resistor (optional) usb solar pannel or usb battery Step 1: Why? During the 2014 art Exhibition at Met (M. di Ragusa),...



990. [Multitouch Music Controller](#) This project is an Arduino-powered infrared touchscreen / coffee-table interface that I've been using to control various music and graphics applications on my computer. This is an old project that...



991. [Arduino ATmega328 – Hardcore using arduino](#) Ok, you've completed your prototype using an Arduino Uno board, perhaps using a shield or a breadboard for any additional components, but now you want to finalise your design and...



992. [Plugduino – Arduino based 120 Volt outlet controller](#) give your Arduino a 120 volt kick in the pants! The Arduino is a great tool for anyone interested in learning microcontroller programming, but after blinking some LEDs, what's next?...



993. [Arduino Masterclass Part 2: Build an LED weather station using arduino](#) Project-specific parts You'll need the standard parts (Arduino board breadboard wires pliers and so on) along with these extras: DHT11 temperature/humidity sensor 7 x 330-ohm/0.5W metal film resistors 3 x...



994. [Easily control your iPod using Arduino](#) Easily control your iPod with Arduino using serial commands. This instructable includes the schematic, the code and some extra info; everything you need to make this work. USB,battery or wall...



995.

[RC Car to Robot using arduino](#) Converting an RC car into a robot is a quick and easy way to get started with robotics. At the very least, when you get bored of playing with your...



996.

[Arduino Guitar Pedal using arduino](#) The Arduino Guitar Pedal is a digital multi-effect pedal based upon the Lo-Fi Arduino Guitar Pedal originally posted by Kyle McDonald. I made a few modifications to his original design....



997.

[Arduino Optical Theremin](#) When I first became aware of Arduino, a theremin seemed like a natural project: sensor + actuator. It turned out to be quite affordable and fun to make. It is...



998.

[Arduino Wireless Programming with XBee Series 1 or 2](#) Hi. This Instructable will guide you through the process of wirelessly programming your Arduino using two XBees. I just finished designing a wireless EEG system with the XBee modules, so I've become quite fluent...



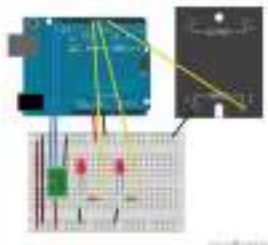
999.

[My Arduino Binary Clock](#) Hi from Italy Although many watches are created binary, my project was inspired mainly to this: <http://www.instructables.com/id/LED-Binary-Clock-1/>, very smart and funny. I tried to improve the design and to...



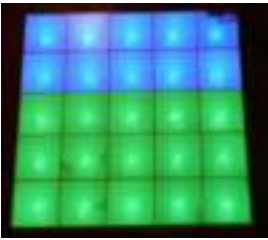
1000.

[Using Arduino tide predictions using arduino](#) In the previous post, I outlined some Arduino code to generate tide height predictions for a NOAA tidal reference station. Now let's do something useful with this newfound functionality. In...



1001.

[Low Cost LED Grid](#) There are a number of great Instructables on LED grids out there. This is a low cost version - not quite as polished, but easy to make. This project uses...



1002.

[Arduino controlled Interactive wallpiece](#) This project is a subset of my idea of an interactive wall.. so this is an interactive wall-piece.. What does it do ? Mine is a touch activated light display....



1003.

[Intro to Arduino](#) An Arduino is an open-source microcontroller development board. In plain English, you can use the Arduino to read sensors and control things like motors and lights. This allows you to...



1004.

[Sentriduino! Its the all new Sentry turret](#) Hey guys, Today I would like to show you how to make a simple sentry turret out of household Items! You would only need to get an Arduino UNO or...



1005.

[Temperature-Sensitive Infinity Mirror](#) As per an assignment in my digital multi-media class, I've combined two Arduino-related tutorials into a functional object! The result is a pair of infinity mirrors that flash red and...



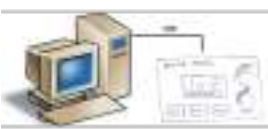
1006. [Wireless nunchuk controlled animatronic doll](#) This instructable will attempt to show you how to make an animatronic doll controlled by a wireless nunchuk. This doll can only move its head though. I'm sure there are...



1007. [Blinky Lights using Arduino and LumiGeek](#) I used the Arduino UNO combined with three LumiGeek shields to run lighting. LumiGeek has dedicated shields to support 1 Watt RGB LEDs that require constant current, Addressable RGB LED...



1008. [Analog audio panel for PC using Arduino](#) Have you ever struggled with audio settings in control panel in middle of a VoIP call? Or, wondered if the other guy can hear you properly? I have. My work...



1009. [4X4X4 LED Cube w/ Arduino Un](#) As someone who is very new to digital electronics this LED cube was fun to make, challenging and a great lesson in soldering. If you have some patience (64 LED's...



1010. [Arduino Color Sensor](#) Here we will be learning how to make a color sensor. my model consists of three cardboard compartments containing an LED - one red, one blue, and one green -...



1011. [Cat Repelling PIR motion sensor \(covert\) speaker box alarm using Arduino](#) This is a PIR motion sensor device that works with the arduino uno. In order to make it covert enough to be placed in multiple settings and portable enough to fit most places,...



1012. [Digital Clock with Arduino and DS1307](#) In this article you will learn how to make a digital clock using Arduino and the DS1307 RTC IC. What is DS1307 IC actually? Well, it is a Real Time...



1013. [Arduino Drawbot](#) In some of my previous Arduino instructurables I have show to the Arduino beginners on how to control servos in different ways. And in my last instructurable I have show the modification...



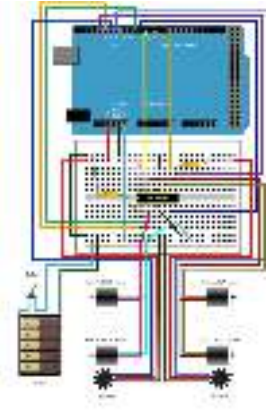
1014. [The Traveling Geocache using Arduino](#) This project and future projects can be found at my website <http://revoltlab.com/> where you can also find my blog. UPDATE LOG: NOW SUPER SIMPLE TO REPROGRAM! Easy FTDI USB interface...




1015. [Arduino Button Activated Treat Dispenser](#) For my Digital Multimedia class final, I created a treat dispenser that is activated by pulling a chain, which starts a servo motor that spins a wheel to dispense treats...



1016. [Drive with PID Control](#) This example shows how to simulate a simple closed-loop control algorithm in Simulink® and how to run it on an Arduino® board. Supported Hardware: Arduino Leonardo Arduino Mega 2560 Arduino...




1017.




[BLINKING AN LED USING AN ARDUINO UNO \(EXPLAINED\)](#) So you're here because you want to start learning some of the Arduino Basics... So let's start with THE most basics... no this "tutorial" is actually a little more basic...

1018.




[Webster: A Geometric Pattern Weaving Machine](#) We are three students from California College of the Arts in San Francisco in the Architecture program. This studio is called Creative Architecture Machines and is taught by Jason Johnson...

1019.




[Arduino Based Automated Lighting Control](#) This is my second instructable. i want to share some of the basic things i made using the arduino i am so busy lately. then i got the chance to...

1020.




[Arduino-controlled, Aluminum Archangel Costume Wings](#) I have always loved the Marvel character Archangel. When my brother, (Shameless plug alert) budding comic book artist David Fernandez, showed me pics of a cosplay convention he went to I thought...

1021.




[Arduino Breathalyzer](#) What is a breathalyzer you may ask? It is a device for estimating blood alcohol content (BAC) from a breath sample.In simple terms it is a device to test weather a...

1022.




[Arduino Masterclass Part 1: Make your own hardware](#) The world is going nuts over the Raspberry Pi single-board computer (SBC) for being a whole system under \$50. In reality though the Pi isn't actually the cheapest computing device...

1023.




[Electronic Instrument](#) This electronic instrument allows you to sequence and loop audio and MIDI data. Most of the time I use it to sequence drum samples so I can play around with...

1024.



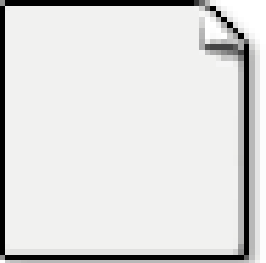
[Arduino Uno – Programming With A Serial Port](#) I'm working on an Arduino clone. The Arduino is essentially an ATMEGA328P development board with a bootloader pre-loaded. There are a lot of custom macros built into the programming interface...

1025.




[LeoStick Getting Started Guide](#) The Freetronics LeoStick is a handy break-out board for the ATmega32U4 microcontroller. The board has a convenient USB stick format, and is based on the pinout and connections of the Arduino...

1026.



[ArduSensor Fun Pack](#) ArduSensors are open source plug-in-play sensors for Arduino. These were originally made for beginners to get started with Arduino, a very cool electronics prototyping platform, but anyone can use them....

1027.



[Ardu-Bot-Tom – RF Link Controlled Robot](#) [box color="#985D00" bg="#FFF8CB" font="verdana" fontsize="14 " radius="20 " border="#985D12" float="right" head="Major Components in Project" headbg="#FFEB70" headcolor="#985D00"] Ardu-Bot-Tom List of Materials Controller Parts: 1x - Arduino Uno 1x - 9V Battery...

1028.

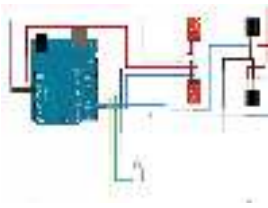
[Multiplexing with Arduino and the 74HC595](#) The 74HC595 is an easy and inexpensive (at about 60 cents apiece) way to increase the number of digital out pins on your Arduino. In this tutorial I'll show you...



1029. [Arduino LED Flasher Circuit](#) In this project, we will go over how to build an arduino LED flasher circuit. We will use a standard arduino board, doesn't matter which, and connect it so that...



1030. [Touche for Arduino: Advanced touch sensing](#) Update: New interface - look at the last step. Credits: Arduino sensing done by DZL, Processing sketch and Instructable done by Mads Hoby. Disney Research lab designed a novel way to detect touch....



1031. [Arduino IR Transmitter & Receiver w/ LEDs Flickering Issue](#) I have an Arduino Uno connected to two IR transmitters and respective receivers. Basically, when one of the receivers detects a beam break, I have a strand of LEDs display...



1032. [Arduino Solar Tracking Robot](#) This is a simple solar tracker which automatically orients itself towards the sun or any bright source of light like the sun .If you place solar panels on this robot...



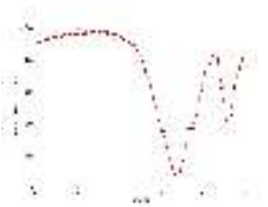
1033. [Domotic arduino](#) In this introduction I will show you a overview of this project whit Arduino Uno. The purpose of this instructable is move a electric roller shutter by Arduino Uno. The...



1034. [Arduino DDNS \(Dynamic DNS\) by Open-Electronics.org](#) This device captures the IP address of your network and it publish on site DynDNS.com. All without PC. It allow a remote access to your LAN even if the IP...



1035. [Wrap Beats – Capsense Arduino Instrument](#) Wrap Beats is an instrument that lets you string together notes in order to create different melodies and visual patterns. I constructed it using the Capacitive sensing library for Arduino...



1036. [Simple Arduino data-collection](#) At this year's "Arduinos in the Physics Lab" workshop at the AAPT meeting, one of the participants asked for a simple way of using the Arduino as a tethered A/D...



1037. [Energino: an Arduino-based energy consumption monitoring shield](#) Energino is a plug-load meter that measures the amount of power consumed by whatever DC electrical appliance is plugged into its. It was originally designed to monitor the energy consumption...



1038. [More Humane Moisture sensor](#) Recently I got a project from Titan industries, who were in search of something as an interactive plant pot which could bridge this gap of emotional communication, in mins this...



1039. [How To Make an Obstacle Avoiding Arduino Robot](#) Hello all! In this Instructable I'll be showing you how to make a robot similar to the "Mobile Arduino Experimental Platform" (MAEP) that I made. It is equipped with two...



1040. [Fijibot](#) Fijibot is an autonomous, self-charging photovore. I built him using a 1.5 liter Fiji Water bottle, an Arduino Uno, 6v solar panel (plus various other parts) from Radio Shack, an...



1041. [Cwik Clock v1.0 – An Arduino Binary Clock](#) Overview This is a guide to building an Arduino-powered clock that uses LEDs to display a 24-hour clock (hours and minutes) as binary digits, an analog meter to display the...

1042. [Clusterbot](#) What is Clusterbot? He is a small, affordable, autonomous Arduino-powered robot. He can move, see, avoid obstacles, and makes a melodic chirping sound sometimes. Clusterbot was my first Arduino project,...



1043. [4 Servo drive CellBot which can be remotely controlled using Arduino](#) I started with an idea of what I wanted to do from the beginning but one attempt after another I finally got to where I am now. This robot can...



1044. [Over the Counter Kitchen Radio using Arduino](#) This project used the Si470x FM radio receiver and an ardurino to make an over the counter kitchen radio. These parts had been purchased for a different build that unfortunately...



1045. [SPEAKR](#) Nature has a way of speaking to us in a way that soothes and revitalizes. Sounds of the wind in various places create low volume tones that we barely hear....



1046. [Box Scurity Package using Arduino](#) If you touch the package, it will scream and run away--changing its course when it strikes an obstacle. When you lift the gift tag, light strikes a photocell and operation...



1047. [How To Interface a CDV 700 Geiger Counter to a PC Using an Arduino Video instrucitons](#) How To Interface a CDV 700 Geiger Counter to a PC Using an Arduino (Part 1) The second part of our video series of our project to interface to a...



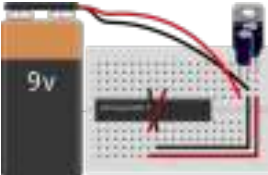
1048. [Using the Sparkfun Motor Driver 1A Dual TB6612FNG using Arduino](#) As a beginner myself, I struggled to find a one-stop set of instructions to get up and running with Sparkfun's Motor Driver 1A Dual TB6612FNG. This motor driver breakout board...



1049. [An 8-Bit Waterfall using Arduino](#) So far my Arduino projects have all needed only a small number of output pins. In a previous post I talked about moving some of the logic off the Arduino...



1050. [Honey, I Shrunk The Arduino](#) As you might be able to tell from recent posts, I've been doing quite a bit of work with an Arduino. I've now got at least one project that I'd...



1051. [Color Changing LED Tree](#) Ever wanted an LED tree? Well now you can have your LED tree and eat it too (no, wait, you probably shouldn't).. Step 1: Gather the parts You will need:...



1052. [BIKEDUINO – Stopping Point Predictor for bike riders](#) The project consists in a Arduino that gets the speed of the bike from a dynamo and it controls a laser which points always to the point where the bike...



1053. [Tissue Box Guitar – Light Strings using Arduino](#) the idea of anything can be an instrumental music has been always in my mind so i made a wooden tissue box that i installed inside it a guitar of...



1054. [Making a Better Mouse Trap](#) There are a lot of things this world needs at the moment. One of them is a better mouse trap. Mice are getting smarter every day and if we're not...



1055. [Arduino text'in](#) Arduino text'in. Key Features: 24 relays controlled by 4 I/O lines! Cell phone text using your Arduino. This project hacks a cell phone to text using normally open relays. After...



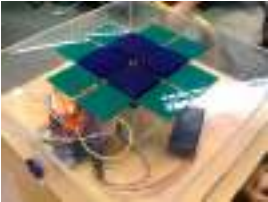
1056.

[Arduino Analog Inputs](#) This week is all about analog inputs for the arduino. I'll show you how you can use a voltage divider circuit (see episode 3) and a variable resistor to make...



1057.

[Combo Blocks using an Arduino](#) Project by CU Boulder Thinks That Think students: Michelle Bourgeois, Charles Dietrich, and Ben Link Imagine having a safe in which the combo is any small object of your choosing. ...



1058.

[Buzz Wire Alarm Clock](#) Does it happen to you to slide your finger across your phone's screen and turn the alarm off ... just because you have automated this task and don't even need...



1059.

[Making a Mayan Tzolkin Calendar](#) OK, I will admit that I am a little obsessed with things Mayan at the moment, which explains why I wanted to make a Mayan Tzolkin calendar. I modeled the...



1060.

[Robot Snake](#) Purpose This project was built for the Things that Think undergraduate/graduate class CSCI 4830-7 and CSCI 7000-7 for the University of Colorado at Boulder. Our group consisted of one graduate and two...



1061.

[Rabbit Ears on a Cap using Arduino](#) We are students from Singapore Polytechnic. After looking at the famous Necomimi Arduino Cat Ears, we decided to give it a try to help us familiarise ourselves with the accelerometer...



1062.

[Geoweaver: A Walking 3D Printer Hexapod using arduino](#) Geoweaver is a student designed (team members Jia Wu, Mary Sek, and Jeff Maeshiro) robot created in the Creative Architecture Machines advanced options studio at the California College of the...



1063.

[Polar Plotter on Arduino and MakerBeams](#) The project A polar plotter is a plotter with a rotating, extendable arm. Its characteristics differ greatly from those of a traditional plotter, which in most areas have a superior...



1064.

[Build the Remote Control Bobble-head Bobbler! using arduino](#) Bobble-heads!!! Every sports fan loves em, but they're kind of boring, just sitting frozen on your shelf 😞 I thought it might be fun to create an Automatic Bobble-head Bobbler something...



1065.

[Arduino Webserver Control Lights, Relays, Servos, etc...](#) In this project using only an Arduino with an Ethernet shield. I'll be controlling one LED and a servo, but you can apply this method to control a DC motors,...



1066.

[Lunch Decider Wheel using arduino](#) The lunch decider wheel is basically a carnival-style wheel that spins every day at 11:45am and selects what is for lunch. It came about on account of my perpetual indecision...



1067.

[UnDecima Audio Output from Arduino](#) I already have one project where arduino outputs audio signal to USB speakers via software 10-bits PWM. In first, I was not satisfied with quality of sound generated via PWM. There...



1068. [Interval Long Exposure Camera](#) There's a real beauty in long exposure photography. Hours and days and weeks and months and even years can be condensed onto a single frame, and that frame will catalog...



1069. [Lego Technic Car with Arduino + XBee Wireless Control](#) I was perusing Instructables one fine winter Saturday, when my 8 yo son came in and peered over my shoulder and saw this: <http://www.instructables.com/id/RC-Lego-Car/> by sath02. My son is a...



1070. [Visual Navigator Making it MOBILE using Arduino](#) Obstacle avoiding vehicle, continue in "3D Laser Range Finder" series (project 1, project 2). The basic idea is the same, measuring distance using red laser pointers, CCD analog camera...



1071. [8x8x8 LED Cube with Arduino Mega \(+Sound +PS controller +Game\)](#) This is a instructable which is based on the Cube by Chr, (<http://www.instructables.com/id/Led-Cube-8x8x8/>) by SuperTech-IT, (<http://www.instructables.com/id/CHRs-8X8X8-LED-Cu...>) and by das-labor.org, (http://www.das-labor.org/wiki/Borg3d_Bauanleitung...) but i think its...



1072. [Joystick controlled Camera using Arduino](#) Hi, First of all, my English is not perfect => I've seen many projects with Arduino that describes how to control 2 servo's with a joystick or use a lcd...



1073. [Gyro Camera for Motorcycle using Arduino](#) As seen in MotoGP Race, the rider is seen riding through corners while laying aside his bike to the left and right. But there is an interesting moment when the...



1074. [Building a device that clips to your belt](#) Our goal in this step-by-step instructable is to build a device you can clip to your belt and wear throughout the day. This device will log data that, when downloaded...



1075. [Hidden Wall Outlet Safe \(w/Arduino Lock\) using arduino](#) Stash your valuables where no one will ever suspect. Wall outlets are perfect for stashing valuables since you have tons of them at home. You must be crazy enough to...



1076. [DIY Arduino Motor Shield \[for only \\$8!\]\(L298N 2x4A\)](#) Today, I'm going to show you how to make an Arduino motor shield (driver) at a low cost. It works splendidly, its posses almost all the characteristics of the original Arduino...



1077. [Intermediate Arduino: Inputs and Outputs using arduino](#) Continuing from my Intro to Arduino post, this Instructable will go over some slightly more advanced topics with Arduino, specifically relating to controlling and managing many inputs and outputs. The...




1078. [EL Wire Hat: Sequenced and Sound Activated with Remote Control](#) Welcome to the Instructable guide of my EL Wire hat with some fun features. The concept is an EL Wired hat with 8 sequenced EL wires controlled by a wired...

1079. [TV Remote Controlled Car](#) Nothing is worse than loosing the controller that came with your remote control car. Replace that sucker with an arduino and the one remote that always seems to be around,...




1080.




[Arduino Solar Cell Tester](#) When I'm building Solar Shrubs and other solar-powered creations, I often scavenge cells from various off-the-shelf devices such as solar garden or security lights. But these cells are rarely labeled as to their voltage, current,...

1081.




[Capteur temperature choix du type de degres par infrarouge using arduino](#) ENGLISH VERSION HERE Dans ce programme nous allons voir comment capter une température et afficher sa valeur sur un lecteur LCD en choisissant si on veut l'afficher en°C ou °F...

1082.




[Open Bitcoin ATM using arduino](#) The world's first completely open-source Bitcoin ATM for Education and Experimentation. <http://openbitcoinatm.org> for more information. Step 1: Fabricate Box and Faceplate Out of a piece of 12"x12" aluminum sheet metal, cut...

1083.




[Programming the Arduino I/O pins](#) Overview The Arduino Uno is a microcontroller board based on the ATmega328 (datasheet). It has 14 digital input/output pins (of which 6 can be used as PWM outputs), 6 analog...

1084.



[Arduino, Sensors, and MIDI](#) Now that you're up to speed on using Arduino's inputs and outputs, this Instructable will give you everything you need to get started using sensors to trigger MIDI notes from...

1085.




[LittleBitty Joe using arduino](#) Say Hello to littleBitty Joe! Joe is my school's mascot! Speak to Joe and watch his eyebrows lift, whiskers vibrate, eyes illuminate, heart spin and hear him ROAR! Not only...

1086.




[A Simple and Very Easy Inverted Pendulum Balancing Robot](#) Let's make a simple inverted balancing robot, and operate it. You need only half a day to do them, if you have an arduino and some materials. [a video of...

1087.




[How to build an Arduino synth](#) This is a super simple and easily customizable little synthesizer. This is my first time using the Arduino and also with acrylic, both I found very fun to work with...

1088.



[Smart Distance Measuring Tape v2](#) After posting up the v1 of my project many people requested an more detailed instructable. So i decided to start with a new one with a little upgrades to my...

1089.




[Burn Arduino Bootloader on Atmega-328 TQFP and DIP chips on Breadboard](#) Parts required (Hardware) Arduino Uno Board (1) TQFP 32 to DIP 28 Adapter (1) Link Atmega TQFP 32 pin chip (1) Atmega DIP 28 pin chip (1) 10K resistor (1)...

1090.

[Arduino Control DC Motor via Bluetooth](#) Hi guys, In this project we will control a DC motor with a smartphone via bluetooth. This project is great to learn more about: -DC motor - Interfacing Arduino with your...

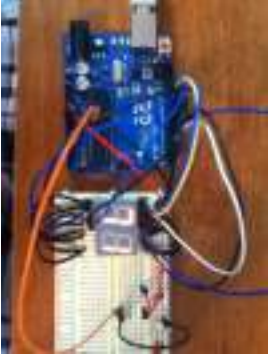


1091.




[Arduino Powered 3-zone thermostat](#) I was looking at all those swoopy-zoomy internet connected and controllable thermostats. "Self," I told myself, "we should make one of those." He didn't seem all that excited about that...

1092.




[Arduino Digital 7-Segment Thermometer](#) This a guide for an Arduino version, but I am working on a mini ATtiny84 version. Once I get that working, I will post another Instructable on how to make...

1093.




[Wi-Fi Body Scale with Arduino Board](#) In this post we present the design of a scale that connects to the Internet and automatically sends weight info on a Google Document. The project is composed of Arduino Uno...

1094.




[Paint Pulse: Digital Water Marbling](#) Paint Pulse is a project which seeks to build upon the water marbling crafts of Ebru and Suminagashi with digital behavioral additions. The idea is to design intricate, flowing patterns of paint directly...

1095.




[Dogduino:The Automatic Dog Feeder using Arduino](#) Tired of having to find the dog food to feed the dog? Tired of having to get up early so your dog doesn't attack you for his food? Are just...

1096.




[A solar tracking automatic motorized window blind retrofit using Arduino](#) Buildings account for 20-40% of total energy use in developed countries. Window shades (or blinds) can help to reduce building energy use and improve visual comfort (i.e., reducing glare and...

1097.




[StopIt! LED Game \(powered by arduino\)](#) This project was inspired by this video from YouTube and the Pendulum Challenge Kit from Makershed.com. Its a simple game consisting of five LED lights and one pushbutton switch. The...

1098.



[Arduino 3-axis Mini Lazer Paper-Cutter](#) Updated : 16/3 Add step 4, about using the stage. Updated : 18/3 Add photos (cutting vinyl adhesive sheet) Updated : 19/3 Add step 5, acting as pen plotter Updated...

1099.



[PCB on a Box using Arduino Board](#) Sorry, but I hate cleaning windows, is one of my unfinished business as usual, but I had to do (at least) every time I wanted to etch a circuit board...

1100.

[Arduino browser based remote control \(linux\)](#) We have kids. I love them to bits but they keep hiding the remote control for the satellite and TV when they put the children's channels on. After this happening...



1101. [Rainbow Mega Pong Clock using Arduino](#) This is my take on the clasic Pong clock with an RGB back light that changes every time the date is displayed. A big thanks to mrnick1234567 and his <http://www.instructables.com/id/Pong-Word-Clock/>...



1102. [Arduino V-Twin Flux Capacitor](#) I SHALL CALL HIM " PEE-WEE " Personal Electronics Entertainment With Embedded Education. Basically a project that is fun and I learn a hole lot of stuff from it.



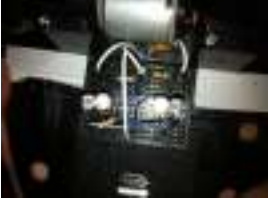
1103. [Mechanical Led Matrix Display](#) First of all we would like to thank everybody that helped organizing the 2nd edition of Arduino Jam, and especially the Jo3ri, who supplied us with some quite cool goodies...



1104. [Interactive Logo using an Arduino](#) first of all we would like to thank the organisation and especially the main sponsor, Capgemini, which made all of this possible. This project is a contribution to the first belgian Arduino...



1105. [\[Arduino\] Linefollower with photoresistors](#) I built a linefollower robot that could be used in many different ways, and I summed up my project in some steps. To begin with, all you need is the...



1106. [New animatronic Eyes: Rock On!](#) Someone had seen Peter Penguin or my Instructables on Animatronic Penguin Torso or Animatronic Eyes, and was working on a sculpture. He wanted to animate the sculpture when someone walked...



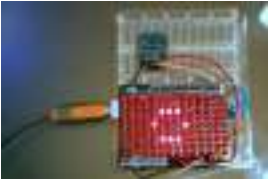
1107. [Randomized Arduino Drum Machine](#) I like drum machines. However they are not always the easiest to build. I wanted one that is: A. Simple, Yet Powerful-If it uses lots of components then it is...



1108. [Touch Sensitive Audio Desk Trays- Arduino](#) After having completed my first Arduino project (which can be found here) I wanted to try and create something that had more of a practical use. My idea behind this...



1109. [Arduino makes 2D Level](#) This is a project for Arduino to make a 2D Level, aimed at beginners. Arduino draws a circle on an LED Matrix that moves around according to readings from a...



1110. [Arduino Etch-A-Sketch Clock](#) I've seen various Arduino driven Etch-A-Sketch clocks on the web , but none with instructions (is it some kind of secret? Is someone planning on making it rich in the...



1111.

[Home Alert: Arduino + Cloud Messaging On A Large Display](#)

In the age of mobile phones, you would expect that people would be responsive to your call 24/7. Or... not. Once my wife gets home, the phone stays buried in...



1112.

[Reginald: a UDP surveillance bot; control via the Internet using Arduino](#)

Reginald started from the simple, yet bold idea to control a bot from anywhere in the world with a live video feed. What I wasn't expecting was for Reginald to...



1113.

[Beginner Arduino](#)

The Arduino is a pocket-sized computer (also called a "microcontroller") that you can program and use to control circuits. It interacts with the outside world through sensors, leds, motors, speakers.....



1114.

[Auduino Lo-fi Synth for Arduino](#)

Hello again. Today I'd like to show you the Auduino. That's right, the Auduino is a Lo-fi Granular Synth that works on arduino. It uses some analog pins and a...



1115.

[Ambient Etch-a-Sketch](#)

We built a pseudo Etch-A-Sketch emulator that modifies its appearance based on the user's environment – the temperature and light conditions. Instead of only drawing horizontal and vertical lines, we...



1116.

[The iDial – Critical Making Personal Identity Augmentation Device](#)

In this critical making project, we will be making a personal iDial, which will give you, the wearer, the ability to reflect on your personal identity in a private space,...



1117.

[LED Super Mario Piranha Plant using an Arduino](#)

We are going to make an Arduino control LED Piranha Plant :) Step 1: What you'll need Arduino Uno 9 Resistors 9 LEDs - Red, Yellow, Orange is best since...



1118.

[ArduinoISP Bootloader/Programmer Combination Shield](#)

I started recently to get interested in building Arduino based robots. Since it is a traumatizing process to take any creation apart, I am opting to keep mine alive and...



1119.

[Sugarcube MIDI Controller](#)

This project is a portable, Arduino-powered, grid-based MIDI controller that boots up into a variety of apps to do lots of things with sound. It has 16 backlit buttons, used...



1120.

[Fun Shway Display using an Arduino](#)

Build a nice looking LCD display with buttons for mounting on the wall. Key Features: 2 line by 24 character LCD display controlled with 4 I/O's (74HC164). Back light control...



1121.

[Build a Controllable Coffee Roaster from an Air Popcorn Popper](#)

I have a passion for coffee. I also have a passion for electrical engineering. Why not combine them? This Instructable describes how I transformed a hot air popcorn popper into...




1122.

[Sound Reactive LED Strip](#)


THERE MAY BE 9 STEPS BUT I PROMISE THIS ONE IS QUICK AND EASY! In this Instructable I will be showing you how to create a light reactive LED system....




1123.




[Heat-Seeking Desk Fan \(using Arduino\)](#) Summary: The following is a step by step guide on how to make a Heat-Seeking Desk Fan from an Arduino microcontro servo, and an infrared temperature sensor....
1124.




[Proximity sensing mouse wheel scroller using Arduino](#) List of tools: 1. Exacto 2. Arduino Nano / USB chord (Mini-B) 3. Dremel / Drill 4. Paper & Pencil 5. Sharp IR Sensor (2Y0A21 F) 6. Hot glue gun...
1125.




[Twitter Enabled Text to Speech using an Arduino](#) Let the world know what you're eating for breakfast with an 80's style vocal synthesizer! This project uses an Arduino to send your Twitter stream to a voice generator chip...
1126.




[Microcontrollers: The Basics](#) Different kinds of computers are designed for different purposes. The computer at the heart of your laptop is optimized for different pupposes than the one in your phone or the...
1127.




[Arduino Robot V2 \(Fast\) Also Voice Controlled](#) This is my second version of my arduino robot after "Build your first robot". My Second version is slightly complicated as compared to my first one but offers better features....
1128.




[Programming an ATtiny w/ Arduino 1.0](#) This tutorial shows you how to program an ATtiny45, ATtiny85, ATtiny44 or ATtiny84 microcontroller using the Arduino software. These are small, cheap (\$2-3) microcontrollers that are convenient for running simple...
1129.




[Arduino Cat Detector SD Card Logger](#) I used: an Arduino Uno a Parallax PIR Motion Sensor and a Seeed Studio SD Card Shield Arduino, shield, sd card, logging shield, storage, logger Check out This instructable on...
1130.




[Pi...In A Single Digit using an Arduino](#) Ah yes. It has been a long time since I posted an Instructable...well here goes: It has been a while since I have been otivated to write an 'ible. During...
1131.




[Printer to vinyl cutter hack](#) Vinyl cutters are used in the sign writing industry, and are great for making stickers, signs and graphics. I would like to thank Instructable members silverjimmy and Groover for their...
1132.




[Automatically water your small indoor plant using Arduino + pump](#) Have you ever wanted a little plant to brighten up your desk or home, but you're afraid that you'll forget to water it? Fear no longer! Using an Arduino, a...
1133.



[Solar Module](#) This page maintains the necessary documentation (hardware & software) for recreating the Solar Hardware Module ("Solar Module") using either Arduino UNO or TI Launchpad. Prior to creating the solar module,...
1134.



[Arduino Vocal Effects Box](#) This Arduino-powered vocal effects box pitch shifts and distorts incoming audio signals to produce a wide variety of vocal effects. This project is my first experiment with real-time digital signal...
1135.



[Bacon Alarm Clock – Arduino](#) This is a project I came up with that was inspired by my love for bacon! This is an alarm clock that is designed to wake you up with the...

1136. [Robotic Arm Trifecta \(Science Olympiad\)](#) In the fall of 2012, we set out to construct a robotic arm for the Science Olympiad competition that would be capable of performing the required set of tasks efficiently...



1137. [Interactive Magic Mirror with Candy Dispenser](#) For Halloween 2012 I created an interactive Magic Mirror. The Magic Mirror has a sonar (PING))) sensor that detects when kids are are close. Then the mirror says a few random...



1138. [Self-Balancing Robot](#) First of all I want to apologize for my English, if you don't understand something, please, ask. I know that a self-balancing robot is not new, but when i started...



1139. [Artemis & Apollo: Dancing with Arduino and light detection](#) According to Ancient Greek mythology, Artemis and Apollo were immortal twins born ages ago on a rocky island in the Aegean Sea. Artemis, her hunting bow poised and fleet feet...



1140. [Arduino+Stepper Motor Camera Slider](#) This is a trial and error / design and development process which I followed in developing a camera slider for creating time-lapse video clips on my DSLR camera. The idea...



1141. [Urban Sensing Networks using Arduino](#) Often government data sets available to us online are taken from major nearby metropolitan areas or infrastructural centers. With an easy to follow introduction to new softwares and technologies the...



1142. [RFID touch screen Automated Bar – Barduino v2.0 with Facebook Integration!](#) Got an Arduino? Like parties / alcohol? Can't be bothered to make your own bar quality cocktails? Make a Barduino! Its back, with new features in v2.0: Facebook integration -...



1143. [IMP-ERSONATOR: Electric Imp + Arduino + Wave Shield = Remote Sound File Player](#) This Instructable will demonstrate how to make a remotely activated sound file player. It uses an Electric Imp, an Adafruit Wave shield and an Arduino Uno The Electric Imp enables...



1144. [Intuitive Vibrotactile Feedback Educational Feedback Devices](#) The goal of the project is to come up with an affordable yet generic vibrotactile feedback device to be used for educational purposes. A chemistry learning environment is developed to...



1145. [Bird Proof Squirrel Feeder & Solar Powered Camera using Arduino](#) The Solar Powered-Bird Proof Squirrel Feeder w\ Camera will allow squirrels to retrieve seeds, nuts, and corn kernels without worrying about those pesky birds stealing all their food. While your...




1146. [How to make and use the arduino as an lsp for an ATtiny85](#) In this instructable I will show you how you can make your own Atting programming shield for the arduino and then use the arduino as a programmer. Usually If you...




1147. [Brushless Gimbal with Arduino](#) This is a Spring 2014 Electronics project at Pomona College created by Andreas Biekert and Jonah Grubb. Thanks to Professor Dwight Whitaker, Tony Grigsby and the Pomona Physics Department. Our...



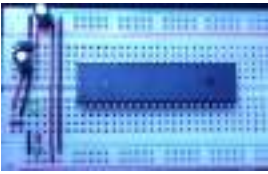
1148.




[Plush toy, singing with Mommy's voice](#) This Instructables is about upgrading a plush toy to give it the ability to sing when baby presses its belly. Most importantly : it will not play a stupid pre-recorded...
1149.




[Mechanical Bull for Dolls](#) This mechanical bull was created as a weekend hobby. The creation process was simple and did not last more than two hours. The materials I already had at home. For...
1150.




[How To Make The Easiest Breadboard Arduino-Compatible Sanguino-Equivalent](#) Okay so the Title is indeed a bit of a mouthful lol ! Ive been needing to mess around with a desire for MORE Input/Output pins than the Arduino UNO...
1151.




[Head Mouse – Game controller or disability aid using Arduino](#) My kids wanted to have a head controlled mouse for playing Minecraft - they wanted to move their heads and have the field of view move. I decided that was...
1152.




[Connect 4 Binary Clock using an Arduino](#) Welcome ladies and gents! As an entrepreneur, I'm always looking for great projects to share. Myself and two other classmates recently put together a project for our Master's of Engineering...
1153.




[Speech-controlled Game Boy Advance using arduino](#) This is a project I worked on for my electronics class at Pomona College. Thanks to Professor Dwight Whitaker and Tony Grigsby for their help and guidance throughout this project,...
1154.




[Sign Language Translator using Arduino](#) First of all, this project is not finished. We're still trying to improve and fix some problems. Right now, we're only able to translate letters from "A" to "E". The...
1155.




[Motion Sensing Digital Camera & Alarm using Arduino](#) Welcome to my instructable on how to make an Arduino-controlled motion sensing camera and alarm! The motivation behind this project, which I worked on in my electronics class at Pomona...
1156.



[A Planar 2-DOF Haptic Device for Exploring Gravitational Fields](#) For our project, we built a planar, 2 degree-of-freedom haptic device for educational use. The design is based on a 5-bar mechanism. We wanted to build a device that would...
1157.



[Robo-Mobile – A Homemade Bluetooth Robot using arduino](#) Background This robot is one I built to learn. Before this project I did get my feet wet with a few small scale Arduino projects like an ultrasonic robot, (that...
1158.



[Smartphone controlled Arduino tank using Annikken Andee](#) Hi guys, I am Robin, one of the developers of Annikken Andee. Just a few weeks back we were invited to be a part of Arduino Day Singapore 2014. On...
1159.

[Bitcoin Price Ticker \(almost\) from scratch using Arduino as ISP](#) Hello everyone! I decided to create this tutorial on how to make a Bitcoin Price Ticker. Well, this is only a prototype and I will make a smaller edition with...



1160.

[Passive Sensors – Detecting Light and Motion](#)

Equipment: Arduino UNO microcomputer, PC with Arduino IDE installed, and a USB cable. PhotoSensitive Resistor(s), 10K Ohm Resistor, and Parallax PIR Motion Sensor Passive sensors detect some physical...

CdS



1161.

[Machine Design](#)

The assignmente for this week is to automate the machine assembled two weeks ago. For this Roxanna milled the Arduino's shield for controlling the steppers, but Alejandro found that we...



1162.

[Tracking Cat Eyes via Kinect using Arduino](#)

This instructable was made as part of the CS graduate course "Tangible Interactive Computing" at the University of Maryland, College Park taught by Professor Jon Froehlich. The course focused on...



1163.

[Talking Arduino Heart Rate Monitor](#)

My partner and I wanted to make heart rate monitor that does more than simply measure a user's heart rate. Our heart rate monitor talks! Each button gives a verbal...



1164.

[The Creepy Doll using Arduino](#)

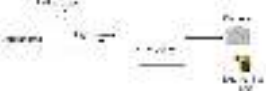
Here at Mikamai, we often organise events and hackathons. After the last hackathon, someone left an old doll, and it was kinda creepy... so why not make it even creepier?...



1165.

[Capture the image of a falling object](#)

The aim of this project is to create a setup to capture the image of a falling object or any object in motion at a precise time using a DSLR...



1166.

[Sleep n' Tweet](#)

Step 1: The Sleep n' Tweet Now I am lucky enough to work at the greatest company in the world as a University of Waterloo, co-op student. It might not...



1167.

[Password access with arduino](#)

~~ The complete kit for this tutorial is now for sale at [www.razvantech.com](#) Get one! ~~ This instructable will show you how to make a pass-code lock system using the...



1168.

[Make your pet dishes tweet](#)

You give your pets everything: Food, water, a home, toys, and love. Why not give them a twitter account? This project allows you to monitor your pets' eating habits and...



1169.

[AlarmingTweet](#)

This project will add tweeting capabilities to the GE 45142 Choice-Alert Wireless Control Center Alarm system. The alarm system allows you to connect up to 16 different sensors across 4...



1170.

[ArduRoller balance bot](#)

Caveat Emptor: (I don't want to put you off building one but I also don't want you to be disappointed.) This Instructable is now 2 years old. Many of the...




1171.

[The Touch module – a robotic dog toy](#)

The idea was to invent an Arduino-based, robotic toy that my dog could interact and play with. One that could record scores, automatically deliver treats, and grow more advanced as...




1172.




[Turn your Arduino Uno into an USB-HID-Mididevice](#) While building an Arduino Uno based Midi-Controller for Ableton Live, I came across the HIDUINO project <http://code.google.com/p/hiduino/>). It allows you to turn your Arduino Uno (or any other...

1173.




[Diy Xbox wireless controller adapter for Pc](#) This instructable will go over the steps to connect a RF module from an RROD xbox to your computer so you can use a wireless controller with your computer. *****DISCLAIMER***** ...

1174.



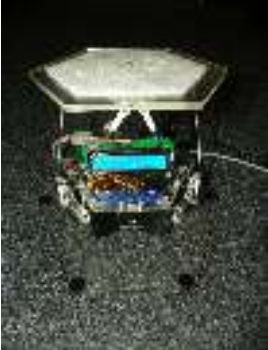
[Make a digital "meow" from analog clock using arduino](#) Is your analog clock just not doing enough stuff? Want to do digital things with an analog clock? This tutorial will show you how to make a Kit Cat Clock...

1175.




[Voice Activated LED Lighting with Arduino](#) This project is an extension to the Speech Recognition with Arduino by leandro4b (<http://www.instructables.com/id/Speech-Recognition...>). However, instead of using 3 separate colored LEDs, I used a multicolor 4-channel RGBW LED Emitter....

1176.




[Arduino controlled Rotary Stewart Platform](#) This instructable is about building a Rotary Stewart Platform. It allows to position its moving platform in six degrees of freedom. This specific platform is designed to be able to...

1177.




[Control Keyboard & Mouse Android app via Arduino](#) This instructable will show you how to control your computer's keyboard and mouse with an Android app via bluetooth to an Arduino BACKGROUND Ever wanted to control your computer's mouse/keyboard...

1178.




[Blind Maze Navigation using 2-DOF Haptic Joystick](#) The domain of haptics has immense potential as a technology to assist visually-impaired individuals with their navigation of the physical world. In this project, we sought to develop a 2-DOF...

1179.




[Temperature Displayed on 4 Digit 7 segment using Arduino](#) In this project I'll display the temperature in a 4 digit 7 segment display (common anode). The sensor is the cheapest you can find so actually the temperature changes pretty...

1180.




[Huge Arduino Animatronic LED Eyeball using arduino](#) I'm currently in the process of making a Halloween contraption that has a few components that are worth documenting. The Huge Arduino Animatronic LED Eyeball is one of them. Background...

1181.




[Hack an old iPod using an Android and an Arduino](#) This tutorial shows you how to use an Arduino to turn that old dusty music player into a Bluetooth controlled docking station. Even if it has a cracked screen or...

1182.




[Traffic Signal Wiring with Arduino Controller](#) I always wanted an old traffic signal and finally got one recently. However, it was very simply wired so that all the lights were fixed on. What fun is that? ...

1183.




[Balancing Instructable Robot using arduino](#) In this Instructable I wanted to show to you how to make a self balancing robot. What makes it unique is that its exterior is made to look like the...


1184.




[Fab Lab Barcelona SuperNode](#) [assignment] Add an output device to a microcontroller board and program it to do something. Class syllabus:: http://academy.cba.mit.edu/classes/output_devices/index.html [what i learned /am learning] _ Relearned Arduino installation. _ Work with...
1185.



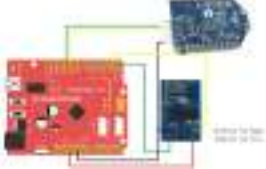
[Rubik's Cube Solver using arduino](#) This robot that can solve a Rubik's cube using Arduino. I learned how to solve a Rubiks cube last year, and I was also into Arduino, so eventually I ended...
1186.




[Retablillo de las Maravillas v1.0](#) 4./ Interactivity & electronics 4.1/ Switches / characters 4.2/ Screen / interface 4.3/ Motor controller 4.4/ I/O controller & interface [4./ electronics] [4.1/ switches / characters] The characters on top...
1187.




[Desktop Fist Bumper using arduino](#) This simple device sits on your desk at work, ready to give you fist bumps throughout the day as you need them. A 3D printed "fist" is moved by a...
1188.




[Arduino Basic Wifi Project using ESP8266 wifi module](#) Overview ESP8266 is a highly integrated chip designed for the needs of a new connected world. It offers a complete and self-contained Wi-Fi networking solution, allowing it to either host...
1189.




[\\$1.50 Arduino TV Annoyer](#) Hey Arduino fans! Here is an 'ible for making a device that turns TVs on when you want them off, and off then you want them on! If you hide...
1190.




[Stereo Audio with an Arduino](#) Recently I've been posting a lot of projects that use an 8 bit resistor ladder digital to analog converter(DAC) and an Arduino to make sound. (see the Arduino vocal effects box, the Arduino drum...
1191.




[Arduino All-In-One Remote](#) Now you can have all the remotes of your house in a device that fits in your hand with Arduino, never fight for who has the TV remote again! To...
1192.



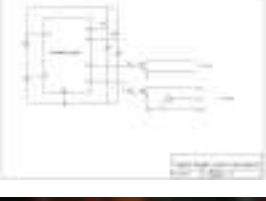
[Just Veggin with an Arduino Beetbox](#) Bring Touch Control to the Arduino. Use interesting touch sensors like Carrots or Beets to make a "Beetbox". In this instructable you will learn: * How to use the Cap...
1193.




[DIY FPV RC Tank V2 \[2km RANGE upgrade!\] using Arduino](#) Lets build An FPV tank that could be controlled within 2 kilometers! With the help of my best friend ASCAS I was able to borrow his old parts for this...
1194.




[DIY GPS Tracked Bike Lock using Arduino](#) Having just purchased a half decent bicycle, and living in a city with a bike theft rate almost as high as New York, I wanted to have some peace of...
1195.



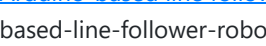
[Capture the image of a falling object using Arduino](#) The aim of this project is to create a setup to capture the image of a falling object or any object in motion at a precise time using a DSLR...
1196.



[Darkness Map Data Collection Device](#) The Darkness Map encompasses both data collection and visualization of nighttime light levels. You can add to the map by downloading the app for iPhone or Android, but you can...
1197.



[Say Hello with My Roommate Mouse with Arduino](#) I live alone in a small house in Shenzhen, and i really I love this graceful and dynamic city. As an software engineer, I have no girlfriend yet, and usually...
1198.



[Arduino-based line follower robot using Pololu QTR-8RC line sensor](#) UPDATE FEB 2012: This guide is featured on Adafruit's blog <http://www.adafruit.com/blog/2012/02/14/arduino-based-line-follower-robot/> This is Faz3a II, my first line-following robot, which I also hope to use for maze-solving. I used the...



1199.

[RGB LED Rainbow Fader using an Arduino](#) Introducing the RainBoard: A simple RGB LED Rainbow fader using an Arduino Uno and a few simple components. Believe it or not, we will control 45-channels of RGB LEDs at...



1200.

[Laser Cut Sphere-O-Bot using Arduino](#) The Sphere-O-Bot is a simple 2 axis CNC machine that can draw on most spherical surfaces. You can use it to decorate ping pong balls or eggs.This design is based...



1201.

[Arduino controls cheap RC car transmitter](#) OBJECTIVE Cheap Chinese RC toy cars can be had for about 5 Euros in the local market. The wireless brains behind the majority of these cheap RC toys is a pair of...



1202.

[Breathalyzer using an Arduino](#) What is a breathalyzer you may ask? It is a device for estimating blood alcohol content (BAC) from a breath sample.In simple terms it is a device to test weather a...



1203.

[ZAPpelin, or how to train your blimp with an Arduino and IR remote](#) Is it flying seal? A flapping alien? No it's a ZAPpelin, an Arduino controlled indoor blimp, setup to learn in the signals from an IR remote to command it. This...



1204.

[The machine of answers](#) Should you ask your boss for a raise? Call that cute guy you met at a party? Sell your stock? Wouldn't it be nice to have a handy method of...



1205.

[ABC 123 Toddler Trainer using Arduino](#) Here is a kid tested and teacher approved trainer for the kids in your family and / or extended family that are learning their ABCs and their 123s. It was...



1206.

[Aergia: Android controlled TV Remote\(with Speech Recognition\) using Arduino](#) Have you ever faced this situation while sitting on your favorite spot on the couch or recliner, comfortably watching your favorite TV program? You're snugly tucked under the blanket, the...



1207.

[Bluetooth RGB Shelf Lighting using Arduino](#) Being the giant fan of LED's that I am i'm always trying to come up with new ways I can put them throughout my house. Today i'm going to show...



1208.

[Arduino Powered Autonomous Vehicle](#) A few months back I started playing around with Arduino micro controllers as a learning exercise (and for fun); this project is the culmination of that. The goal of the...



1209.

[Traffic Signal / Stop Light Wiring with Arduino Controller](#)

I always wanted an old traffic signal and finally got one recently. However, it was very simply wired so that all the lights were fixed on. What fun is that? ...



1210.

[WAVEbuoy using Arduino](#)

The WAVEbuoy is a arduino lamp connected to the internet that displays the current wave height of any of the National Data Buoy Centre's wave buoys. This lamp is currently...



1211.

[Pixel Drop Ceiling using Arduino](#)

In our living room we have a small patch of drop ceiling right in the middle of the room, basically a giant piece of duct tape to cover up bad...



1212.

[Create an internet controlled robot using Livebots](#)

Here you will learn how to create an internet controlled robot or other installation using Livebots. Livebots is a project I'm working on which consists of an easy to use website...



1213.

[Using the Arduino Uno to program ATTINY84-20PU](#)

Using the Arduino Uno to program ATTINY84-20PU (Newark item # 68T3783). This Instructable shows how to use the Arduino platform to work with physically smaller processors, such as the ATTiny84...



1214.

[How to make your own Arduino board](#)

If your are like me which I am guessing you are, then ever since you got into doing stuff with arduino you have wanted to make your own arduino board....



1215.

[Polydexter: Arduino Robotic Translation Arm](#)

Polydexter was the introductory project in the Creative Architecture Machines (CAM) advanced options architecture studio at the California College of the Arts (CCA), taught by Jason Kelly Johnson (co-founder of...



1216.

[Simple Basement Security System using Arduino](#)

In this project I will show you how to build a very simple security system for all kinds of rooms. It might be simple but still effective. It is based...



1217.

[Monitor – Thinking Skins using Arduino](#)

This project was part of Multimodal Media Madness 2014, hosted by the chair for Computer Aided Architectural Design (CAAD) and the Media Computing Group of RWTH Aachen University. For more...



1218.

[Make Voice Call using Arduino](#)

This sketch connects a voice call from your GSM shield and Arduino to a remote phone number entered through the serial monitor. You'll need to attach a speaker and microphone...



1219.

[SmartMesh – Arduino and Android Controlled Pneumatic Facade](#)

This project was part of Multimodal Media Madness 2014, hosted by the chair for Computer Aided Architectural Design (CAAD) and the Media Computing Group of RWTH Aachen University. For more...



1220.

[How to use the IR library with an attiny using Arduino](#)

This Instructable will tell you how to use the IR (infrared) library on an Attiny. I will be using an Attiny85 with an Arduino Uno. I won't cover how to...



1221.

[LED Pattern Hat using an Arduino](#)

This is a (moderately) simple Arduino project that is a spectacular display from LEDs - that you can wear on your head! It also uses a program that is not...



1222.

[DIY Android Home Automation Box](#)

Here's a little show and tell of my Android controlled home automation box. It's a small extension box that's controlled by an Android smartphone. You can turn the individual outlets...



1223.

[ARDUINO WIRELESS HOME SECURITY SYSTEM](#)

In this project I will discuss how you can make a cheap wireless home security system.Though during starting of this project the main objective was only for security alarm but...



1224.

[Theremin Toy using Arduino](#)

I wanted to make a little toy for my granddaughter to play with when she visits. I know like most kids, she enjoys things that make sounds and have different...



1225.

[Face detection and tracking with Arduino and OpenCV](#)

UPDATES Feb 20, 2013: In response to a question by student Hala Abuhasna if you wish to use the .NET Serial class, use the naming convention "\\.\COMn" and replace n...



1226.

[DIY Solar Tracker using Arduino](#)

Introduction We aim to introduce young students to engineering and teach them about solar energy; by having them build a Helios as part of their curriculum. There is an effort...



1227.

[Hacking my RC Car using Arduino and Android Smart Phone](#)

Have an old toy car? I hacked mine using Arduino and an H bridge circuit to control the motors, used my Sony Z1 Android phone to control it with the...



1228.

[Rock Paper Scissors Spock Lizard using Arduino](#)

Introduction: Okay, I cheated. Any similarities between previous Instructables uploaded by me and the graphics, pictures, text and / or programming code is purely intentional. It certainly made putting this...



1229.

[Make your plant smile using Arduino](#)

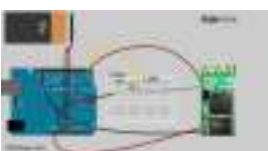
This is a funny project that makes our plants "talk" to us. It's very simple and you can create it in few hours. We use a sensor to read the...



1230.

[Cheap 2-Way Bluetooth Connection Between Arduino and PC](#)

INTRODUCTION In the guide, I will explain how I managed to send data back and forth between a PC and Arduino via a cheap Bluetooth HC-05 transceiver, which can be...



1231.

[Auto Fish Feeder using Arduino](#)

How often do you ever forget to feed your fish? Well, for me I don't forget that much. I just couldn't go out town for a couple of days and...



1232.

[Led Star with Arduino and WS2811 Neopixels](#)

Description This little project makes a great ornament to hang in your window at Christmas time. It is a 20" wide star with 50 "neopixel" leds around the perimeter. Each...



1233.

[Arduino Controlled Lego Lighthouse](#)

Lighthouses have been guiding boats to safety for thousands of years. One of the earliest and most notable of these was the Pharos of Alexandria. This huge structure stood for...



1234.

[4x4x4 LED Cube \(Arduino Uno\)](#)

In this tutorial I'll show you how to make a 4x4x4 LED cube for around \$15.00. The cube has 64 green LEDs which make up it's 4 layers(positives) and 16...



1235.

[Home Made Arduino Prototype Shield](#)

Hi. I've just got myself an Arduino Uno R3 and I'm really new in the world of Arduinos. There's so much to learn and explore 😊 One of the first...



1236.

[Arduino Timer Interrupts](#)

Timer interrupts allow you to perform a task at very specifically timed intervals regardless of what else is going on in your code. In this instructable I'll explain how to...



1237.

[LED Head Arduino TED](#) LED HEAD TED meet the world. I have always been interested in a bare-bones Arduino but never really saw the point if it was not practically useful, This is my...



1238.

[Access control with Arduino plus Keypad 4x4 plus Servo](#) Hi guys, I bring a new instructable for arduino, the control access with password, 4x4 keypad and a servo. We will use the Password and Keypad librarie for arduino, besides...



1239.

[Animatronic Eyes and Wii Nunchuck Part 2 using Arduino](#) After I built the animatronic eyes in PART 1, I wanted to complete the face with a voice and possibly moving eyebrows. If you look back at my PART 1,...



1240.

[Autonomous Race Car using Arduino](#) Build this autonomous driving robot car based on a old RC toy car. I removed the radio control board from the car and replaced it with a brain in the...



1241.

[Arduino powered GLCD \(Graphic LCD\)](#) Displays are always nice. So far I've just been demonstrating how to use 7-segmented displays to display numbers using very few resources. But what if you want to display text?...



1242.

[ATTiny powered Arduino Projects](#) Arduino is a great platform. No question. But what if I told you that you could take your entire board and compact it into tiny package. And I mean really...



1243.

[Qtechknow Robot Obstacle Course using Arduino](#) Have you ever thought of controlling your FuzzBot wirelessly? Do you want to make a real - life video game? Do you want to learn about the tech behind NFC...



1244.

[Clock Four – Scrolling text clock using Arduino](#) Introduction Time for another instalment in my highly-irregular series of irregular clock projects. In this we have "Clock Four" – a scrolling text clock. After examining some Freetronics Dot Matrix...



1245.

[Bear With Me](#) This instructable teaches how to make our Bear With Me system, a prototype that allows two users to tangibly send and receive hugs (as well as motion) in near real-time....



1246.

[Word Clock in German using Arduino](#) While in Germany last year, I saw a world clock in a store similar to this one in a store that was priced at 900€. I read several instructables online...



1247.

[Quiz Game Controller using "Lights and Sounds Buzzers" and Arduino](#) Jeopardy style quiz games are favorites for creating excitement and educational instruction at the same time. Teachers, summer camp counselors, and even industry educators find this type of game to...



1248.

[Arduino Phone Book](#) Ever wanted to have a Phone Book, controlled using a microcontroller, which is very easy to use, and you can use it while talking on phone, and is saving data...




1249.

[Temperature Sensor for Shower using Arduino](#) With this device you diminish the use of water in your house or work. Instead of waiting to see vapor in the shower to get in, this device help you...



1250.



[Fifty Dollar Box Bot](#) The objective is to construct a programmable hobby bot that is affordable and simple to make. The parts will be purchased from places such as Wal-Mart, Radio-Shack, any Hobby Store,...



1251.

[Motion Controlled Ultrasonic Lamp using Arduino](#) Recently I've been learning about Ultrasonic waves and how to harness their power. It's simple enough to make some type of sonar device, but I wanted to take at a...



1252.

[Arduino Interrupts and Debouncing](#) Interrupts are an extremely useful, yet often feared element of microprocessors. Interrupts allow you to run a program, while still being able to react to asynchronous input from the outside world....



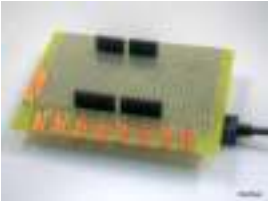
1253.

[Monkey Automaton!](#) This instructable will guide you through the process of building a set of automaton monkeys in the style of "Hear No Evil, See No Evil, Speak No Evil." Our design...



1254.

[SOLAR POWERED ARDUINO WEATHER STATION](#) In country like India most of the people are dependent on agriculture.For effective planning in agriculture weather forecast is of utmost importance.So farmers are always interested in the Weather Forecasts.As...



1255.

[MaKey MaKey Shield for Arduino](#) MaKey Makey is a project created by Eric Rosenbaum und Jay Silver. It's an Arduino based keyboard. A very special keyboard, because you can use apples, bananas or Play Doh as...



1256.

[Model Police Car using an Arduino](#) We wanted to build a model police car with working lights and sirens. Then we decided to add a motor and instead of using a switch to turn everything and...



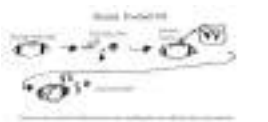
1257.

[How to turn inkjet printer to print on Coffee using Arduino](#) The aim of this project is to make latte printer, I used 1 printers and 1 scanner , it prints one line a time, all what I have done is...



1258.

[Smart Homer Web-enabled TV remote using Arduino](#) Smart Homer, a Web-enabled TV remote puppet Smart Homer is a Web-enabled puppet that turns on your TV when Simpsons is on. As Homer is too lazy to browse the...



1259.

[The Musical FootBall](#) This project is to construct a musical football. The reason for my project is that I was inspired by a little kid with austim who love sports and music. So...



1260.

[Arduino wall avoiding robot](#) This instructable assumes very little with respect to prior knowledge. If there are any areas you feel could be improved or clarified, please feel free to message or comment and...



1261.

[Power Quality Meter \(PQ Monitor\) using Arduino](#) Arduino UNO project, Power Quality Meter, someone would call it's PQ Monitor or PQ Analyzer. I had already published one blog devoted RMS voltage measurements on full band 20 –...



1262.

[Measure RPM – Optical Tachometer using Arduino](#) This Instructable will show you how to make a Portable Digital Optical Tachometer using an Arduino Uno. This project is inspired from This instructable and is an enhanced version of...



1263.

[Using an Arduino to Control an Infrared Helicopter](#) In this Instructable we will explain how infrared signals are used by a remote to control a toy or device, then show how a simple circuit can be added to...

1264.

[Quantifying Access to your Mind using Arduino](#) So, I manage a creative technology lab at California College of the Arts. It's essentially an educational hackerspace for art and design students. Pretty awesome, right? After graduating from the...



1265. [Arduino Bluetooth Serial Connections](#) This is an introduction on how to setup, make a basic connection, and send data to and from an Arduino using Bluetooth! Bluetooth is great for transmitting data over medium...



1266. [RGB LED Strip Circuit with Arduino](#) This Instructable covers the assembly of a circuit capable of PWM-ing (pulse width modulating) a high-power RGB LED strip and programming an Arduino to cycle through a range of colors....



1267. ['Knock Back' – A Knock Echoing Arduino](#) This is a simple Arduino sketch that was originally designed to experiment with arrays and the built-in timing functionality. I based it on the tutorial sample code <http://www.arduino.cc/en/Tutorial/Knock> The system consists...



1268. [Come Home! Connecting Distant Spaces EASILY over Web using Arduino](#) Can you believe that we live in an age where you can touch an object (any object - if it has metal on it) and a light will turn on...



1269. [My Ninth Project: Robot Arm with Joystick Shield using Arduino](#) Although it is great controlling the robot arm with computer or mobile phone, I think using joystick is also cool, so I've bought a joystick shield and make a new...



1270. [Beat Sync using an Arduino](#) Beat Sync is a single frequency audio spectrum volume meter. It can isolate around a certain frequency (I choose the bass) and display it on a creative 8...



1271. [Mini BillBoard using Arduino](#) Designing a Mini BillBoard using LED Lights(different colors) , Arduino and Bread Board. Thought of creating a mini billboard, that could display my name ("Josh") . This is for one...



1272. [How to Make Musical Floppy Drives using an Arduino](#) My brother posted a video about this on facebook almost a year ago. Some old floppy drives playing Bach's masterpiece Toccata & Fugue and it got me really interested. So I read...



1273. [Pimp My Zoomobil using Arduino](#) I recently put together the Playmobil Zoomobil for my kids. As I was busy snapping all the pieces together, I became more and more convinced that this cart had been...



1274. [Interactive Stereoscopic Installations: visual rupture with the Diplopiascope](#) What is it? This is an ongoing project that i've been working on to see the potential of interactive stereoscopic installations in examining the perceptual process. I use a setup...



1275. [8×8 LED Matrix Animations using an Arduino](#) For a party we were about to have I wanted a cool light display to use with my new Xmas present - an Arduino Uno. Having looked at the LED matrix's here...



1276. [Arduino-Based Blue Box \(Phone Phreaking\)](#) History and Story In the 1950s, 1960s, 1970s, 1980s and even up into the 1990s phone phreaking was an amazingly cool way to explore an unknown world of phone switching...



1277. [DIY a Spelling Game with an Interactive Robot using Arduino](#) Did you hear before about Social Robot? Did you see the Pepper Robot or Jibo robot? These kinds of robots that can hear you, understand you and make a...



1278. [DinoCalc Version 1.0](#) (Arduino Pro Mini Protoboard Version) Latest Release: <http://code.google.com/p/dinocalc/> Development: <https://github.com/WeaselJones/DinoCalc> This is a calculator without a LCD that tells you if your math answer is right or wrong, without giving...



1279. [TurtleDuino Object Avoidance Robot using Arduino](#) Hello, in this instructable I'll be showing you step by step how to build the TurtleDuino, an object avoidance robot, with an Arduino UNO microcontroller on board. I designed the...



1280. [Home Automation: Drapes using Arduino](#) Hate having to manually open and close your drapes? Hate getting back from work/school and your room is dark and dreary? Do you want curtains that open and close themselves?...



1281. [Convert a toy piano to work as a midi device and use it with Synthesia](#) Goal of this project: Convert a cheap toy piano to work as a midi device and use it with Synthesia (<http://www.synthesiagame.com/>) Other programs that use midi inputs can also be...



1282. [Garage Genie - Parking & Remote Control using Arduino](#) The Garage Genie Parking & Remote Control is a car automation Arduino gadget. Click on the two images above to see the animated explanation. It aims to do a few...



1283. [5x5 LED Cube using Arduino Uno](#) This is a step by step explanation of how to build a 5x5 LED cube using an arduino. I did this project for my undergraduate electronics class and it took...



1284. [Self Balancing Segway Instructabot](#) [box color="#985D00" bg="#FFF8CB" font="verdana" fontsize="14 " radius="20 " border="#985D12" float="right" head="Major Components in Project" headbg="#FFEB70" headcolor="#985D00"] Supplies: 1. Arduino: I used an Uno 2. 7.2v battery 3. Set of motors:...



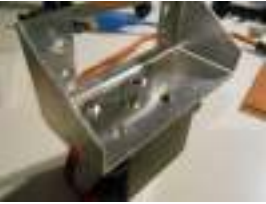
1285. [The morse code generator by a PS\2 keyboard using Arduino](#) Hi, all! Today I'm trying to explain you my last project: "The morse code generator by a PS\2 keyboard" I've used an PS/2 keyboard to send input to...



1286. [Jeopardy Ring-in Buttons with Built-in Rules using Arduino](#) There are several good Jeopardy/Game Show lockout buttons/buzzers, but none incorporate the timing rules of Jeopardy. I am learning about the Arduino and I thought that this would be a...



1287. [Pan & Tilt Servo bracket controlled by Arduino](#) Hi, in this instructable i am showing you how to build a very nice and very sturdy pan & tilt turret for your rc / arduino projects. (Please don't judge...



1292. [The Octo-phonic Synthesizer](#) The Octo-phonic Synthesizer is a polyphonic synthesizer that is able to produce eight tones that in the end, creates a musical scale. Inspiration for this creation came from this project. I...



1293. [Compact 3-in-1 Stripboard DIYduino with Integrated Sensor and L298N Motor Shield](#) I am presenting a compact design of a stripboard Arduino board (DIYduino) that includes a 2A motor driver and has additionally the functionality of a sensor shield. The 2-channel version...



1294. [Persistence of Vision Wand using Arduino](#) Persistence of Vision (POV) Wands are a fun way to create interesting long exposure photographs and light displays. The wand consists of a single row of LEDs controlled by an...



1295. [Code generator for custom Android or Arduino menus](#) Introduction This is the first of two instructables that make up a complete customizable Home Automation for Beginners example. See DIY Home Automation for Beginners for the second part. It...



1296. [Automatic Multi-Photo Taker \(Photobooth Style\)](#) This is a tutorial on how to program your DSLR camera to take photos photobooth-style. It's a simple Arduino setup that allows you to take continuous photos with 3-second delay...



1297. [Arduino Programming With Atmel Studio 6.0](#) How to import the compiled Arduino IDE libraries into Atmel Studio 6.0 using a program written by Omar Francisco. This will allow you to use the feature rich programming environment...



1298. [DIY Motion Sensor Alarm System](#) Are you constantly being scared when people sneak up behind your back? Do you have bad hearing and can't hear people approaching you? Do you want to just build a...



1299. [Android talks to Arduino board](#) This project slightly modifies the Google Android sample app called "Bluetooth Chat" so you can type a message in the Android app and that same message will appear on an...



1300. [Capacitive-Touch Arduino Keyboard Piano](#) Using only an Arduino, a few resistors, a buzzer, and some bits of aluminum foil, you can create your own touch-sensor piano keyboard in just a few minutes! Using an...



1301. [Arduino I2C and Processing](#) As promised, this week brings another communications tutorial! In this video, we'll use both the serial and processing knowledge that we gained last week, plus an I2C enabled temperature-sensing IC...



1302. [How to use a 1602 16X2 LCD display with Arduino, TI Launchpad, and standalone MSP430 video instructions](#) I show how to use a standard 16X2 LCD display in three different use cases. 1. With an Arduino Uno 2. With a TI Launchpad MSP430 running Energia 3. Directly...



1303. [Cup Cooler using an Arduino](#) This is my first Instructable, so please judge harshly so that I can learn 😊 Its a simple project minimal skills needed. Drawings are made using: Fritzting Code Written using...



1304.
- [Home automation system using Arduino and SIM900 GSM module](#) Hi there! As I've almost finished my studies at Faculty of Engineering, I had to make a graduation project and my thought was to make a jaw-dropping thing (I know...



1305.
- [How to control 8 leds using Arduino UNO](#) hey guys this is my first arduino project plz comment how u feel. Step 1: Things u need As this is easy project for beginner's so parts are also simple...



1306.
- [Arduino Guitar Tuner](#) Build your own electric guitar tuner using the Arduino! I decided to make this because I wanted to experiment with audio input and frequency detection. I used Amanda Ghassaei's method...



1307.
- [Make Money with Arduino](#) **** ENTERED IN THE HURRICANE LASERS CONTEST**** What would I do with a Laser Cutter? Build Simple Robotic Kits to teach people a Hobby that I Love.Ever wanted to make...



1308.
- [The Self-Balancing Robot using Arduino](#) Introduction The idea of this project was to design and construct a robot that consists of a body and two wheels that would be able to balance on its own....



1309.
- [48x8 SCROLLING MATRIX LED DISPLAY USING ARDUINO CONTROLLER](#) A monochrome (single colour) LED dot matrix display is used for displaying the Characters and Symbols which is interface with a microcontroller. This project will deliberate on displaying a scrolling...



1310.
- [Real-Time Arduino GPS Tracker with iPhone app](#) [INTRO] This past semester, I decided to build a GPS receiver with an iPhone app that tracks it for my semester project. Here is a step-by-step tutorial to show you...



1311.
- [Spectrum Analyzer, Arduino project with FFT algorithm](#) The basic idea was to create color organ / spectrum analyzer on arduino board, trying to minimize quantity of external components, like analog filters, LED display drivers, etc. Spend a...



1312.
- [How To Control A Stepper Motor With An Arduino Uno](#) Overview Stepper motors fall somewhere in between a regular DC motor and a servo motor. They have the advantage that they can be positioned accurately, moved forward or backwards one...



1313.
- [Data Logger Project using an Arduino](#) This is a data logger I made for my class. I couldn't find any instructions that I could use to make the Arduino record the light brightness and the temperature....




1314.
- [Arduino & Visual Basic 6 Light Controller](#) This instructable is something like a tutorial for new VB users. It shows how to create a parser base VB6 program to interact with Arduino circuit. Basically, interaction is in...




1315.
- [Simple Relay Shield for Arduino](#) Shield to control 6 relay, 6 digital input and 6 analog input with Arduino Duemilanove, Arduino UNO. The digital inputs and relay outputs are equipped with an LED that indicates...




1316.




[Traffic Lights Beginner Arduino Project](#) This is a beginners project for the Arduino. I am using the Arduino Uno but should work with little or no modification on Setting up the hardware is...
1317.




[Tyco RC Arduino Robot](#) Wanted to make your own robot but couldn't afford the fancy H-Bridge IC's or etch your own PCB? Want a quick and dirty method of making your own wheeled robot?...
1318.




[My Arduino WordClock](#) The initial project, and certainly the one to which many were inspired is that of Doug Jackson. <http://www.instructables.com/id/The-Word-Clock-Arduino-version/> also inspired by <http://www.highonsolder.com/blog/2011/1/8/arduino-word-clock.html> <http://www.instructables.com/id/Sleek-word-clock/> Step 1: The Materials The list of...
1319.




[Ultrasonic Range Finder with an ATtiny85 using an Arduino](#) I'm here to show you how to use a HC-SR04 Ultrasonic Range Finder with an ATtiny85 as well as programming the ATtiny85 using the wonderful shield that randofo created. List of materials: ATtiny85 Programming...
1320.




[Arduino 2-axis servo solar tracker](#) What is a solar tracker? A solar tracker can increase the efficiency of a solar panel by up to 100%! It does this by always keeping the panel perpendicular to...
1321.




[Carduino- A simple Arduino robotics platform with its own library](#) This is, as the title says, an Arduino-based robotics platform, with its own library. The "standard" model comes with two back motors, two omni-wheels in the front, and a distance...
1322.




[Bike Speedometer using an Arduino](#) Monitor your road speed using the Arduino. This project uses a magnetic switch (also called a reed switch) to measure the speed of one of the bike's wheels. The Arduino...
1323.




[Waveform Generator using an Arduino](#) Waveform generators (also called function generators) are useful for testing and debugging circuits. I often use them to test the frequency response of electronics components like op amp and sensors. ...
1324.




[LED Matrix with Game Controller using an Arduino](#) This project was built for my introductory electronics class at the University of Waterloo in Canada. This was my first introduction to electronics and therefore, my first project. Follow these...
1325.




[Sous-vide Arduino Shield](#) *NOTE* THIS PROJECT IS DONE BY A GROUP OF STUDENTS FROM SINGAPORE POLYTECHNIC Sous-vide (/su ˈ ɛ ˈ vi ˈ d/; French for "under vacuum")[1] is a method of cooking food sealed in airtight plastic bags...
1326.



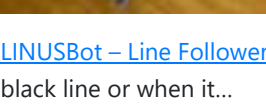
[Audio Output using an Arduino](#) Generate sound or output analog voltages with an Arduino. This Instructable will show you how to set up a really basic digital to analog converter so you can start generating...
1327.



[Audio Input using an Arduino Board](#) Send sound into your Arduino. This Instructable will show you how to prepare audio so that it can be sampled and processed by an Arduino to make sound responsive projects...
1328.



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


















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