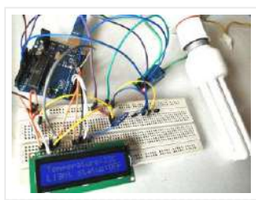
Arduino UNO based Projects List in PDF file offline downloadable

Posted date: April 25, 2018 In: |

1. 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...

2. 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...

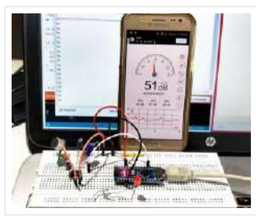
3. MIDI to USB Adapter with Teensy

Among my recent electronics purchase spree was the amazing Teensy LC from PJRC. It has a nice ARM Cortex-M0+ processor, real hardware USB, and what's the nicest part, an Arduino...

4. Arduino Voltmeter Prototype

In this instructable, I'll show you how to make a simple arduino voltmeter. It can measure voltages in excess of 30VDC depending on how you configure it. The smaller the...

5. Measure Sound/Noise Level in dB with Microphone and Arduino

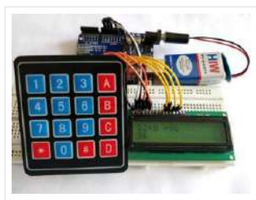


Noise pollution has really started to gain importance due to high population density. A normal human ear could hear sound levels from 0dB to 140dB in which sound levels from...

6. ArdLock – Arduino Door Lock

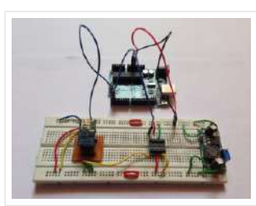
This a door lock built as fun project.It is quite easy to build and a fun way to learn and improve your knowledge of arduino.I tried to add a 16*2...

7. Arduino Calculator using 4×4 Keypad



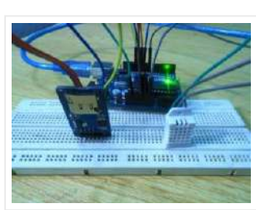
Programming is always fun and Arduino is a wonderful platform if you are just getting started with Embedded programming. In this tutorial we will build our own calculator with Arduino....

8. Guide to ESP8266 and Tweeting Using ESP8266



I learnt about Arduino 2 years ago.So I started playing around with simple stuff like LEDs,buttons,motors etc.Then I thought wouldn't it be cool to connect to do stuff like displaying...

9. 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...

10. Digital Thermometer using Arduino and DS18B20 Sensor

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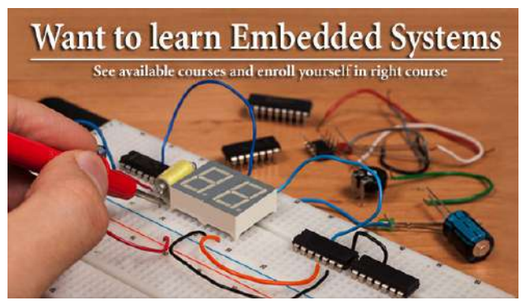
Our Recommended Online Courses



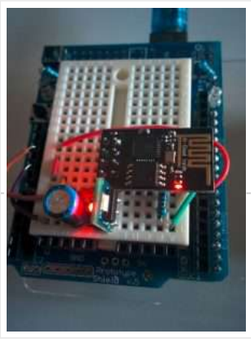
Arduino Battery Projects
Calculator Projects
Arduino Video – Camera – Imaging Projects
Arduino Car Projects
Clock – Timer Projects
CNC Machines Projects
Development Board – Kits Projects
How To – DIY – Projects
Game – Entertainment Projects
GPS Based Projects
Home Automation Projects
Interfacing(USB – RS232 – I2c -ISP) Projects
Internet – Ethernet – LAN Projects
Arduino LCD Projects
Arduino LED Projects
Medical – Health based Projects
Memory – Storage Projects
Metering – Instrument Projects
Arduino Motor Projects

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...

11. New development board runs Arduino, Linux and Android

UDOO is a new development platform designed to be compatible with Arduino, Linux, Android and the Google 2012 SDK. Its designers state that their goal was to bring together the...

12. Cheap Arduino WiFi shield with ESP8266

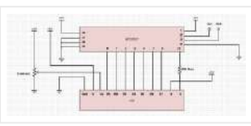


In my previous Instructable I have described how to plug the ESP-01 module into a breadboard. This is just the first step to make a cheap Arduino WiFi shield using...

13. 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...

14. DIY I2C LCD Display



The typical parallel LCD used with an Arduino (16×2 or 20×4) has 16 pins. Only 6 I/O pins are required on the Arduino, but what if you could get that...

15. 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...

16. 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...

17. NerO – An Energy Efficient Arduino UNO Compatible Design

Background. This project started out as an accessory for another planned KickStarter project – a smart TFT display for Arduino called CleO. Now, the display itself required 150mA current, fine,...

18. 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...

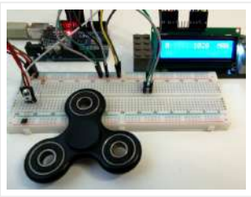
19. transmission: A Creativity Measurement System

It can be too easy to get stuck overthinking your ideas and letting your gears grind without making any progress. As makers, designers, engineers, hobbyists, etc. it is crucial for...

20. Using Nokia 3310 84×48 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...

21. 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 neodyimium magnet Arduino Uno LED + resistor...

Other Projects

Phone Projects

Arduino PWM Projects

Radio Projects

Arduino RFID Projects

Robotics – Automation Projects

Arduino RTOS – OS Projects

Security – Safety Projects

Sensor – Transducer – Detector Projects

Sound – Audio Projects

Temperature Measurement Projects

Recent Projects

Remote WiFi DHT11 Temperature an Humidity Display

April 25, 2018

LTC3106 – 300mA Low Voltage Buck-Boost Converter with PowerPath

April 24, 2018

Arduino TFT Forecast Weather Station with ESP8266

April 23, 2018

Maker's rule, the feature packed PCB multi-tool

April 22, 2018

DC Output Solid State Relay

April 21, 2018

22. 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...

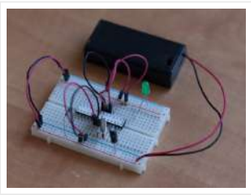
23. Can I Use an Arduino Uno for This?

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...

24. Distance Measurement Vehicle via Websocket

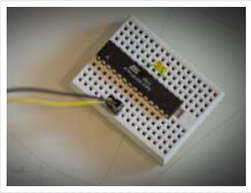
Story When you measure distance between two point general way is to use a ruler. But you can use a lot of other ways: by laser, map, foot or walking...

25. Reducing Arduino Power Consumption



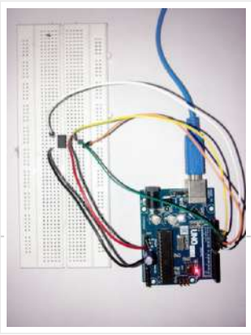
Story When it comes to portable electronics, one of the most important features is how to maximize the battery life. The ATmega328P, used on popular boards like the SparkFun RedBoard,...

26. Arduino on Internal Oscillator Crystal as Clock Source



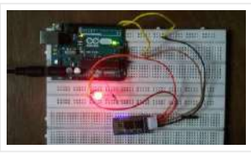
Story I have been working out ways to make a minimal Arduino to fit in the smallest space possible, and limit the power consumption of the microcontroller. (You can go...

27. Programming ATtiny85 with Arduino Uno



Story I am working on a project which requires reading multiple sensor data on different locations. These require only few PWM pins so using multiple Arduino Uno would be expensive...

28. 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...

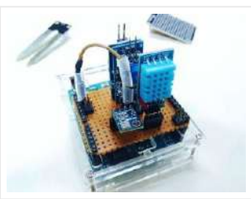
29. Back-Saver: Backpack-carrying follower robot powered by Wunderbar

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...

30. 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...

31. Arduino Weather Station (AWS)



In this project, we will be making a weather station that measures air pressure, temperature, rain drop, soil humidity and air humidity using Arduino which save the data for data...

32. Arduino Digital Capacitance Meter

This project lets you measure capacitors in an alone range of measure from 0.000pF to 1000uF. That is, a 16×2 LCD Display will be displaying a sole scale from 0.000pF...

33. 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...

34. 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...

35. WebRadio player 2 (ARM 32-bit Cortex-M0)

Introduction On 31 August 2015 I got the new WIZnet platform board, the WIZwiki-W7500 that is based on a Cortex-M0 cpu at 48MHz with 128 kBytes of flash memory and...

36. Attiny85/84 with Bluetooth

Hardware components: Capacitor 10 µF × 1 Atmel ATTiny85 × 1 Arduino UNO & Genuino UNO × 1 LED (generic) × 1 Jumper wires (generic) × 1 HC-05 × 1...

37. Hot Wire Foam Cutter – Arduino PWM

Hardware components: Arduino UNO & Genuino UNO × 1 Atmel ATTiny85 × 1 DigiSpark × 1 Plastic box for electronics × 1 Jumper wires (generic) × 1 IRF530 × 1...

38. Easily run your ATtiny at 16MHz, without an external clock, from the Arduino IDE

Hardware components: Atmel ATTiny85 × 1 SparkFun Tiny AVR Programmer × 1 Software apps and online services: Arduino IDE STORY Introduction The Atmel tinyAVR MCU's (ATtiny) are a series of...

39. All about arduino m0 pro

Arduino M0 Pro The Arduino M0 Pro —initially called Zero Pro— board is a major revision of the Arduino line as it is the first Arduino board to feature a debugger....

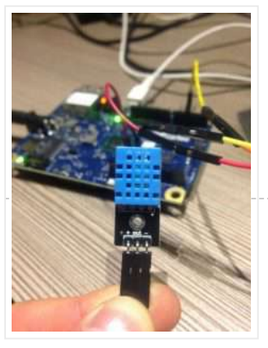
40. Persistence Of Vision

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...

41. Programming the ATtiny85 (Using an Arduino Uno)

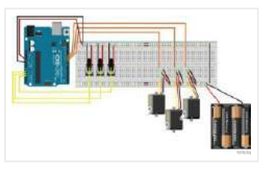
Today, we are going to build a circuit to program an ATtiny85 with our Arduino. Supplies We are going to need the following: Some jumper wires 1 x 10 micro...

42. Intel Galileo Project: Simple DIY Weather Station



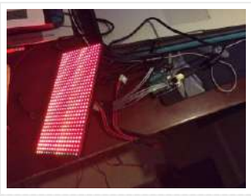
I've played with the Intel Galileo a lot lately, so now it's time to build some Intel Galileo projects! In this project I built a very simple weather station that...

43. Control servo motors with potentiometers and Arduino



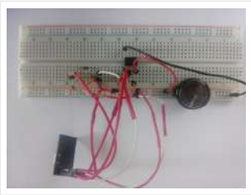
Hi there. This is my first instructable, so I hope you will be patient with me if I make any mistakes setting it up.It is written for beginners like myself,...

44. LED Wave Display



– Arduino Uno ($25) – 32 x 16 LED Matrix ($20) – Breadboard ($5) – Jumper Cables ($5) – USB A to B Cable ($3) – Computer – 5V 2Amp…

45. 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…

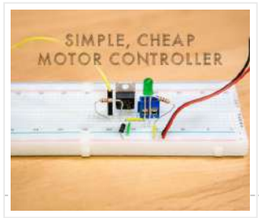
46. The Pendulum Clock

If you've ever rode the Link Light Rail in Seattle to the airport, you may have glanced out of the window while traveling through a tunnel and seen playing cards…

47. 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…

48. Simple, Cheap Motor Controller



I've used this simple circuit several times to drive motors (like in my Stair Climbing robot) as well as solenoids. I originally picked it up from this instructable which is…

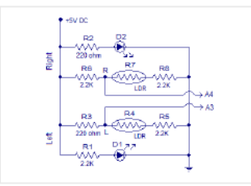
49. Arduino Time-Lapse Panorama Controller

The controller will rotate your GoPro over a set angle for a set duration or will rotate you GoPro for a full rotation for a set duration. This project is…

50. Long Distance Remote Light Sensor With RFM95W/RFM98W LoRa

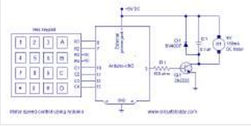
There are many wireless communication options when connecting Arduino boards. One of the most popular ones is the Wi-Fi. It works well at small distances, and around Wi-Fi hotspots, however…

51. Line Follower Robot using Arduino



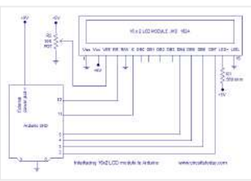
A line follower robot using 8051 microcontroller is already published here and this time the same thing is done using arduino. This line follower robot is basically designed to follow…

52. 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…

53. Interfacing LCD to Arduino – Display Text and Characters on LCD Screen using Arduino

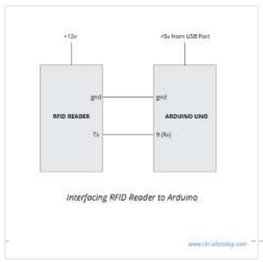


A Liquid Crystal Display commonly abbreviated as LCD is basically a display unit built using Liquid Crystal technology. When we build real life/real world electronics based projects, we need a…

54. How to Interface GSM Module to Arduino-Send and Receive SMS

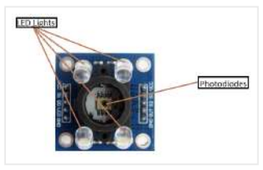
In this article, we are going to see how to interface GSM Module to Arduino. There are different kinds of GSM modules available in market. We are using the most…

55. Interfacing RFID with Arduino – How to Read RFID Cards using Arduino



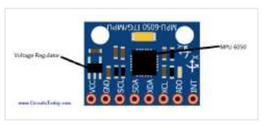
In this tutorial, we are dealing with yet another interfacing technique. This time we are interfacing an RFID Reader which can read RFID Tags to Arduino. RFID is Radio Frequency...

56. Interface Arduino and Color Sensor – RGB Sensor TCS230



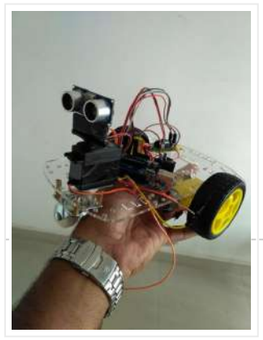
In this article, we are going to read the colors using the TCS230 color sensor (RGB Sensor) and Arduino Uno. The TCS 230 color sensor senses the color light by...

57. Interfacing Accelerometer to Arduino



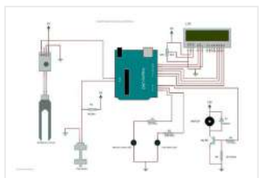
In this article, we are going to interface the GY-521 accelerometer with Arduino. The GY-521 has an InvenSense MPU6050 chip which contains a 3-axis accelerometer and a 3-axis gyro meter. This...

58. Robot using Arduino and Bluetooth Module (Obstacle Avoidance Robot)



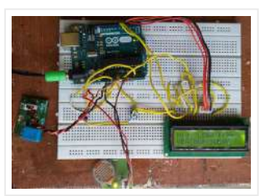
This project is designed to build a robot that automatically detects the obstacle on its path and guides itself whenever an obstacle comes ahead of it. This robotic vehicle is...

59. Arduino Irrigation and Plant Watering using Soil Moisture Sensor



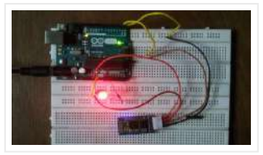
This project is about a moisture-sensing automatic plant watering system using Arduino UNO. The system reads the moisture content of the soil using soil moisture sensor and switches ON the...

60. 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...

61. Bluetooth enabled Door locker using Arduino

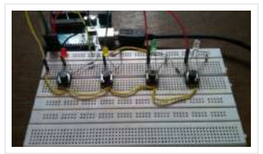


DIY Arduino based lockers can be found plenty in the internet where keypad was used to feed lock input. But this Bluetooth enabled Door locker uses Bluetooth as a medium...

62. 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...

63. Reflex test for your brain using Arduino



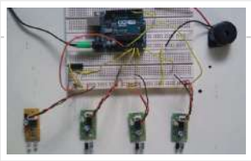
Arduino based games and consoles are quite popular around the web. And this article is going to bring out the Design, working and code part of a simple Reflex test...

64. Milk in Fridge – Internet of Things

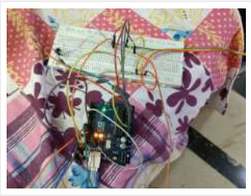
I think that one day, all food cupboards & fridges/freezers will be smart. All products will have an RFID or video recognisable label which will update a list of product...

65. 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...



66. Project X – Smart home control using Arduino

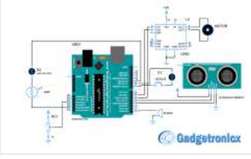


Project X – Smart home control using Arduino is all about automating your home smartly. Imagine your home responding to external condition by altering itself and that's exactly what this…

67. 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…

68. Smart Vehicle using Arduino Uno

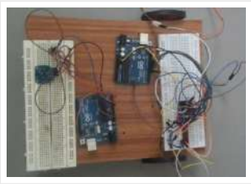


Everything around us is getting smart shoes, watches glasses. Even you might have come across news regarding smart vehicles in newspaper. Likewise we attempted to create a prototype of smart…

69. 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…

70. Gesture controlled car using Arduino

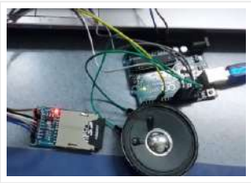


Who doesn't love playing with RC cars and Robots. Not only playing, engineers and enthusiasts like us love to build and experiment with these stuffs. Also its fair to…

71. The Zambroombi: Roomba's Next Ultrasonic Competitor

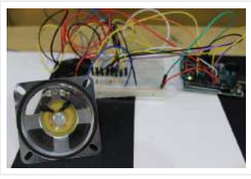
The Zambroombi is the next step up from your neighbor's fancy Roomba. Set it and forget it! "It changed my life. I don't know where I'd be today without it.…

72. Arduino playing the melody with the Sd card



This project is in SD card loaded stolen melody is provided by command sent from the serial monitor. If you want to add the application var.siz 6-melody melody melody file…

73. The BIG Arduino Piano! Use Pulse Width Modulation to Dance like Tom Hanks

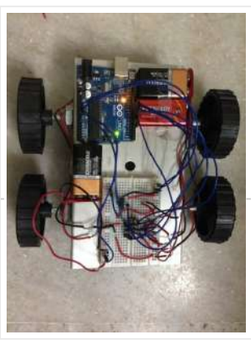


This BIG piano will help exercise the mind and body! All you need is a few buttons, a speaker, and some dancing shoes. BOM: Arduino Uno CUI 8 ohm speaker…

74. 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…

75. Remote Controlled Robot Using Arduino and T.V. Remote

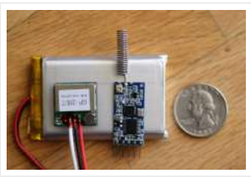


This remote controlled car can be moved around using practically any kind of remote such as TV,AC etc. It makes use of the fact that the remote emits IR(infrared). This…

76. Robot "Cheaper"

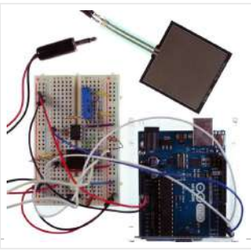
The aim is to build cheapest possible Arduino-robot Step 1: Components Arduino UNO R3 x1 USB cable x1 Mini solderless breadboard x1 IR sensor x1 Continuous rotation servo x2 Battery…

77. 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...

78. 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...

79. 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...

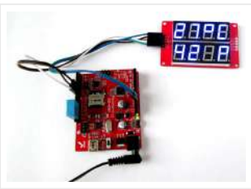
80. The Santa Cam! An Arduino PIR Motion-Activated Camera System

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!...

81. MCP9802 temperature sensor and Arduino

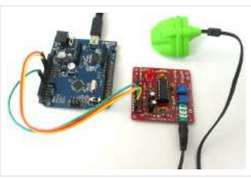
MCP9802 is a digital temperature sensor from Microchip that measures temperatures between -55°C and +125°C to a digital word. It provides an accuracy of ±1°C (maximum) from -10°C to +85°C....

82. 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...

83. 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 cadiovascular...

84. 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...

85. 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...

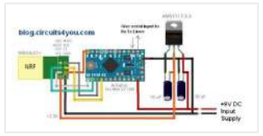
86. Arduino Crowtail and Easy Pulse Plugin

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...

87. 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...

88. Wireless Serial using nRF24L01

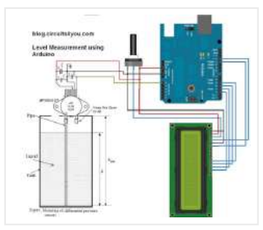


This project is very useful in many application where wireless reliable serial communication is required. It give bidirectional communication, You need to have same code in both arduino, no need...

89. 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...

90. Low cost continuous pricision liquid level measurement using arduino



The purpose of this turorial 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...

91. 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...

92. 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...

93. 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...

94. 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...

95. 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...

96. 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...

97. 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...

98. Arduino CNC Shield – 100% GRBL Compatable

Do it yourself CNC projects are popping up everywhere and we decided that we wanted to contribute to the growth. Here are a few of our design goals: Modular Design –...

99. 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...

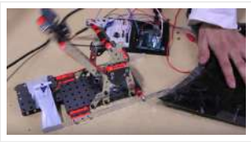
100. Photon Printer – Micro Laser Engraver

The Photon Printer is a 3D printable laser engraver made from recycled DVD Drives. A list of necessary components is in the instructions. The Photon Printer started out as a...

101. 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...

102. 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...

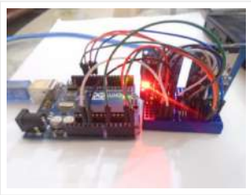
103. Arduino Wheelchair Project: Motorized Controller Mount

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...

104. Arduino and Processing IDE Communication Tutorial

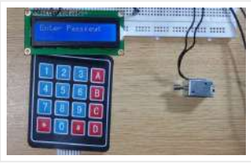
In this tutorial, we will make the communication between the Arduino and Processing. We will make the communication in both the ways, from the Arduino to Processing and from Processing...

105. 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...

106. 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...

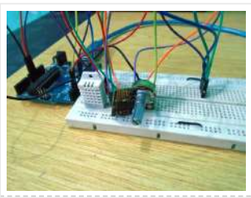
107. Home Automation using Arduino and ESP8266 Module

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...

108. 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...

109. Arduino Weather Station Web Server

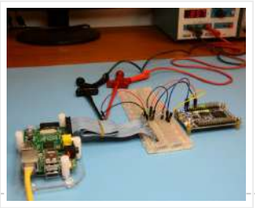


In this tutorial we are going to make a weather station that will tell us temperature, humidity and heat index of a particular location. It will show these values in a...

110. Temperature Controlled Fan using Arduino

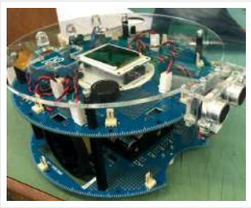
Here we are going to make a temperature controlled DC fan. DHT22 sensor is used to sense the room temperature and then we adjust speed of a DC fan/motor accordingly using...

111. 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,...

112. 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...

113. 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...

114. 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...

115. 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...

116. 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...

117. Arduino Phone

Combining Arduino and other shield modules, we make a mobile phone named Arduino Phone. Meanwhile, we printed a shell for it with a 3D printer. Though not as fine as...

118. 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...

119. 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...

120. Live Temperature and Humidity Monitoring over Internet using Arduino and ThingSpeak

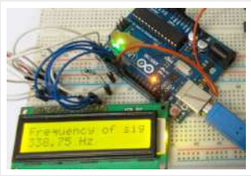
Humidity and Temperature are very common parameters for measuring at many places like farm, green house, medical, industries home and offices. We have already covered Humidity and Temperature Measurement using...

121. 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

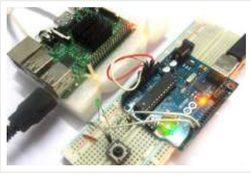
thermometer to display the current ambient temperature and temperature changes...

122. 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...

123. Interfacing Arduino with Raspberry Pi using Serial Communication

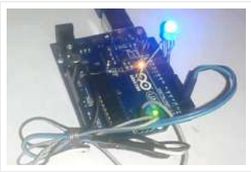


Raspberry Pi and Arduino are the two most popular open source boards in Electronics Community. They are not only popular among Electronics Engineers but also among school students and hobbyists, because...

124. 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...

125. 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...

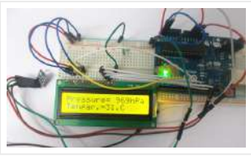
126. Sending Email using Arduino and ESP8266 WiFi Module

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...

127. Wireless Notice Board using GSM and Arduino

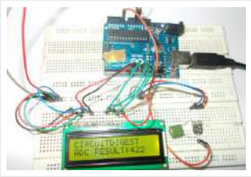
Wireless notice board is very selective term for this project, as it has a very wide scope rather than just being a simple notice board. First we should understand the...

128. 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...

129. 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...

130. 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...

131. IoT Controlled Snow Machine

Story The most homemade snow machine you've ever seen. Made from a hairdryer, polystyrene and MKR1000. Controllable from anywhere in the world* *Must have internet connection Motivation I live in...

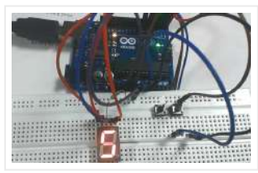
132. Humidity Display of Date, Time and Temperature

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...

133. Complete Digital Clock including Alarm and Motion Sensor

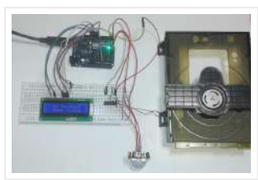
I have done several designs of digital clocks for Arduino using LEDs and LCD displays, but this one is more special because I added other features like alarm and motion...

134. Digital Dice using Arduino



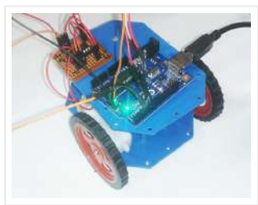
We all are familiar with dice and often played LUDO or SANP SIDI (Snake & Ladders) game by using dice. Dice is a squire type solid box which contains 6...

135. 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...

136. Computer Controlled Robot using Arduino

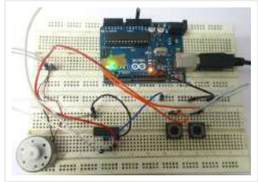


After designing this line follower robot using arduino uno, I have developed this computer controlled robot. It can be controlled via the computer and we can use specific keyboard keys to...

137. DTMF Controlled Robot using Arduino

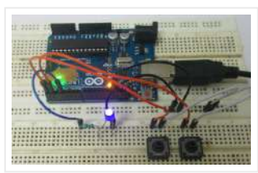
In present time almost all the people are familiar with robots. Robots play a very important role in human life. Robots are a machine which reduces the human efforts in heavy...

138. DC Motor Control using Arduino



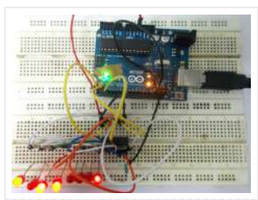
Here we are going to interface a DC motor to Arduino UNO and its speed is controlled. This is done by PWM (Pulse Width Modulation). This feature is enabled in...

139. 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...

140. How to Use Shift Register 74HC595 with Arduino Uno?

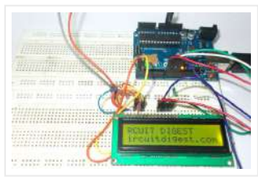


In ARDUINO we have 20 I/O pins, so we can program 20 pins of UNO to be used as either input or output. Although there are more pins on ATMEGA328P...

141. Temperature Controlled Fan using Arduino

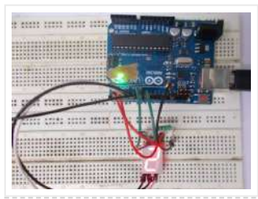
In this arduino based project, we are going to control DC fan speed according to the room temperature and show these parameter changes on a 16×2 LCD display. It is accomplished by the...

142. Interfacing 16×2 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...

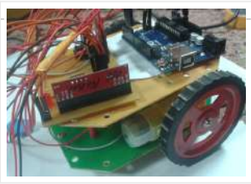
143. 7 Segment Display Interfacing with Arduino



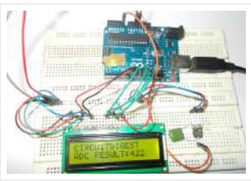
In this tutorial we are going to interface a seven segment display to ARDUINO UNO. The display counts from 0-9 and resets itself to zero. Before going further, let us...

144. 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,...

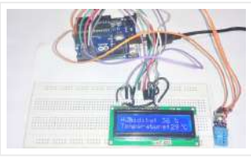


145. How to Use ADC in Arduino Uno?



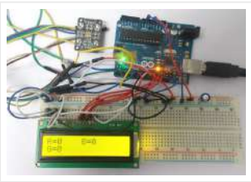
In this tutorial we are introducing concept of ADC (Analog to Digital Conversion) in ARDUINO UNO. Arduino board has six ADC channels, as show in figure below. Among those any one...

146. Humidity and Temperature Measurement using Arduino



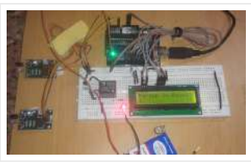
Humidity and temperature are common parameters to measure environmental conditions. In this Arduino based project we are going to measure ambient temperature and humidity and display it on a 16×2...

147. Color Detector using Arduino Uno



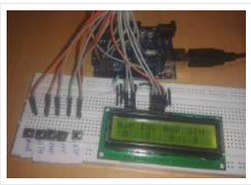
In this project we are going to interface TCS3200 color sensor with Arduino UNO. TCS3200 is a color sensor which can detect any number of colors with right programming. TCS3200 contains...

148. 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...

149. Electronic Voting Machine using Arduino

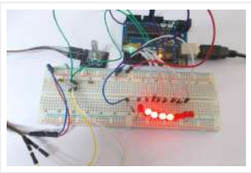


We all are quite familiar with voting machines, even we have covered few other electronic voting machine projects previously here and here using RFID and AVR microcontroller. In this project,...

150. Arduino Based Heartbeat Monitor

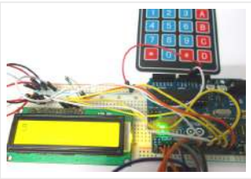
Heart rate, body temperature and blood pressure monitoring are very important parameters of human body. Doctors use various kind of medical apparatus like thermometer for checking fever or body temperature,...

151. Arduino Based LED Chaser using Rotary Encoder



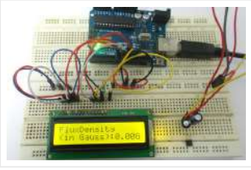
In this project we are going to interface a ROTARY ENCODER with ARDUINO. ARDUINO UNO is an ATMEGA controller based development board designed for electronic engineers and hobbyists. In ARDUINO...

152. Keypad Interfacing with Arduino Uno



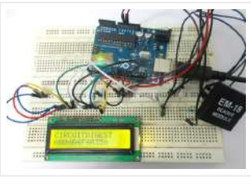
In this tutorial we are going to interface a 4×4 (16 key) keypad with ARDUINO UNO. We all know keypad is one of the most important input devices used in electronics...

153. Magnetic Field Strength Measurement using Arduino



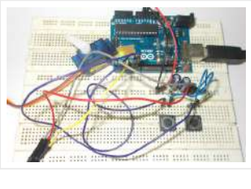
In this project we are using the concept of ADC (Analog to Digital Conversion) in ARDUINO UNO. We are going to use a Hall Effect sensor and Arduino uno to measure...

154. 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...

155. Servo Motor Control using Arduino

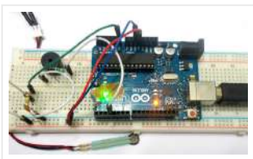


In this tutorial we are going to control a servo motor by ARDUINO UNO. Servo Motors are used where there is a need for accurate shaft movement or position. These...

156. Automatic Water Level Indicator and Controller using Arduino

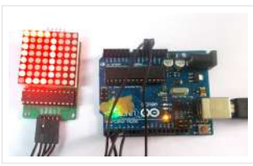
In this Arduino based automatic water level indicator and controller project we are going to measure the water level by using ultrasonic sensors. Basic principal of ultrasonic distance measurement is based on ECHO....

157. Working of Force Sensor with Arduino



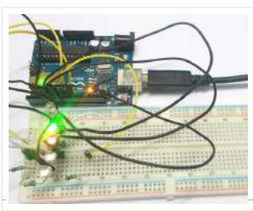
In this project we will be developing a fun circuit using Force sensor and Arduino Uno. This circuit generates sound linearly related to force applied on the sensor. For that...

158. 8×8 LED Matrix using Arduino



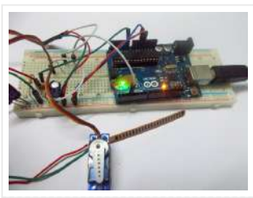
In this project we are going to design an 8×8 LED matrix display, for that we are going to interface an 8×8 LED matrix module with Arduino Uno. An 8×8 LED matrix contains...

159. RGB LED with Arduino



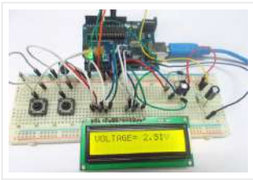
In this project we are going to interface 5 RGB (Red Green Blue) LEDs to Arduino Uno. These LEDs are connected in parallel for reducing PIN usage of Uno. The...

160. 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...

161. Variable Power Supply By Arduino Uno

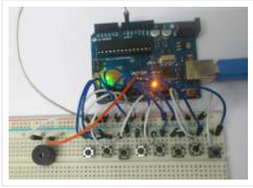


In this tutorial we will develop a 5V variable voltage source from Arduino Uno. For that we are going use ADC (Analog to Digital Conversion) and PWM (Pulse Width Modulation)...

162. PC Controlled Home Automation using Arduino

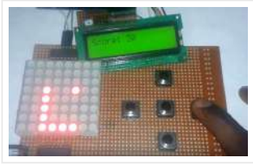
This project explains designing a home automation system which is controlled by a computer to switch On and switch Off various electrical and electronics devices. For demonstration we have used 3...

163. 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...

164. Snake Game on 8×8 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...

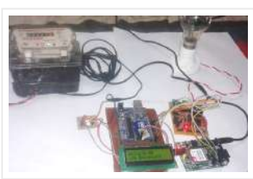
165. Digital Code Lock using Arduino

Security is a major concern in our day to day life, and digital locks have became an important part of these security systems. One such digital code lock is imitated...

166. GSM Based Home Automation using Arduino

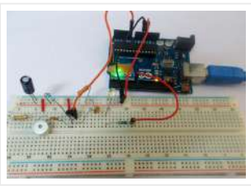
Mobile phone is a revolutionary invention of the century. It was primarily designed for making and receiving calls & text messages, but it has become the whole world after the...

167. 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...

168. 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...

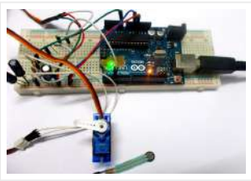
169. IR Remote Controlled Home Automation using Arduino

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,...

170. Bluetooth Controlled Toy Car using Arduino

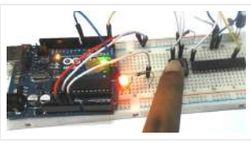
After developing few popular robotic projects like line follower robot, edge avoiding robot, DTMF robot, gesture controlled robot, etc. in this project we are going to develop a bluetooth controlled robo...

171. 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...

172. How to establish UART communication between ATmega8 and Arduino Uno?

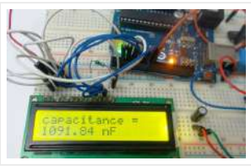


Here we are going to establish a communication between an ATmega8 microcontroller and Arduino Uno. The communication established here is UART (Universal Asynchronous Receiver Transmitter) type. It's serial communication. By this...

173. 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...

174. 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...

175. 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...

176. 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...

177. 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...

178. 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...

179. Universal IR Remote Control using Arduino and Android App

I started this project in order to get rid of various remotes at my home and build something single which could incorporate features of all of them. I got this...

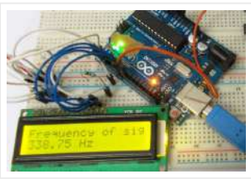
180. Call and Message using Arduino and GSM Module

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...

181. Make Your Own Homemade Arduino Board with ATmega328 Chip

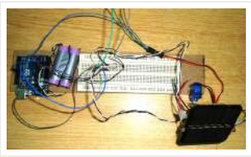
Arduino is an open-source development platform for engineers and hobbyists to develop electronics projects in an easy way. It consists of both a physical programmable development board (based on AVR series of microcontrollers) and...

182. 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...

183. 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...

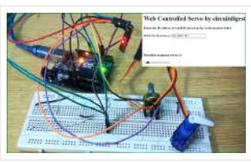
184. Arduino Digital Magnetic Compass – HMC5883L

MHC5883L 3-axis digital compass board. Before you start, make sure that you have: Arduino uno HMC5883L sensor board Nokia 5110 display (pcb version) 2x push-button 1x on/off switch (you can...

185. 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...

186. Web Controlled Servo using Arduino and Wi-Fi

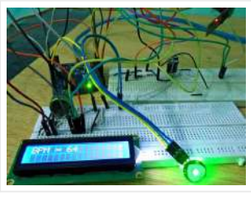


In this post we are going to control a Servo Motor using a web browser with the help of Arduino and Wi-Fi module ESP8266. The ESP8266 will establish a connection...

187. How to Interface GSM Module to Arduino-Send and Receive SMS

In this article, we are going to see how to interface GSM Module to Arduino. There are different kinds of GSM modules available in market. We are using the most...

188. 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...

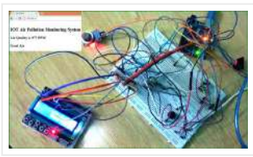
189. The Arduino Starter Kit with Arduino Book

The Official Arduino Starter Kit is here! This kit walks you through the basics of using the Arduino in a hands-on way. You'll learn through building several creative projects. The...

190. Arduino based Automatic Plant Irrigation System with Message Alert

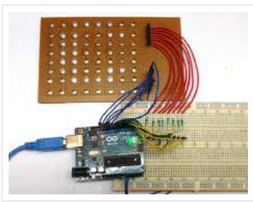
Whenever we go out of town for few days, we always used to worry about our plants as they need water on regular basis. So here we are making Automatic Plant...

191. 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...

192. Scrolling Text Display on 8×8 LED Matrix using Arduino



In this tutorial we are going to design an 8×8 LED Matrix Scrolling Display using Arduino Uno, which will show scrolling alphabets. 8×8 LED Matrix contains 64 LEDs (Light Emitting...

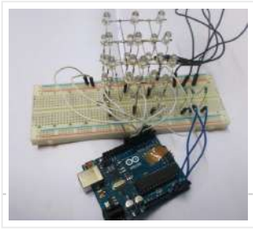
193. How to Interface GSM Module to Arduino-Send and Receive SMS

In this article, we are going to see how to interface GSM Module to Arduino. There are different kinds of GSM modules available in market. We are using the most...

194. IOT Based Dumpster Monitoring using Arduino & ESP8266

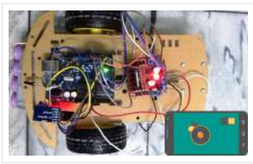
In this DIY, we are going to make an IOT based dumpster/garbage Monitoring System which will tell us that whether the trash can is empty or full through the webserver and...

195. 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...

196. 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...

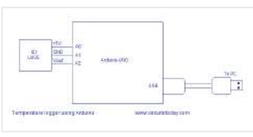
197. LM35 and Arduino – Temperature Measurement and Display on LCD

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...

198. Programming an ATtiny w/ Arduino 1.6 (or 1.0)

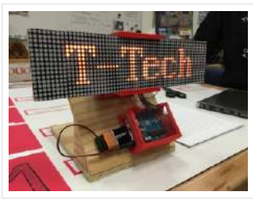
This tutorial shows you how to program an ATtiny45, ATtiny85, ATtiny44 or ATtiny84 microcontroller using the Arduino software. These are small, cheap ($2-3) microcontrollers that are convenient for running simple...

199. 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...

200. 64×16 RED LED Marquee



The purpose of this small scale LED marquee is to display messages to our classroom in a more modern and centralized way. In the classroom, this construction would save white...

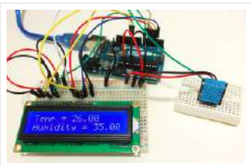
201. Arduino measures heart beat rate from fingertip

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...

202. Playing with analog-to-digital converter on Arduino Due

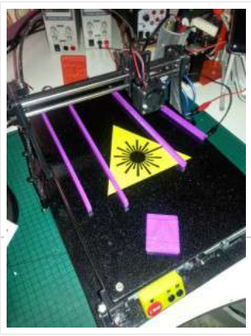
Today I'm going to present some of more advanced capabilities of ADC built in ATSAM3X8E – the heart of Arduino Due. I like the Arduino platform. It makes using complex...

203. How to Set Up the DHT11 Humidity Sensor on an Arduino



Because of their low cost and small size, DHT11 humidity and temperature sensors are perfect for lots of different DIY electronics projects. Some projects where the DHT11 would be useful include remote weather...

204. 3dpBurner. An Open Source 3D printed laser cutter/engraver.



3dpBurner is an open source laser cutter/engraver CNC machine. It is created with the same RepRap concept, by using 3D printed parts and some easy to find “vitamins” (non printed...

205. 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...

206. Getting Arduino data to a web Page

Being new to Arduino I was a bit overwhelmed by the different ways to do things. So this is what I came up with! I am using an Arduino UNO...

207. 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...

208. 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”...

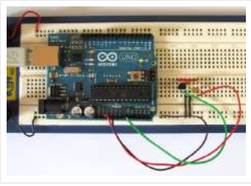
209. Weather Monitor

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...

210. 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...

211. 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)....

212. 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...

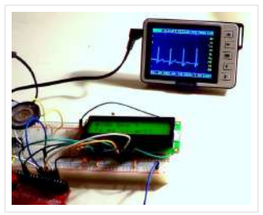
213. Speech Controlled Quadropod

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...

214. 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...

215. Electrocardiograph & Heart Rate Monitor



This instructable shows you how to make an electrocardiograph and a heart rate monitor. It is intended to be a fun science project only. Of course, it should not serve...

216. 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...

217. 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....

218. 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...

219. 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...

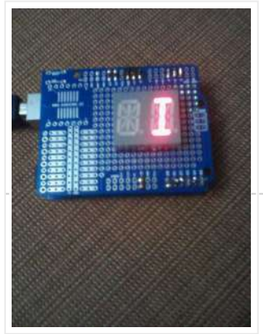
220. Arduino CNC

Hi, this is my first instructable and I hope to do more. This project was for 'Creative Electronics', a Beng Electronics Engineering 4th year module at the University of Málaga, ...

221. 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...

222. 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...

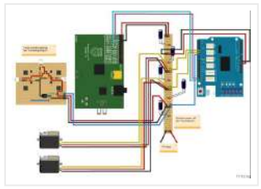
223. Arduino based Tic Tac Toe with TV Remote

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...

224. K4S, a Keyboard for Arduino to use with Scratch

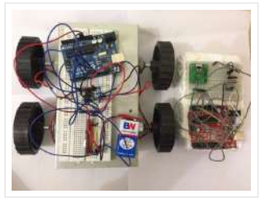
This project starts a few months ago. Juan Brito, author of the blog Desafio Ecuador, contacted with me to talk about Scratch and the opportunities that gives this programming enviroment in the world of...

225. 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...

226. Gesture controlled robot using Arduino

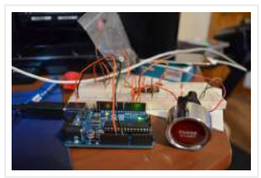


This gesture controlled robot uses Arduino,ADXL335 accelerometer and RF transmitter-receiver pair. We will divide the entire robot into 3 parts the transmitter,the receiver and the robot. The different gestures that...

227. Computer controlled RC car with two Arduinos

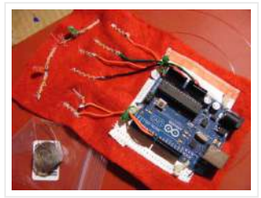
Required Parts: This project requires two Arduino boards which can be bought from http://www.adafruit.com/category/17 This project uses two Arduino Uno compatible boards. An L293D or other Dual H-Bridge Motor Driver...

228. 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...

229. 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...

230. 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...

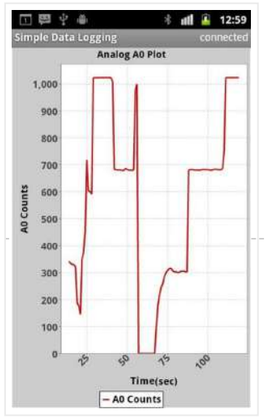
231. Microcontrolled Farm Equipment

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...

232. Arduino Ultrasonic Parking Spotter

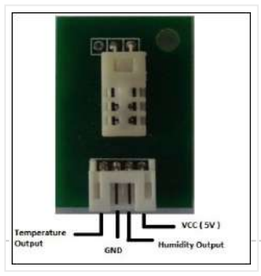
For my first instructable, I'd like to present The Parking Spotter. This is not a new concept, I know. However, this build was done specifically to suit my needs/wants/materials already...

233. Simple Remote Data Plotting using Android / Arduino / pfodApp



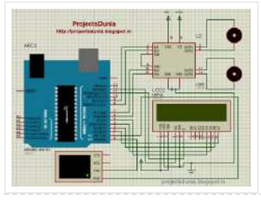
Simple Remote Data Plotting using Android / Arduino / pfodApp This Instructable shows you how to plot Arduino sensor data on your Android mobile and capture it for later downloading...

234. HSM-20G Interface with Arduino Uno



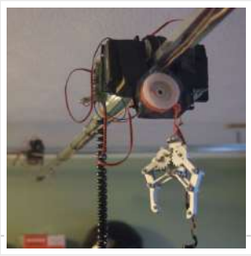
The HSM-20G is an analog humidity and temperature sensor that outputs analog voltage respects to relative humidity and temperature. However from this sensor relative humidity is found along with temperature....

235. How To Make a PC Control Robot



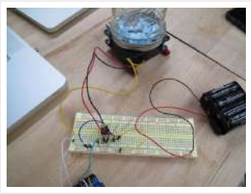
Do you ever tried to control your robot using your PC or laptop? Controlling a robot using PC or laptop is often being a fun for the student or hobbyist....

236. 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...

237. Beacon

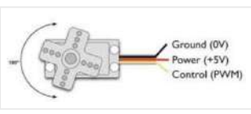


In this tutorial you will learn how to turn any conductive surface into a capacitive touch sensor. This project illustrates how to use capacitive touch to turn on a motor...

238. Back to the 1980s with the Graphic EQ

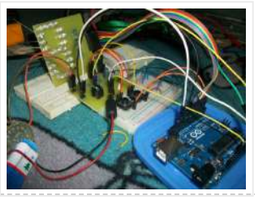
For those of you who remember the eighties, this will no doubt bring back fond memories when every piece of audio equipment in the known universe was at the time...

239. 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...

240. Arduino – Theremin with 7 Segment LED Display

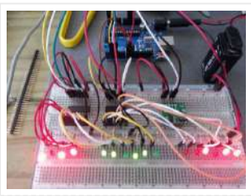


In this instructable, I will show you how to make a simple toy that combination of the LEDs flash and Theremin. We're gonna using some basic electronics built on top...

241. miniLOG – Precision Standalone Voltage Logger

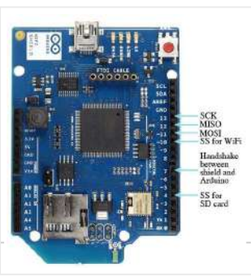
miniLOG is a precise standalone voltage logger that save the data on a SD card. It has 4 basic analog channels: – one has 12bit resolution for voltage measurements, -...

242. Arduino Binary Clock (hours, minutes and seconds)



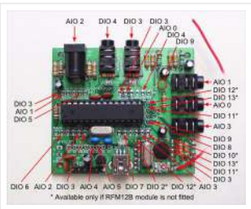
Hello everyone; I was looking for this project for a long time. Finally I it it together with a lot of effort. For this project you will need: [box color="#985D00"...

243. Arduino Wifi Shield is back on the store!



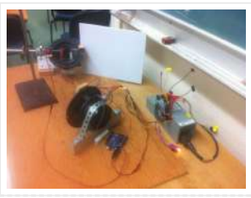
Overview The Arduino WiFi Shield connects your Arduino to the internet wirelessly. Connect it to your wireless network by following a few simple instructions to start controlling your world through...

244. 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...

245. 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,...

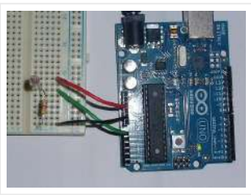
246. How to Deal with Noisy Neighbors with Arduino device

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...

247. 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...

248. Arduino UNO Tutorial 8 – NightLight

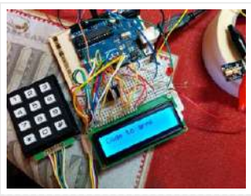


In this Arduino UNO tutorial, we are going to use a Light Dependent Resistor (LDR) to create a simple childrens bedroom nightlight which turns on automatically when it gets dark...

249. 1 LED Game with Arduino Uno and an RGB LED

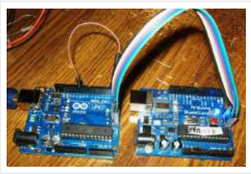
Sometimes I just have those days where I really want to make something neat with the Arduino I have lying around, but I know I don't have the patience for...

250. Arduino Laser Trip Wire



For this dandy little project you'll need: Arduino – I'm using an Arduino Uno a 3 x 4 keypad a 16 x 2 LCD screen a laser module/sensor a light...

251. Arduino ISP – LOG

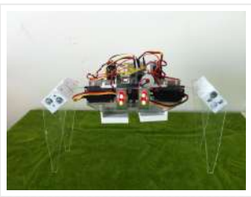


Arduino ISP – LOG So this Lazy Old Geek (LOG) has had a lot of trouble getting Arduino bootload on Atmega chips. I couldn't get either of these to work...

252. 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...

253. 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...

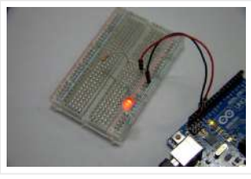
254. DIY- G-force measurement system

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...

255. Arduino UNO Tutorial 6 – Rotary Encoder

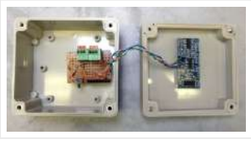
We have written a tutorial for Rotary Encoders using a Microchip microcontroller but now would be a good time to make an Arduino UNO version. With a rotary encoder we...

256. Arduino LEDs



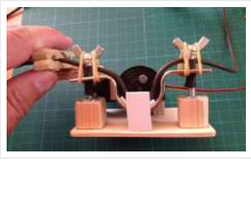
Description In this tutorial you will set up and turn on a single LED. Note that this code can actually be executed with just the Arduino and no other components...

257. Arduino Project 11 (2D/3D pictures) – Measuring a water tank level v2 (HC-SR04 Ultrasonic Rangefinder/Arduino Uno/1.0)



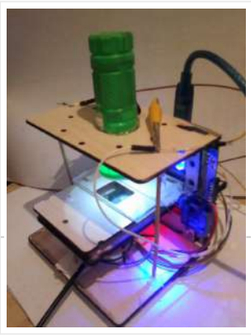
1. Introduction: I made a water level sensor a little while a go to measure the water level in my underground rainwater harvesting tank. Thanks to the Jubilee I found...

258. 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 small amounts of liquids. The pump is a peristaltic pump which...

259. DIY Microscope

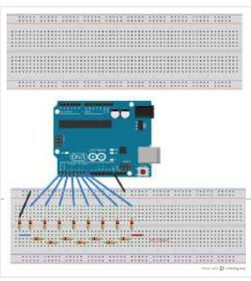


This Project Is A Part Of The Afrimakers Event http://www.afrimakers.org/ Introduction We used a simple cheap webcam to make a microscope. In short, a small hack to the optics of...

260. 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...

261. 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...

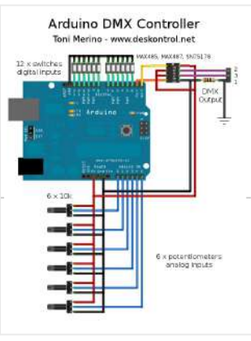
262. Remote Controlled Switching

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...

263. 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...

264. Small Arduino DMX controller

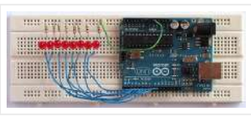


In this post we show you how to make a small and useful Arduino DMX512 controller, which can use by example to handle a smoke machine with DMX, or as...

265. 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...

266. 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...

267. Tutorial 16: Arduino Clock

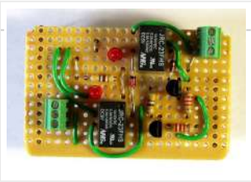
In this tutorial, the Arduino displays the time and date on a LCD (optional) and in the Arduino IDE serial monitor window. A PCF8563 real time clock (RTC) IC is...

268. 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 doyler.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...

269. 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...



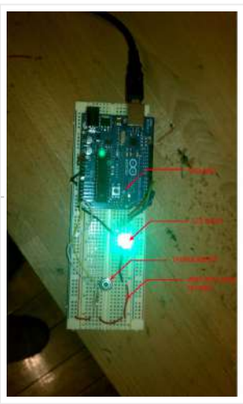
270. Open Source Home Automation Project using Arduino UNO + Ethernet Shield

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...

271. 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...

272. Thermal Camera: Arduino UNO + MLX90614 IR Thermometer

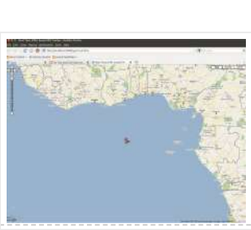


I did the following steps: 1) Hardware: Connect the MLX90614 (refer to the datasheet) as follows: Pin 1 on MLX (SCL) connect to ANALOG pin 5 on Arduino Pin 2...

273. 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...

274. 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...

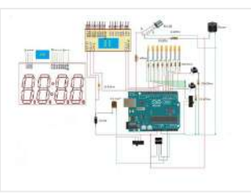
275. Jacob Quatier

The Meter Dec 2, 2014 The whole idea of this project was to create a giant meter to show website response time almost like a speedometer would. The result is...

276. 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...

277. 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...

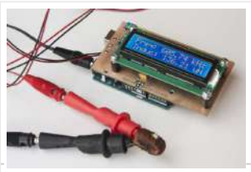
278. Stage 4: Complete Beginner's Guide For Arduino Hardware Platform For DIY

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...

279. Arduino project: USB foot-operated mouse switch

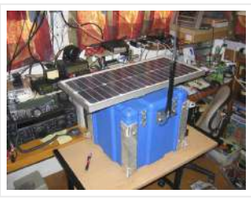
This foot pedal plugs into the Arduino case which plugs into your PC via microUSB cable. Arduino microcontrollers can easily be used to power fun projects like robots and even...

280. Arduino-based Inductance Meter



I've just finished a little Arduino project. It's a shield for the Arduino Uno that lets you measure inductance. This is a functionality that I found missing in just about...

281. Technical Details of Logging Seawater Temperature

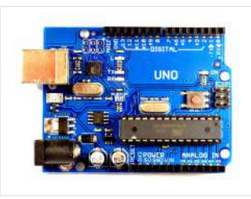


Block Diagram This diagram shows the basic components required for collecting temperature readings from seawater and transmitting the data to a base station where it can be collated into a...

282. Tutorial – Using DS1307 and DS3231 Real-time Clock Modules with Arduino

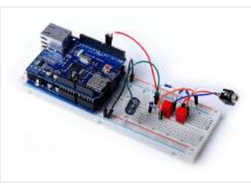
We keep getting requests on how to use DS1307 and DS3231 real-time clock modules with Arduino from various sources – so this is the first of a two part tutorial on...

283. 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...

284. Arduino Project 6: Web-controlled music player

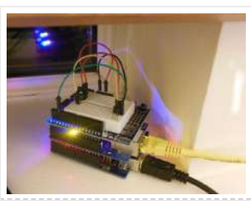


Our NetPlay project is built on a standard breadboard. In our previous Arduino masterclass we briefly introduced the Ethernet Shield an Arduino expansion board that adds Ethernet connectivity plus microSD...

285. Arduino Project 8: Stompy the robot (part 1)

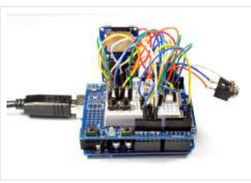
Our first Arduino robot called Rolly in our February issue proved to be a popular project. Powered by an Arduino Uno board it was easy to put together and cost...

286. 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...

287. 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,...

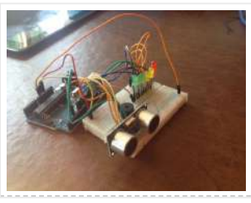
288. Arduino Weatherstation

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...

289. 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...

290. 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...

291. 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...

292. [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...

293. 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...

294. 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...

295. 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...

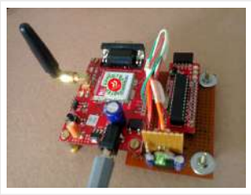
296. Using an Arduino as a garage car parking sensor

"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...

297. 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...

298. 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...

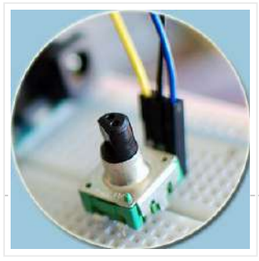
299. Arduino RFID Reader RC522 + Access Control System

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...

300. 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...

301. 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...

302. 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....

303. Cheap Arduino Controlled Light Sockets – Reverse Engineering RF

Smart lightbulbs cost your firstborn child. Which is a shame, because smart lights unlock tremendous potential for home automation, energy savings, and all sorts of cool projects. If only there...

304. 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...

305. 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...

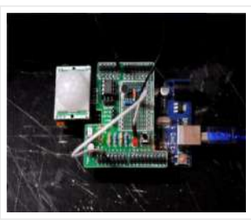
306. SITWAY

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....

307. Drawing on a 7×5 LED matrix with Arduino in C

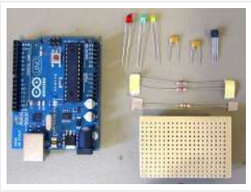
In my component drawers I have a LTP-7357AG, which is a matrix of 35 green LEDs conveniently packaged in a 12-pin display. I wanted to play with it so I began to...

308. The Viciously Simple Clap-ON Clap-OFF Circuit For Arduino



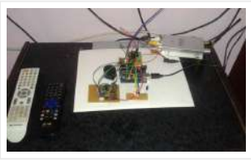
Hi Everyone! I've had a few people ask about creating a simple clap-on/clap-off circuit using Arduino. Well those who are interested are now in luck. The software in this instructable...

309. Arduino Tiny Temperature Shield Project



In this Arduino project, you will build a small shield that measures temperature and will switch on one of three LEDs depending on the current temperature measurement. Each LED can...

310. 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...

311. 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...

312. 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...

313. 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....

314. 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....

315. 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...

316. 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...

317. DIY Lithium Battery Charger Shield for Arduino

In this project, we are building a programmable single/multi cell lithium battery charger shield for Arduino. The shield provides LCD and button interface which let the user set the battery...

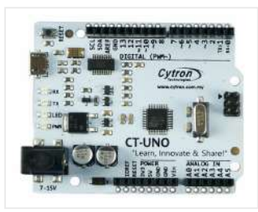
318. Project Suite Bros: Voice Activated LED Friendship Photoset (Arduino, Bluetooth, Crafts)

(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....

319. 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,...

320. Introducing CT-UNO, Cytron version of Arduino UNO



The CT-UNO combines the simplicity of the UNO's Optiboot bootloader (which load program faster), the stability of the FTDI and the R3 shield compatibility of the latest Arduino UNO R3....

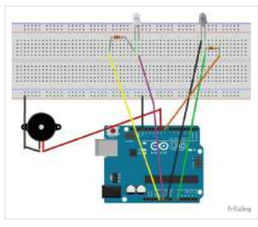
321. Project: Cleaner robot using Magician Chassis, Arduino, distance sensor and hand sweeper

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...

322. 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...

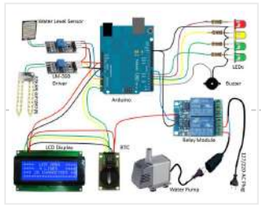
323. ARDUINO Burglar Alarm Using Infrared Emitter-Detector pair



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...

324. 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

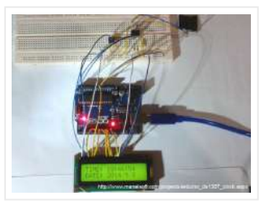


control of soil moisture,...

325. Arduino Compatible apc220 Wireless rf Module with Graphics LCD

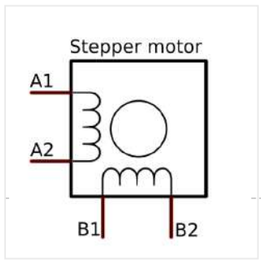
16 node mesh, up to 1000m between nodes, sample two analog voltages per node, link any node to any other node, display data on any node with either graphics or...

326. 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...

327. 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...

328. 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...

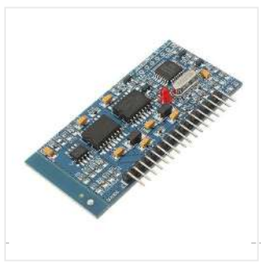
329. Arduino Basics #5 – Add SD storage to Arduino

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...

330. 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...

331. Sinewave Inverter Circuit Using Arduino

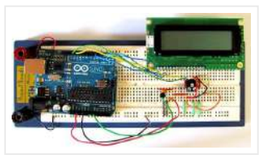


The post explains how to build a simple sinewave inverter circuit using PWM feed from an Arduino Uno board, the article also discusses a sinewave 3 phase inverter using the...

332. 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...

333. Tutorial 14: Arduino LCD Thermometer



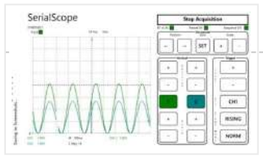
In this tutorial, a temperature sensor (MCP9700 linear active thermistor IC) and LCD are connected to the Arduino. The Arduino reads the temperature from the MCP9700 on analog pin A0...

334. 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...

335. 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...



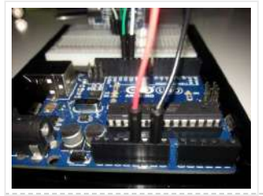
336. Arduino 3.3V

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...

337. 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...

338. Ultrasonic Range detector using Arduino and the SR04 Ultrasonic sensor

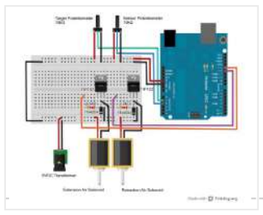


his is a preliminary instructable that will take you through the steps I took to get the SR04 ULTRASONIC SENSOR connected and working to the Arduino. It will then be...

339. 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...

340. David Bynoe works in progress

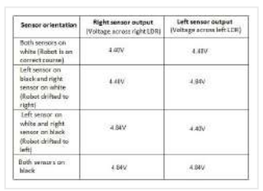


For an upcoming project I needed a pneumatic ram with a closed loop control system so I could position it accurately. Didn't have the budget for an off the shelf...

341. Arduino passive IR trigger for Canon EOS

The other day I wanted to experiment with external triggers for my Canon EOS 550D camera. I stumpled upon a nice open source project called Arduino Camera Control from Oleg...

342. Line Follower Robot using Arduino



Sensor orientation	Right sensor output (Voltage across right LDR)	Left sensor output (Voltage across left LDR)
Both sensors on white (Robot is on correct course)	4.40V	4.40V
Left sensor on black and right sensor on white (Robot drifted to right)	4.44V	4.84V
Left sensor on white and right sensor on black (Robot drifted to left)	4.84V	4.40V
Both sensors on black	4.84V	4.84V

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...

343. 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...

344. Getting Started with Arduino – LED Blinking

Arduino Uno is the best development board for beginners in the field of embedded systems. We can program Arduino board with less technical knowledge and programming skills. This tutorial is intended...

345. 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...

346. 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...

347. Planterbot – The Plant Monitoring Robot

Hello everyone ! Please vote for me in the tech contest! In this instructable I am collaborating with Akin Yildiz an instructables author that creates instructables that help plants grow...

348. 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...

349. Arduino or Pi? You Choose

The Raspberry Pi is much more powerful than an Arduino but it has a few limitations of its own. Its I/O is much more limited, it can't use common Arduino...

350. 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...

351. ZERO plus Prototype your IOT product in seconds

What we wish to achieve? Technology makes a better world !

We believe ZERO+ can turn great ideas into reality because with ZERO+, you can deve
Traditionally, to develop your own smart device, you would need to go through hardw
This not only is time and resource consuming but also often needs a huge team to acl
that includes hardware, embedded system, cloud service and user application. Now, y
ZERO+ is designed for both individuals and teams, so anyone from makers to startup
be manufactured in large scale. We are looking forward to seeing lives with all sorts o
only limit is up to your imagination. ZERO+ , a smart open-source wifi...

352. Arduino development environment

Introduction This tutorial will walk you through downloading, installing, and testing the Arduino software (also known as the Arduino IDE – short for Integrated Development Environment). Before you jump to...

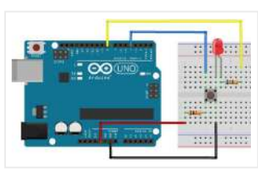
353. Arduino automatic watering system

[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...

354. 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...

355. Using Push Button Switch with Arduino Uno

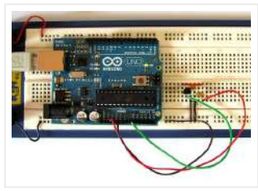


In this tutorial you will learn how to read the status of a digital pin of Arduino. I hope that you already go through our first tutorial, Getting Started with Arduino Uno –...

356. 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"...

357. [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...

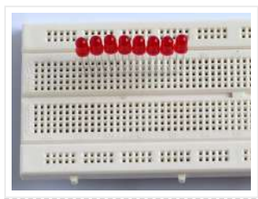
358. [Using the Arduino Serial Port]

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...

359. [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...

360. [Arduino Knight Rider]

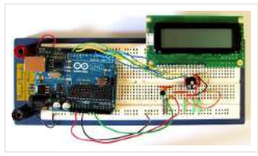


In this tutorial, eight LEDs are interfaced to the Arduino Uno board. This is not complicated – it is just like interfacing a single LED to the Arduino as done...

361. [Arduino LCD]

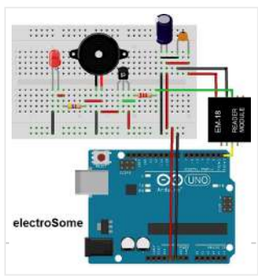
In this tutorial you will connect a LCD (Liquid Crystal Display) to the Arduino Uno and then run the Arduino LCD example programs that are built into the Arduino IDE....

362. [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...

363. [Interfacing EM-18 RFID reader with Arduino Uno]

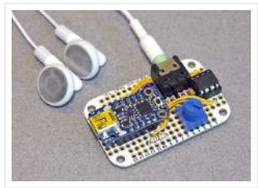


Arduino Uno is an opensource physical computing platform based on ATmega328 microcontroller and provides a development environment for writing software for the board. It can be used for a variety...

364. [Arduino + WiFi, Music Responsive LED Light Fixture using arduino]

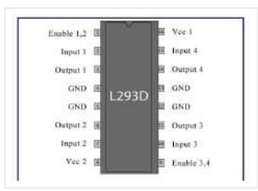
This instructable gives instructions for constructing a Saiko5 WiFi enabled LED light fixture based on the Arduino hobbyist platform. It includes step-by-step instructions from board design to soldering to case...

365. [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...

366. [ARDUINO based IR remote control robot using arduino]

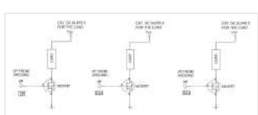


Hi everyone. This my new project IR remote control robot using arduino. This is a simple design robot you can easily build it. Step 1: Requirements: Project requirements: Arduino uno...

367. [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,...

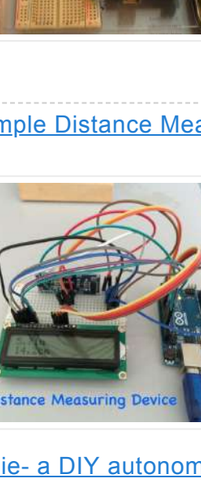
368. [Arduino PWM Led Control using arduino]



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...

369. Arduino project: Stereo Peak Program Meter using arduino

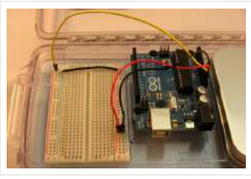


Previously, we introduced the Arduino's analog-to-digital converter (ADC) in detail, looking at successive-approximation A-D conversion and how it's the best compromise between speed and cost. This time, we start putting...

370. 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...

371. 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...

372. Simple Distance Measuring Device

In this project we are going to learn how to use the HC-SR04 PING))) ultrasonic sensor to measure distance. This sensor is also often used on robots to detect obstacles....

373. 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....

374. 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...

375. 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...

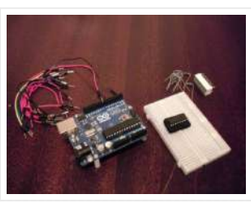
376. Car No. 06 Programmed Automatic Driving Car using arduino

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...

377. 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...

378. 8 LED Chaser with 74HC595 8 Bit Shift Register using arduino

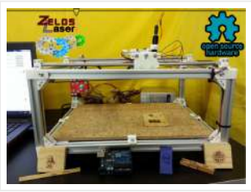


Have you wanted to make a sweet Cylon/Knight Rider (Larson) Scanner effect? But you don't want to use up all of your Arduino IO pins? Well, you can make a...

379. [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...

380. [Affordable Opensource Arduino Laser Engraver for Everbody]

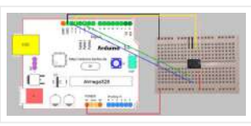


What are the characteristics of the ZelosLaser Engraver? Work area *Normal* 300mm x 200mm Housing dimensions Normal 440mm x 350mm x 220mm Work area *BIG MAMA* 660mm x 650mm Housing...

381. [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...

382. [Voice Recognition System using arduino]

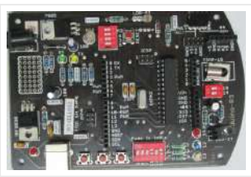


Contents 1 Team Members 2 Mentor 3 Concept 4 Softwares Used 5 circuits 5.1 Pre Amp circuit 5.1.1 Circuit Diagram 5.1.2 Working 5.2 EEPROM circuit 5.3 Led Matrix display circuit...

383. [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...

384. [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...

385. [64×16 RED LED Marquee]

The purpose of this small scale LED marquee is to display messages to our classroom in a more modern and centralized way. In the classroom, this construction would save white...

386. [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...

387. [DIY SPEEDOMETER AND ODOMETER]

Step 1: HOW IT WORKS The working of a project is simple. It is also very important to understand it for making the project. Basically the apparatus consists of the...

388. [Playing with analog-to-digital converter on Arduino Due]

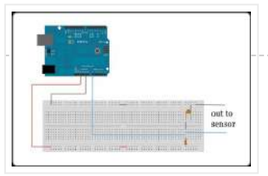
Today I'm going to present some of more advanced capabilities of ADC built in ATSAM3X8E – the heart of Arduino Due. I like the Arduino platform. It makes using complex...

389. [Automation Board]

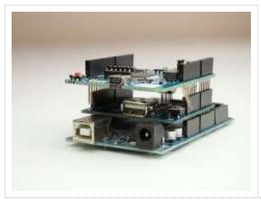
The Automation Board is 100% compatible with the Arduino Uno. This way it allows the enjoyment of all the easy programming and libraries that Arduino provides. It's a strong and...

390. [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...



391. 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...

392. 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...

393. Arduino Bike Speedometer

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...

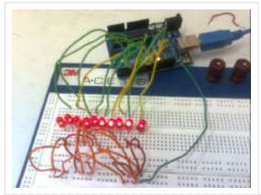
394. LilyPad Arduino – the wearable technology using arduino

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...

395. 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)...

396. Making 1×10 LED Array with Random Patterns

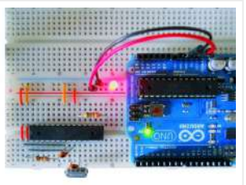


This will teach you how to make a very simple 1×10 array of LEDs on a breadboard controlled by an Arduino Uno to make the LEDs blink and flash in...

397. 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...

398. 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...

399. 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...

400. 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...

401. Focus on Arduino YÚN: a board for all, that makes life easier

This post introduces in details one of the latest boards from the Arduino Team: a board that we still didn't cover that much on the blog. YÚN's DNA is that...

402. 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...

403. [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...

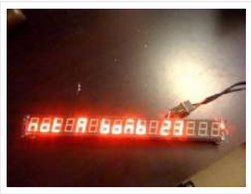
404. Arduino Controlled RGB LED Dot Matrix Board

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...

405. 5×5 rgb lpd6803-led matrix arduino controlled

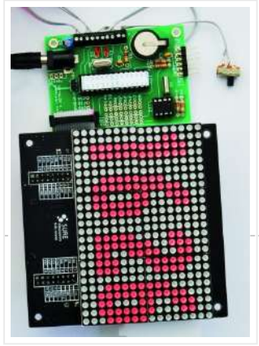
what: a 5*5 rgb led matrix, made with arduino and lpd6803 based leds from adafruit. with an pir sensor, it goes on if it detects movements and a ir distace...

406. 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...

407. 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...

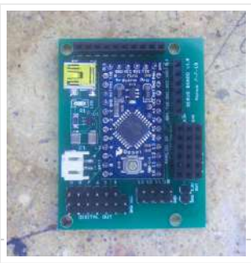
408. An Intel Galileo Walkthrough using arduino

Despite the Arduino YUN was presented just recently, already a new board that is compatible with GNU/Linux has been released. This one is based on x86 technology and made by...

409. IR Harp using arduino

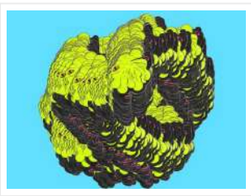
Contents 1 Team Members 2 Mentor 3 Introduction 4 Components Used 5 Idea 6 Arduino Uno Board (ATMega328P) 7 Approach to Project 8 Sound Synthesis 8.1 Delay() 8.2 Interrupts 8.3...

410. 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...

411. Read analog data directly in Processing using arduino

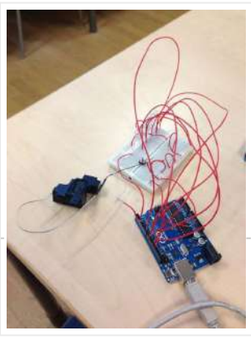


This instructable presents a fast an easy way to use data received from an analog sensor in Processing. You will learn to utilize the Arduino and prototype electronic boards to...

412. The Arduino Noise Machine

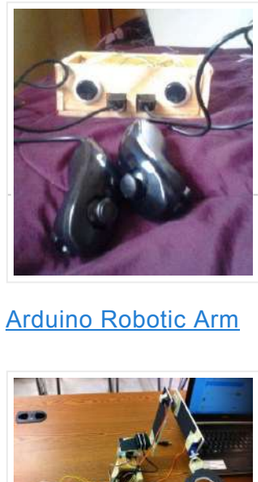
Okay, okay, I know you all were wondering what I am up to now. I love synths and so, I built this. There are three things that can catch my...

413. Connect the arduino and make the speaker play



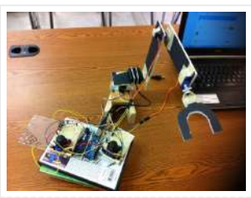
To make your Arduino to play a melody you need thes accessories. One 5 ohm speaker One Arduino uno board One Push buttom One 10 kohm resistor 8 leds And a...

414. Team 1 Final Project Report & Video: Arduino Video Game System using arduino



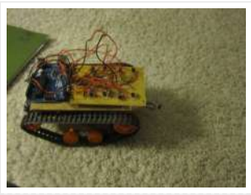
Introduction We built a video game system that can play either Snakes or Pong. We saw a project called “Arduino Pong” and wanted to recreate it with our own twist....

415. Arduino Robotic Arm



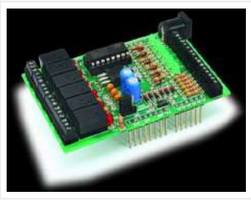
In this instructurable I will show you how to make a simple robotic arm controlled by 4 servos , 2 analog joysticks, and an Arduino UNO. It is very similar...

416. The Versatile Arduino Robot using arduino



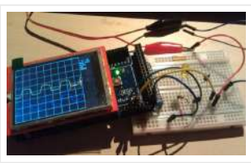
This is my first arduino robot, and I am quite happy with the outcome. What I came up with is a robot that with modifications can do just about anything...

417. 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...

418. A simple DIY Oscilloscope with Arduino Uno and Mega



My DIY Oscilloscope, how i got my signal Content : – Description – Screenshots – Video – Credits and links Descriptions I am experimenting with RF and IR signals in...

419. 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...

420. 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...

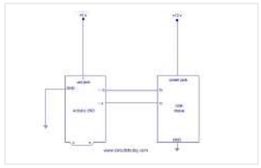
421. Arduino Digital Magnetic Compass – HMC5883L

Today I will show you how to make your own arduino compass by using the MHC5883L 3-axis digital compass board. Before you start, make sure that you have: Arduino uno...

422. 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...

423. How to Interface GSM Module and Arduino-Send and Receive SMS

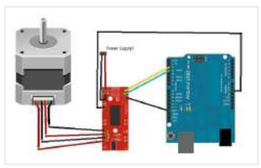


In this article, we are going to see how to interface GSM Module to Arduino. There are different kinds of GSM modules available in market. We are using the most...

424. Soldering Robot – Head Assembly

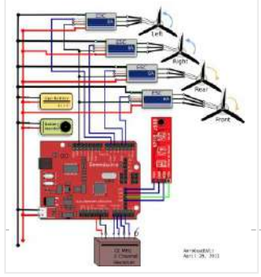
We have finished the soldering iron element slider system and stepper mount for the new soldering robot project. The soldering iron element slides on a pair or 6mm rails, drylin®...

425. 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...

426. 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...

427. 3dpBurner – A 3D printed laser cutter/engraver

3dpBurner is an open source laser cutter/engraver. It is created with the same concept as RepRap, using 3D printed parts and some easy to find “vitamins” (non printed hardware). I...

428. 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...

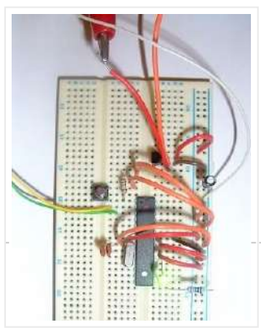
429. Team 12 – Prototype I Final Report: Home Automation Project using arduino

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...

430. 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...

431. 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...

432. Bicycle North Indicator using Arduino

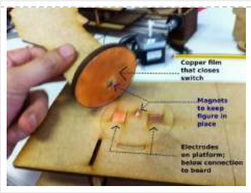
Magnetoception is the ability of some animals to detect magnetic fields as a means of orienting themselves. Although humans do not seem to posses the same biological mechanisms that allow other...

433. 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...

434. 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]...



435. 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 digitalRead and...

436. 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...

437. 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...

438. 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...

439. 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...

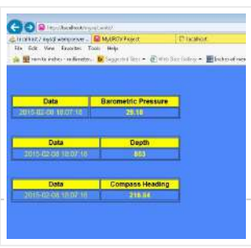
440. CatBot: Automated Cat Laser using an Arduino

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...

441. 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...

442. Getting Arduino data to a web Page



Being new to Arduino I was a bit overwhelmed by the different ways to do things. So this is what I came up with! I am using an Arduino UNO...

443. 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...

444. 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...

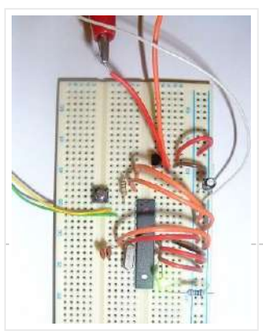
445. Solar theremin with Arduino using arduino

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),...

446. 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...

447. Arduino ATmega328 – Hardcore using arduino

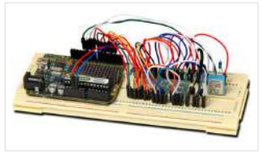


Ok, you've completed your prototype using an Arduino Uno board, perhaps using a shield or a breadboard for any additional components, but now you want to finalise your design and...

448. 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?...

449. 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...

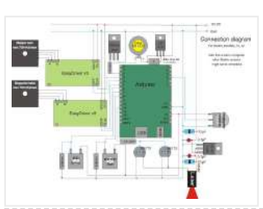
450. Easily control your iPod using Arduino

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...

451. 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...

452. about controlling your system with arduino

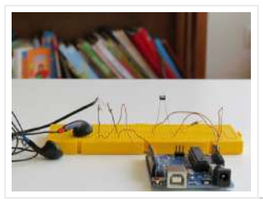


Hi all, First of all , i'm dutch and from Belgium. I'm new with and for David-laser. I tried to find a clear site and list for controlling. I've found...

453. Arduino Guitar Pedal using arduino

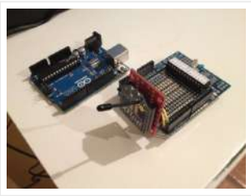
The Arduino Guitar Pedal is a digital multi-effect pedal based upon the Lo-Fi Arduino Guitar Pedal originally posted by Kyle McDonald. I made a few modifications to his original design....

454. Arduino Optical Theremin



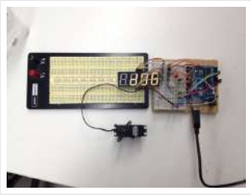
When I first became aware of Arduino, a theremin seemed like a natural project: sensor + actuator. It turned out to be quite affordable and fun to make. It is...

455. Arduino Wireless Programming with XBee Series 1 or 2



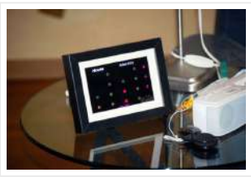
Hi. This Instructable will guide you through the process of wirelessly programming your Arduino using two XBees. I just finished designing a wireless EEG system with the XBee modules, so I've become quite fluent...

456. How to Do Arduino-Controlled Intelligent Time-Lapse Photography



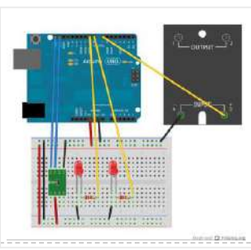
Project: Light-Sensitive and Adjustable Dynamic Time-Lapse Photography By Holden Leslie-Bole Approximate cost: $70 without the camera I've been doing some time-lapse photography with my GoPro HERO3 for a while now, and...

457. My Arduino Binary Clock



Hi from Italy Although many watches are created binary, my project was inspired mainly to this: http:// http://www.instructables.com/id/LED-Binary-Clock-1/, very smart and funny. I tried to improve the design and to...

458. 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...

459. 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...

460. Arduino CNC

Hi, this is my first instructable and I hope to do more. This project was for 'Creative Electronics', a Beng Electronics Engineering 4th year module at the University of Málaga, ...

461. 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....

462. 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...

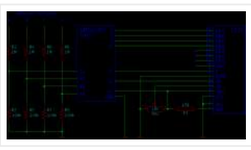
463. Sentriduino! Its the all new Sentry turret

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...

464. Arduino a Robotica 2012

Anche quest'anno Arduino partecipa a Robotica – mentre non partecipa Makersitaly! – e ha scelto il mezzo della stampante termica in controtendenza con i mille volantini, flyer, cataloghi, allegati, biglietti...

465. Arduino LCD Voltmeter with 4 Channels



Analog channels A2 to A5 on an Arduino Uno are used to measure four different voltages. The measured voltages are displayed on a 16 character by 2 line LCD. The...

466. Temperature-Sensitive Infinity Mirro

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...

467. 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...

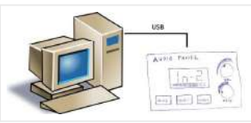
468. Arduino Project 7: Build a Retro Gamebox

The games market may well dwarf the music and movie industries combined in global revenue and new-release games offer lighting effects and texture detail that make you forget you're in...

469. 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...

470. 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...

471. Arduino Tutorial: Temperature Sensor

If you're like me, every morning before you leave for work you wonder whether you should wear a jacket before heading outside. You might not have time to check outside...

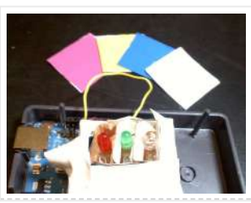
472. 4X4X4 LED Cube w/ Arduino Un

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...

473. Stress Makes Art: Galvanic Skin Response and Visual Generation

I'm a graphic design student and built this project for a beginning electronics class. I'm interested in connecting the signals generated by one's body to the act of visual generation....

474. Arduino Color Sensor



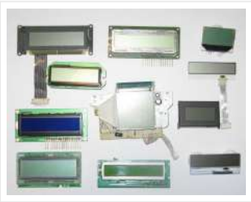
Here we will be learning how to make a color sensor. my model consists of three cardboard compartments containing an LED – one red, one blue, and one green -...

475. 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,...

476. Salvaging Liquid Crystal Displays (LCDs)

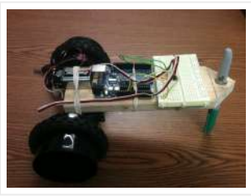
Almost all electronics have some sort of human interface, from blinking lights and beeping speakers to seven segment alphanumeric and Liquid Crystal Displays. This Instructable is about salvaging and testing...



477. 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...

478. Arduino Drawbot

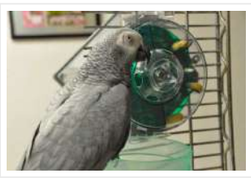


In some of my previous Arduino instructurables I have show to the Arduino beginers on how to control servos in different ways. And in my last instructurable I have show the modification...

479. The Traveling Geocache using Arduino

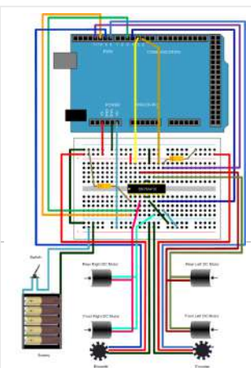
This project and future projects can be found at my website http://revoltlab.com/ where you can also find my blog. UPDATE LOG: NOW SUPER SIMPLE TO REPROGRAM! Easy FTDI USB interface...

480. Arduino Button Activated Treat Dispenser



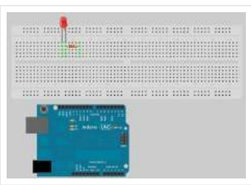
For my Digital Multimedia class final, I created a treat dispenser that is activated by pulling a chain, which starts a servo motor that spins a wheel to dispense treats...

481. Drive with PID Control



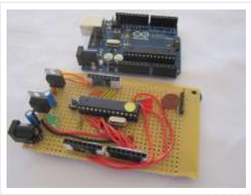
This example shows how to simulate a simple closed-loop control algorithm in Simulink® and how to run it on an Arduino® board. Supported Hardware: Arduino Leonardo Arduino Mega 2560 Arduino...

482. BLINKING AN LED USING AN ARDUINO UNO (EXPLAINED)



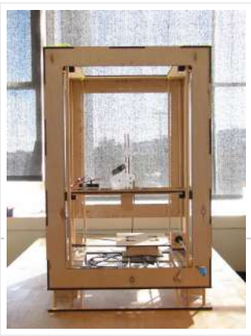
So you're here because you want to start learning some of the Arduino Basics... So let's start with THE most basics... no this "tutorial" is actually a little more basic...

483. 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....

484. 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...

485. 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...

486. 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...

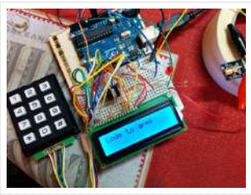
487. Arduino Breathalyzer

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...

488. 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...

489. Arduino Laser Trip Wire



For this dandy little project you'll need: Arduino – I'm using an Arduino Uno a 3 x 4 keypad a 16 x 2 LCD screen a laser module/sensor a light...

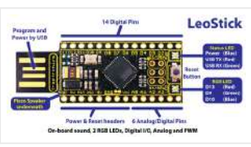
490. Electronic Instrument

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...

491. Arduino Uno – Programming With A Serial Port

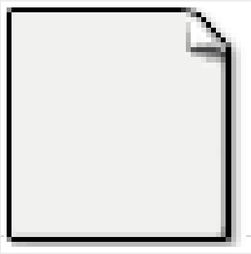
I'm working on an Arduino clone. The Arduino is essentially an ATMEGA328P development board with a bootloader pre-loaded. There are a lot of custom macros built into the programming interface...

492. LeoStick Getting Started Guide



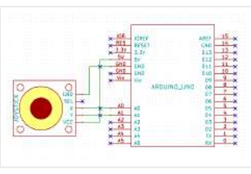
The Freetronics LeoStick is a handy break-out board for the ATmega32U4 microcontroller. The board has a convenient USB stick format, and is based on the pinout and connections of the Arduino...

493. 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....

494. Ardu-Bot-Tom – RF Link Controlled Robot

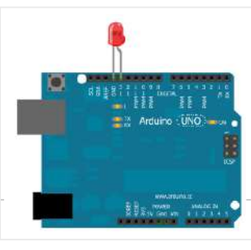


[box color="#985D00" bg="#FFF8CB" font="verdana" fontsize="14 " radius="20 " border="#985D12" float="right" head="Major Components in Project" headbg="#FFEB70" headcolor="#985D00"] Ardu-Bot-Tom List of Materials Controller Parts: 1x – Arduino Uno 1x – 9V Battery...

495. 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...

496. Arduino LED Flasher Circuit



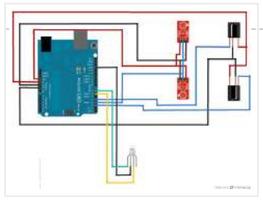
In this project, we will go over how to build an arduino LED flasher circuit. We will use a standard arduino board, doesn't matter which, and connect it so that...

497. 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 Hobye. Disney Research lab designed a novel way to detect touch....

498. 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...



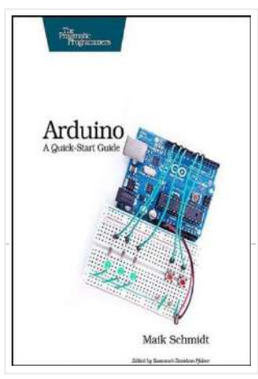
499. Arduino Solar Tracking Robot

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...

500. DIY Air Quality Sensing from HabitatMap and Sonoma Tech

High-precision air quality monitors are normally very expensive, but Tim Dye of Sonoma Technology is on a mission to change that. He's been working with Michael Heimbinder and habitatmap.org to create...

501. Arduino A Quick-Start Guide by Maik Schmidt E-Book



Book Description Arduino is an open-source platform that makes DIY electronics projects easier than ever. Readers with no electronics experience can create their first gadgets within a few minutes. This...

502. 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...

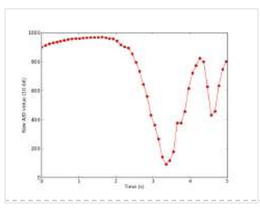
503. Arduino DDNS (Dynamic DNS) by Open-Electronics.org

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...

504. Wrap Beats – Capsense Arduino Instrument

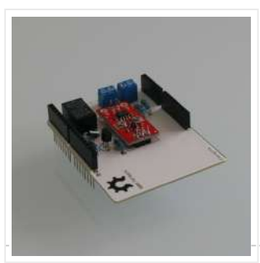
Wrap Beats is an instrument that lets you string together notes in order to create different melodies and visual patterns. I constructed it using the Capacitive sensing library for Arduino...

505. 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...

506. Energino: an Arduino-based energy consumption monitoring shield

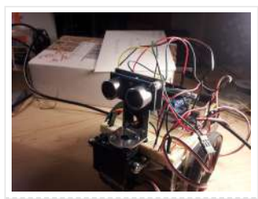


Energino is a plug-load meter that measures the amount of power consumed by whatever DC electrical appliance is plugged into its. It was originally designed to monitor the energy consumption...

507. 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...

508. 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...

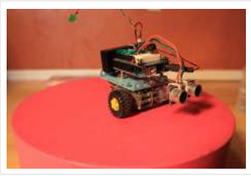
509. Fijibot

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...

510. 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...

511. Clusterbot

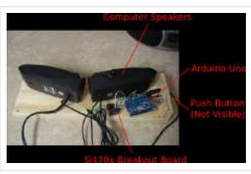


What is Clusterbot? He is a small, affordable, autonomous Arduino-powered robot. He can move, see, avoid obstacles, and makes a melodic chirping sound sometimes. Clusterbot was my first Arduino project,...

512. 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...

513. 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...

514. 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....

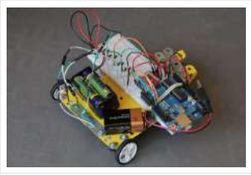
515. Box Scurity Package using Arduino

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...

516. 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...

517. Using the Sparkfun Motor Driver 1A Dual TB6612FNG using Arduino

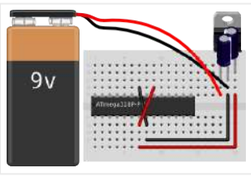


As a beginner myself, I struggled to find a one-stop set of instructions to get up and running with Sparkfun's Motor Driver 1A Dual TB6612FNG. This motor driver breakout board...

518. 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...

519. Honey, I Shrunk The Arduino

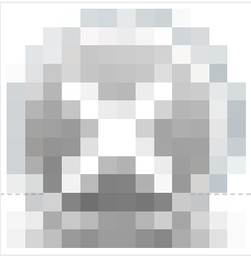


As you might be able to tell from recent posts, I've been doing quite a bit of work with an Arduino. I've now got at least one project that I'd...

520. 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:...

521. 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...

522. Arduino Cellular Shield Tutorial

The Arduino Cellular Shield allows you to make cellular telephone calls, and send text messages. The brains of this shield is the SM5100B which is a robust cellular module capable...

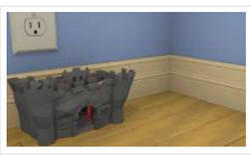
523. Tissue Box Guitar – Light Strings using Arduino

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...

524. Interfacing BMP180 temperature and pressure sensor on Arduino UNO

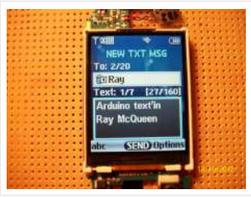
The BMP180 is a new generation digital barometric pressure and temperature sensor from Bosch Sensortec. In this tutorial, we will briefly review this device and describe how to interface it with an...

525. Making a Better Mouse Trap



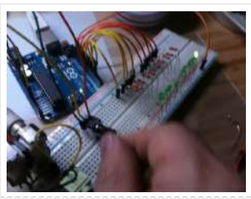
There are a lot of things this world needs at the moment. One of them is a better mouse trap. Mice are getting smarter every day and if we're not...

526. Arduino text'in



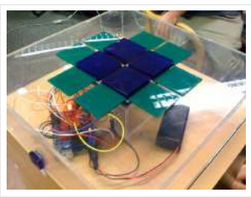
Arduino text'in. Key Features: 24 relays controlled by 4 I/O lines! Cell phone text using your Arduino. This project hacks a cell phone to text using normally open relays. After...

527. 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...

528. 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. ...

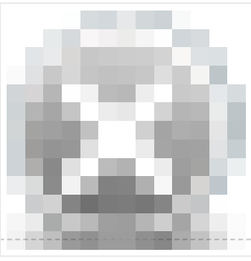
529. Buzz Wire Alarm Clock

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...

530. Making a Mayan Tzolkin Calendar

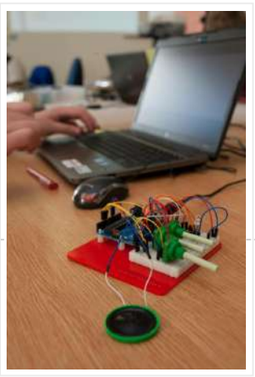
OK, I will admit that I am a little obsessed with things Mayan at the moment, which explains why I wanted to make a Mayan Tzolkin calendar. I modeled the...

531. 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...

532. Tinkering and coding with teens for a future of digital making



At the beginning of march Christopher Martin, researcher in applied computer, wrote us an email to tell us that he got involved in an ambitious plan taking place: 100 school pupils,...

533. OV7670 Camera Module DIY Guide

Here we introduced one OV7670 camera module just purchased online, including the communication of camera module and Arduino UNO, the using ways to take photo via camera module, and so...

534. 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...

535. 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...

536. 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...

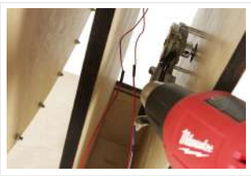
537. Build the Remote Control Bobble-head Bobbler! using arduino

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...

538. 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,...

539. Lunch Decider Wheel using arduino

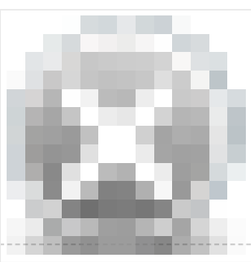


The lunch decider wheel is basically a carnival-style wheel that spins every day at 11:45am and selects what is for lunch. It came about on account of my perpetual indecision...

540. 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...

541. 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...

542. 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...

543. 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...

544. 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...

545. 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...

546. 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...

547. 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...

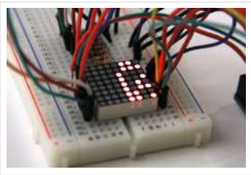
548. Hidden Wall Outlet Safe (w/Arduino Lock) using arduino

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...

549. DIY Arduino Motor Shield [for only $8!] (L298N 2x4A)

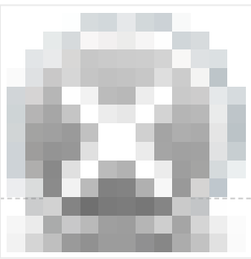
Today, I’m going to show you how to make an Arduino motor shield (driver) at a low cost. It works splendidly, its posses almost all the characteristics of the original Arduino...

550. Intermediate Arduino: Inputs and Outputs using arduino



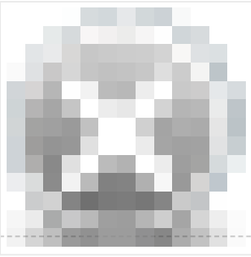
Continuing from my Intro to Arduino post, this Instructable will go over some slightly more advanced topics with Arduino, specifically relating to controlling and managing many inputs and outputs. The...

551. 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...

552. TV Remote Controlled Car

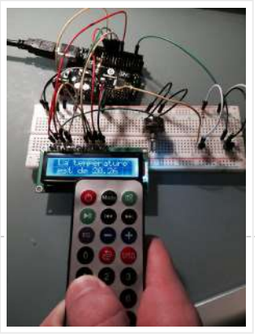


Nothing is worse than loosing the controller that came with your remote control car. Replace that sucker with an arduino and the one remote that always seems to be around,...

553. Arduino Solar Cell Tester

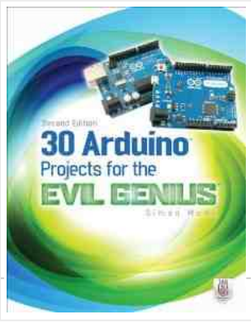
When I'm building Solar Shrubs and other solar-powered creations, I often scavenge cells from various off-the-shelf devices such as solar garden or security lights. But these cells are rarely labeled as to their voltage, current,...

554. 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...

555. 30 Arduino Projects for the Evil Genius: Second Edition by Simon Monk E-Book



Introduction The bestselling project-based book for Arduino'updated for Arduino Uno and Leonardo Covers the Arduino 1.0 development environment which includes new features, a new extension, toolbar icons, and modifications to...

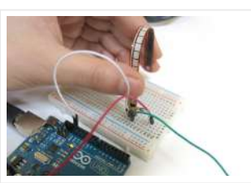
556. Open Bitcoin ATM using arduino

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...

557. 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...

558. Arduino, Sensors, and MIDI

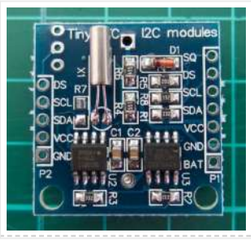


Now that you're up to speed on using Arduino's inputs and outputs, this Instructable will give you everything you need to get started using sensors to trigger MIDI notes from...

559. LittleBitty Joe using arduino

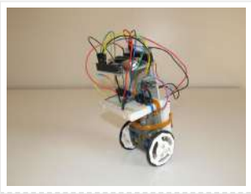
Say Hello to littleBitty Joe! Joe is my school's mascot! Speak to Joe and watch his eyebrows lift, whiskers vibrate, eyes illuminate, heart spin and hear him ROAR! Not only...

560. Using DS1307 and DS3231 real-time clock modules with Arduino



We keep getting requests on how to use DS1307 and DS3231 real-time clock modules with Arduino from various sources – so this is the first of a two part tutorial on...

561. 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...

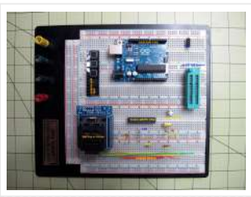
562. How to build an Arduino synth

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...

563. Smart Distance Measuring Tape v2

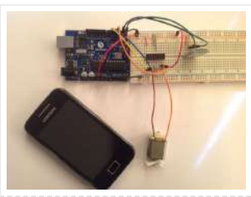
After posting up the v1 of my project many people requested an more detailed instructable. So i decided to start with a new one with a little upgrades to my...

564. 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)...

565. Arduino Control DC Motor via Bluetooth

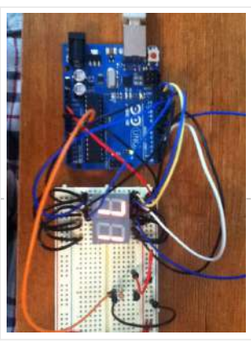


Hi guys, In this project we will control a DC motor with a smartphone via bluetooth. This project is great to learn more about: -DC motor -Interfacing Arduino with your...

566. 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...

567. 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...

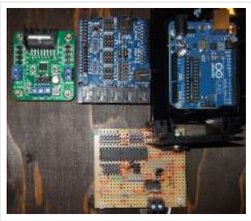
568. Wi-Fi Body Scale with Arduino Board

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...

569. 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...

570. Compact 3-in-1 Stripboard DIYduino with Integrated Sensor and L298N Motor Shield

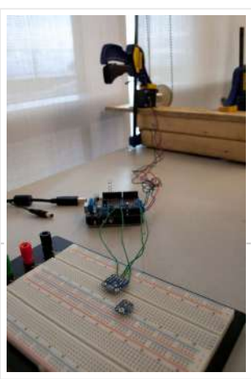


I am presenting a compact design of a stripboard Arduino board (DIYduino) that includes a 2A motor driver and has additionally the functionality of a sensor shield. The 2-channel version...

571. 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...

572. A solar tracking automatic motorized window blind retrofit using Arduino

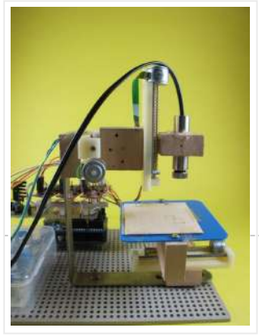


Buildings account for 20-40% of total energy use in developed countries. Window shades (or blinds) can help to reduce building energy use and improve visual comfort (i.e., reducing glare and...

573. 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...

574. 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...

575. 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...

576. 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...

577. 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/...

578. 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. ....

579. 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...

580. Aussie Shield

Aussie Shield description: The Aussie Shield is the shield that sits "down under". It is compatible with the Arduino Uno, Duemilanove, and Mega boards (and other compatible boards). The shield...

581. Reflow Oven Controller Shield

Reflow Oven Controller Shield description: Controls soldering reflow ovens or other temperature-controlled systems using a PID loop. Provides an accurate thermocouple sensor interface using a MAX31855KASA+ for real time temperature...

582. 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...

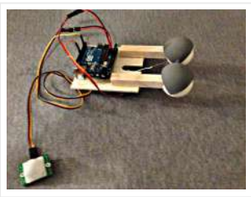
583. [Arduino] Linefollower with photoresistors

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...

584. Turn-Taking Device

Conversation analysts consider turns to be the most basic unit of conversation. As you would imagine, the intricacies of turn-taking have been well documented by researchers, and this process always...

585. New animatronic Eyes: Rock On!

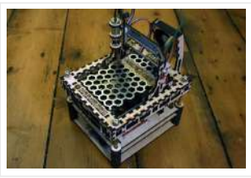


Someone had seen Peter Penguin or my Instructables on Animatronic Penguin Torso or Animatronic Eyes, and was working on a sculpture. He wanted to animate the sculpture when someone walked...

586. Randomized Arduino Drum Machine

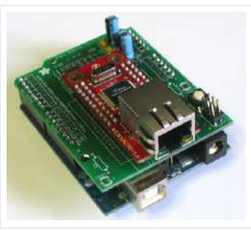
I like drum machines. However they are not always the easiest to build. I wanted one that is: A. Simple, Yet Powerful-If it uses lots of components then it is...

587. A tiny laser cutter using Arduino



Step 1: To Begin The basis for Groover's axis was the two mini stepper motors from the DVD-RW drives. The motors drive the DVD head mechanism which either moved the...

588. Ethernet Shield

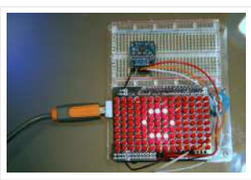


Ethernet Shield description: The Arduino Ethernet Shield allows an Arduino board to connect to the internet. It is based on the Wiznet W5100 ethernet chip. The Wiznet W5100 provides a...

589. 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...

590. 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...

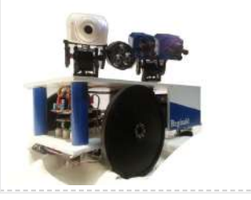
591. Arduino Etch-A-Sketch Clock

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...

592. 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...

593. 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...

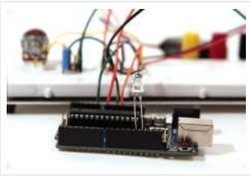
594. Dottie the Flip Dot Clock

How Dottie Was Made My trusty Arduino (it's red, a clone from Sparkfun, and it was on sale for $10) begins this journey to reverse-engineer a flip-dot board. I figure...

595. Arduino Ethernet Shield

Overview The Arduino Ethernet Shield connects your Arduino to the internet in mere minutes. Just plug this module onto your Arduino board, connect it to your network with an RJ45...

596. Beginner Arduino

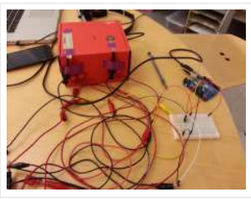


The Arduino is a pocket-sized computer (also called a "microcontroller") that you can program and use to control circuits. It interacts with the outside word through sensors, leds, motors, speakers.....

597. 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...

598. 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...

599. 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,...

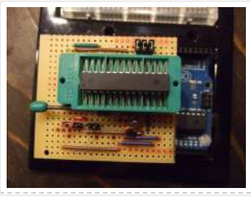
600. LED Super Mario Piranha Plant using an Arduino

We are going to make an Arduino control LED Piranha Plant :] Step 1: What you'll need Arduino Uno 9 Resisters 9 LEDs – Red, Yellow, Orange is best since...

601. Arduino video Tutorial more Reliable Forever

Arduino Tutorial #1 – Getting Started and Connected! In this video I cover the following: * What is Arduino? * What is a sketch? * What is the Arduino (software)...

602. 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...

603. Arduino-based inductance meter

I've just finished a little Arduino project. It's a shield for the Arduino Uno that lets you measure inductance. This is a functionality that I found missing in just about...

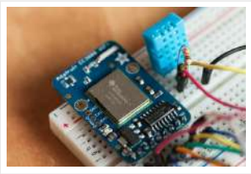
604. Sugarcube MIDI Controller

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...

605. 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...

606. Make a WiFi Weather Station With Arduino



As open-source hardware users and makers, we love playing with new chips, boards and tools. And there is one chip which is quite popular these days: the CC3000 WiFi chip...

607. 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...

608. 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....

609. Let's explore Arduino Yún's unique features – Hardware review

The Yún is unique in the Arduino lineup, as it has a lightweight Linux distribution to complement the traditional microcontroller interface. It also has WiFi and Ethernet connections on board,...

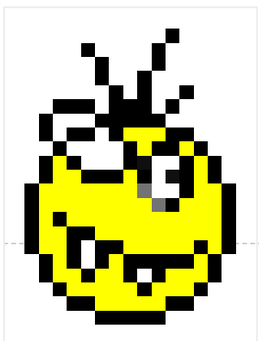
610. Heat-Seeking Desk Fan (using Arduino)

Summary: The following is a step by step guide on how to make a Heat-Seeking Desk Fan from an Arduino microcontroller, a computer fan, a servo, and an infrared temperature sensor....

611. 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...

612. Overclocking Arduino with liquid nitrogen cooling

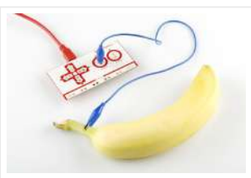


Before I start I guess I must answer 2 questions which would be asked inevitably: 1) Why? Because I can. To learn how electronics behave at cryogenic temperatures. And just...

613. 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...

614. Microcontrollers: The Basics



Different kinds of computers are designed for different purposes. The computer at the heart of your laptop is optimized for different puprposes than the one in your phone or the...

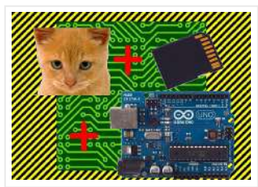
615. Arduino Robot V2 (Fast) Also Voice Controlled

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....

616. Programming an ATtiny w/ Arduino 1.0

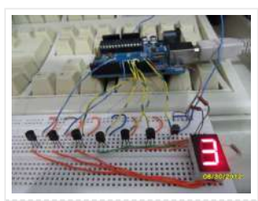
This tutorial shows you how to program an ATtiny45, ATtiny85, ATtiny44 or ATtiny84 microcontroller using the Arduino software. These are small, cheap ($2-3) microcontrollers that are convenient for running simple...

617. 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...

618. 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...

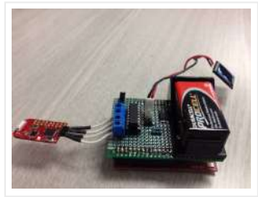
619. Printer to vinyl cutter hack

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...

620. 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...

621. 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,...

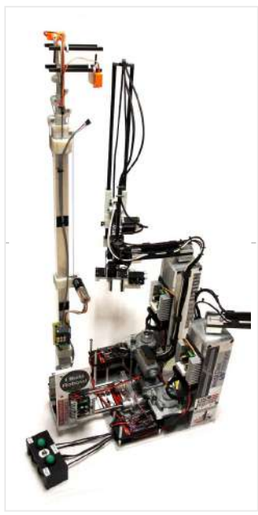
622. Arduino Vocal Effects Box

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...

623. 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...

624. 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...

625. 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...

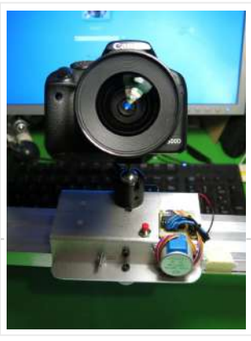
626. Self-Balancing Robot

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...

627. 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...

628. 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...

629. 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...

630. 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 - ...

631. 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...

632. Creative diorama lighting with the Arduino and TLC5940

I became interested in model railroading a few years ago. It's a hobby that requires skills in precision painting, model building, scenery design, wood working, electrical engineering and about a...

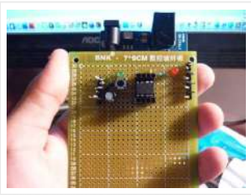
633. Intuitive Vibrotactile Feedback Educational Feedback Devices

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...

634. 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...

635. How to make and use the arduino as an Isp 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...

636. 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...

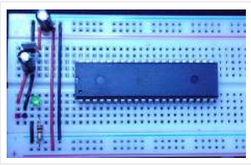
637. Plush toy, singing with Mommy's voice

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...

638. 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...

639. 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...

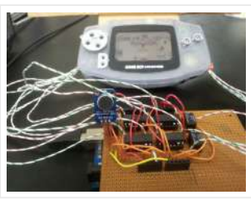
640. Head Mouse – Game controller or disability aid using Arduino

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...

641. 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...

642. 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,...

643. 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...

644. 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...

645. 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...

646. 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...

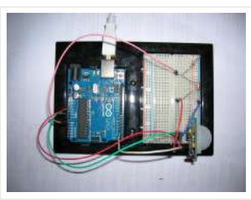
647. Smartphone controlled Arduino tank using Annikken Andee

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...

648. Bitcoin Price Ticker (almost) from scratch using Arduino as ISP

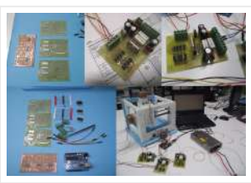
Hello everyone! I decided to create this tutorial on how to make a Bitcoin Price Ticker. Well, this is only a prototype and I will make a smaller edition with...

649. Passive Sensors – Detecting Light and Motion



Equipment: Arduino UNO microcomputer, PC with Arduino IDE installed, and a USB cable. CdS PhotoSensitive Resistor(s), 10K Ohm Resistor, and Parallax PIR Motion Sensor Passive sensors detect some physical...

650. 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...

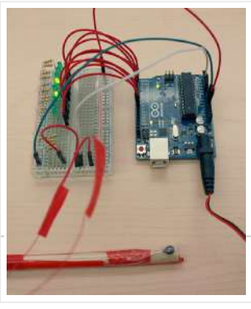
651. Tracking Cat Eyes via Kinect using Arduino

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...

652. DIY Lithium Battery Charger Shield for Arduino

In this project, we are building a programmable single/multi cell lithium battery charger shield for Arduino. The shield provides LCD and button interface which let the user set the battery...

653. A cicada warning system with Arduino

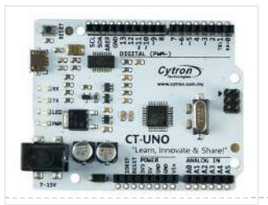


This spring, patches of the East Coast will turn buzzy and crunchy because of ... bugs. Periodical cicadas (or Magicicadas) usually live underground but after 13 or 17 years, they emerge...

654. Planterbot – The Plant Monitoring Robot

Hello everyone ! Please vote for me in the tech contest! In this instructable I am collaborating with Akin Yildiz an instructables author that creates instructables that help plants grow...

655. Introducing CT-UNO, Cytron version of Arduino UNO



Yes, this is Cytron version of Arduino UNO, we called it CT-UNO!!! Since 3 years ago, we started using Arduino and today we use a lot of Arduinos, particularly Arduino...

656. 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...

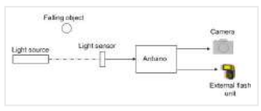
657. The Creepy Doll using Arduino

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?...

658. Beat Feet: set your beats and effects with gestures using Arduino

One of the teams participating to the MIT Media Labs Design Innovation workshop at PESIT Bangalore last January built something called Beat Feet using Arduino Uno: We designed a system...

659. Capture the image of a falling object

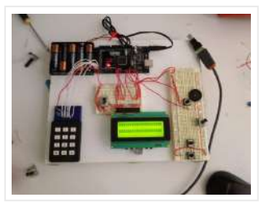


The aim of this project is to create a setup to capture the image of a falling object or any object in motion at a precise time using a DSLR...

660. 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...

661. 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...

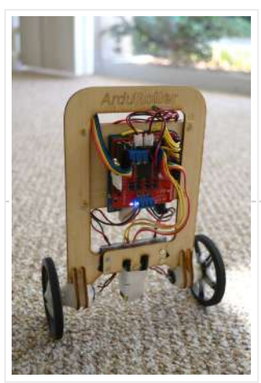
662. Make your pet dishes tweet

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...

663. AlarmingTweet

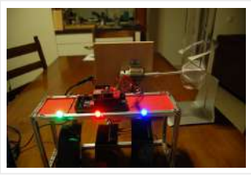
This project will add tweeting capabilities to the GE 45142 Choice-Alert Wireless Control Center Alarm system. The alarm system allows you to connect up to 16 different sensors across 4...

664. ArduRoller balance bot



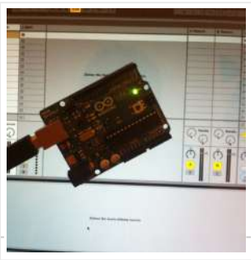
Caveat Emptor: (I don't want to put you off building one but I also don't want you to be disappointed.) This Instructable is now 2 years old. Many of the...

665. 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...

666. 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...

667. Discover the MakerFaire Rome Ambassador kit with an Arduino Uno limited edition

MakerFaire Rome, for the first time gathering makers from all over Europe, is coming up and the clock is ticking while the Call for Makers closes next 2nd of June....

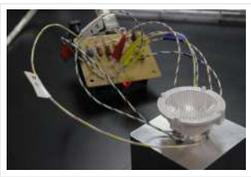
668. Diy Xbox wireless controller adapter for Pc

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*******...

669. Make a digital “meow” from analog clock using arduino

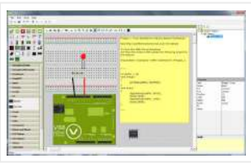
Is your analog clock just not doing enough stuff? Want to do digital things with an analog clock? This tutorial will show you how to make a Kit Cat Clock...

670. Voice Activated LED Lighting with Arduino



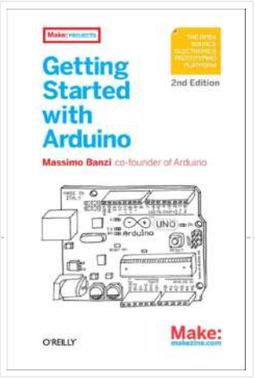
This project is an extension to the Speech Recognition with Arduino by leandro4b (http://www.instructables.com/id/Speech-Recognition...). However, instead of using 3 separate colored LEDs, I used a multicolor 4-channel RGBW LED Emitter....

671. Arduino Simulator



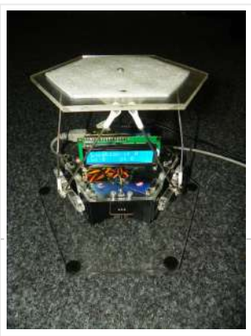
Here is the list of our top 5 arduino simulators. [dropcap color="red" font="arial" fontsize="72px;"]1[/dropcap] Virtual Breadboard for Arduino: Launched in 2005, the Arduino open hardware and software platform has grown...

672. Getting Started with Arduino by Massimo Banzi E-Book



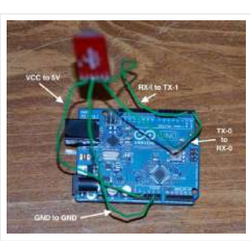
Book Description Arduino is the open-source electronics prototyping platform that’s taken the design and hobbyist world by storm. This thorough introduction, updated for Arduino 1.0, gives you lots of ideas...

673. 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...

674. Control Keyboard & Mouse Android app via Arduino

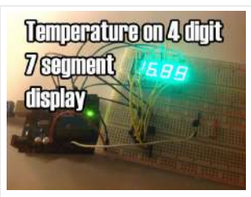


This instructable will show you how to control your computer’s keyboard and mouse with an Android app via bluetooth to an Arduino BACKGROUND Ever wanted to control your computer’s mouse/keyboard...

675. Blind Maze Navigation using 2-DOF Haptic Joystick

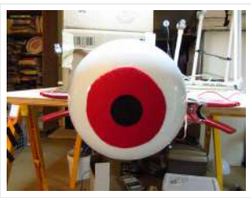
The domain of haptics has immense potential as a technology to assist visually-impaired individuals with their navigation of the physical world. In this project, we sought to develop a 2-DOF...

676. 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...

677. 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...

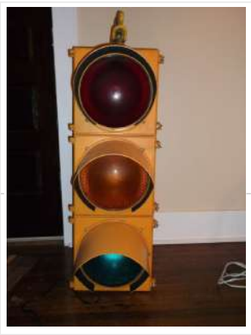
678. Arduino or Pi? You Choose

The Raspberry Pi is much more powerful than an Arduino but it has a few limitations of its own. Its I/O is much more limited, it can't use common Arduino...

679. 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...

680. 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? ...

681. 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...

682. Fab Lab Barcelona SuperNode

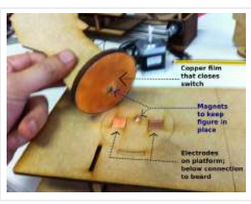
[assigment] Add an output device to a microcontroller board and program it to do something. Class syllabus::

http://academy.cba.mit.edu/classes/output_devices/index.html [what i learned /am learning] _ Relearned Arduino installation. _ Work with...

683. 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...

684. Retablillo de las Maravillas v1.0

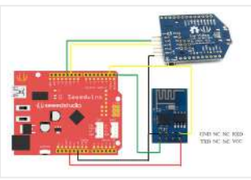


4./ Interactivity & electronics 4.1/ Switches / characters 4.2/ Screen / interface 4.3/ Motor controller 4.4/ I/O controller & interface [4./ electronics] [4.1/ switches / characters] The characters on top...

685. Desktop Fist Bumper using arudino

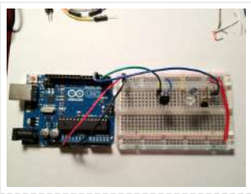
This simple device sits on your desk at work, ready to give you fist bumps throughout the day as you need them. A 3D printed “fist” is moved by a...

686. 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...

687. $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...

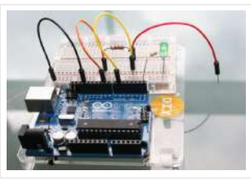
688. Stereo Audio with an Arduino

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...

689. 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...

690. 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...

691. Arduino Seven Segment Display Tutorial

How many TV shows and movies have some mysterious device counting down to zero those displays are 7 segment displays.With the 7 segment displays you can display any number or...

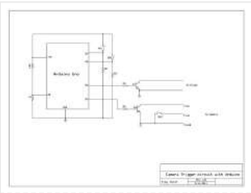
692. DIY FPV RC Tank V2 [2km RANGE upgrade!] using Arduino

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...

693. 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...

694. 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...

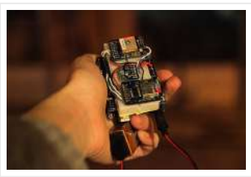
695. LCD Word Clock using Arduino

Introduction: This Instructable is about making a 16 character by 2 line LCD Word Clock with DST switch. The pictures show how some of the times will read out. I...

696. Arduino Video Tutorial Series(Basic to Advance)

Arduino Video Tutorial #1(Getting Started and basic Connection) Contents: What is Arduino? What is a sketch? What is the Arduino (software) IDE (interactive development environment) arduino-1.0.1 Arduino philosophy We take...

697. Darkness Map Data Collection Device

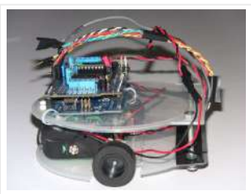


The Darkness Map encompasses both data collection and visualization of nighttime light levels. You can add to the map by downloading the app for iPhone or Android, but you can...

698. 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...

699. 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...

700. 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...

701. 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...

702. 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...

703. 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...

704. 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...

705. 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...

706. 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...

707. Aergia: Android controlled TV Remote(with Speech Recognition) using Arduino

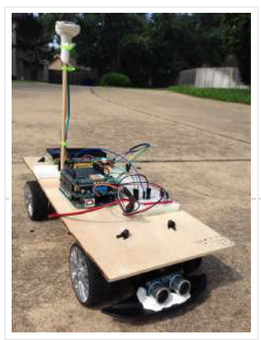
Have you ever faced this situation while sitting on your favorite spot on the couch or recliner, comfortably watching your favorite TV program? You're snugly tucked

under the blanket, the...

708. Bluetooth RGB Shelf Lighting using Arduino

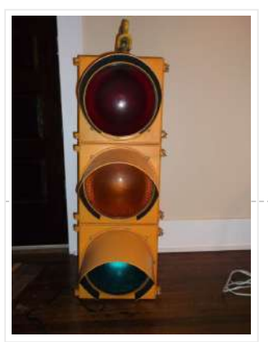
Being the giant fan of LED's that I am i'm always trying to come up with new ways I can put them throughout my house. Today i'm going to show...

709. 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...

710. 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? ...

711. 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...

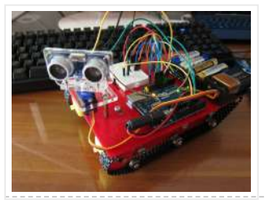
712. Pixel Drop Ceiling using Arduino

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...

713. Create an internet controlled robot using Livebots

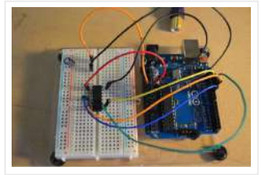
Here you will learn how to create an internet controlled robot or other installation using Livebots. Livebots is a project I'm working on which consists of an easy to use website...

714. Smart Tank Chassis with Ultrasonic Sensor using Arduino



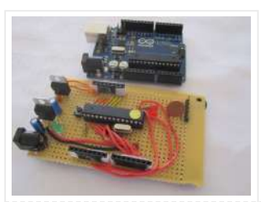
In the previous projects I tried different ways to control the smart tank manually. But how about if the tank makes its own decision and control itself? It should be...

715. 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...

716. 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....

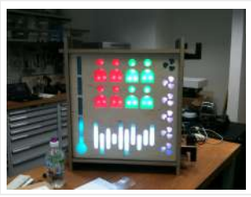
717. Polydexter: Arduino Robotic Translation Arm

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...

718. 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…

719. 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…

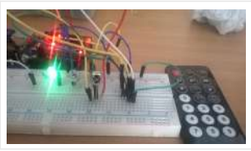
720. Make Voice Call using Arduino

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…

721. 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…

722. How to use the IR library with an attiny using Arduino

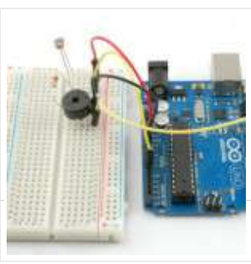


This Instructable will tell you how to use the IR (infrared) library on an Attiny. I will be using an Attiny85 with an Arduino Uno. I won't cover how to…

723. 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…

724. Arduino Tutorial (Photocell)



This tutorial shows how to use the Arduino Uno and a photo resistor (photocell) to control a LED light and a servo motor. Below you can find the links to…

725. 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…

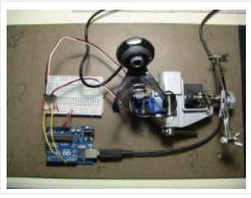
726. ARDUINO WIRELESS HOME SECURITY SYSTEM

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…

727. 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…

728. 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…

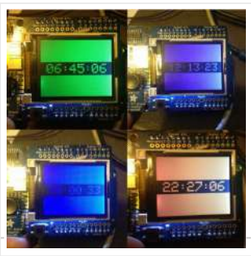
729. DIY Solar Tracker using Arduino

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…

730. 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...

731. Arduino TFT Color Clock

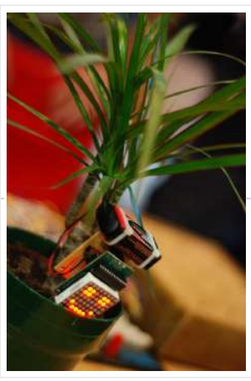


You may be familiar with a website in the UK called Colour Clock (http://thecolourclock.co.uk/) which converts the time into a hex value and then uses that value to update the...

732. Rock Paper Scissors Spock Lizard using Arduino

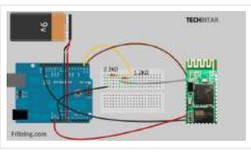
Introduction: Okay, I cheated. Any similarities between previous Instructables uploaded by me and the graphics, pictures, text and / or programming code is purely intentional. It certainly made putting this...

733. 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...

734. 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...

735. 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...

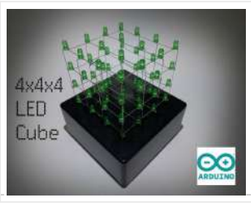
736. Led Star with Arduino and WS2811 Neopixels

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...

737. 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...

738. 4x4x4 LED Cube (Arduino Uno)



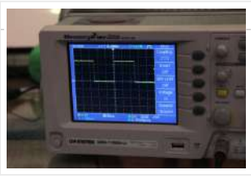
In this tutorial I’ll show you how to make a 4x4x4 LED cube for around $15.00. The cube has 64 green LEDs which make up it’s 4 layers(positives) and 16...

739. 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...

740. 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...



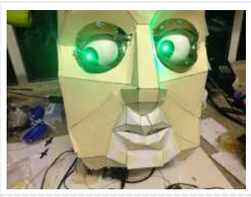
741. LED Head Arduino TED

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...

742. Access control with Arduino plus Keypad 4×4 plus Servo

Hi guys, I bring a new instructable for arduino, the control access with password, 4×4 keypad and a servo. We will use the Password and Keypad librarie for arduino, besides...

743. 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,...

744. Measure RPM – DIY portable digital tachometer

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...

745. 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...

746. DUO Light Computer

An inexpensive single board computer which connects to a composite video monitor, keyboard, and SD card. I created the DUO Light as a low cost platform for hobbyists to create...

747. 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?...

748. 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...

749. 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...

750. 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...

751. 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....

752. 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...

753. 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...

754. 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...

755. 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...

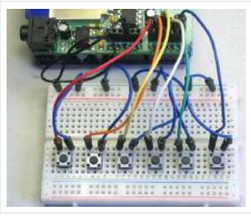
756. Fifty Dollar Box Bot

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,...

757. 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...

758. 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....

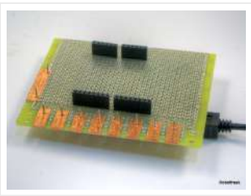
759. Monkey Automatons!

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...

760. SOLAR POWERED ARDUINO WEATHER STATION

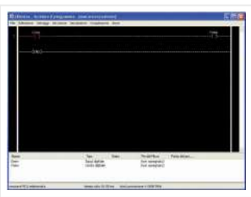
In country like India most of the people are dependent on agriculture.For effective planning in agriculture weather forecast is of utmost importance.So farmers are always interested in the Weather Forecasts.As...

761. 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...

762. Arduino as a programmable logic controller (PLC)



Today we’ll explain how to exploit the potential of Arduino as a programmable logic controller, connecting it to appropriate interfaces for I/O. The PLC (Programmable Logic Controller) has been and...

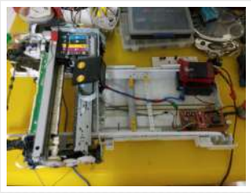
763. Model Police Car using an Arduino

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...

764. Arduino Timer and Interrupt Tutorial

Arduino Timer and Interrupt Tutorial This tutorial shows the use of timers and interrupts for Arduino boards. As Arduino programmer you have probably used timers and interrupts without even knowing...

765. 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...

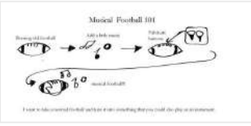
766. Temperature controlled reflow oven build

Reflow Oven Build We have successfully managed to build a temperature controlled reflow oven using an Arduino based PID controller and a standard toaster oven from Robert Dyas! This is...

767. 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...

768. The Musical FootBall

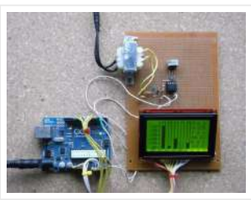


This project is to construct a musical football. The reason for my project is that I was inspired by a little kid with austim who love sports and music. So...

769. 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...

770. Power Quality Meter 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 –...

771. 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...

772. 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...

773. 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...

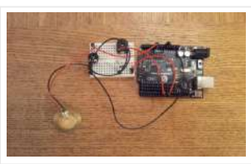
774. Arduino Bluetooth Serial Connections

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...

775. 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....

776. 'Knock Back' – A Knock Echoing Arduino

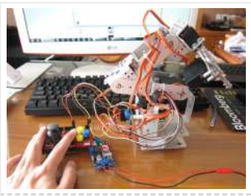


This is a simple Arduino sketch that was originally designed to experiment with arrays and the built-in timing functionality. I based it on the tutorial sample code http://www.arduino.cc/en/Tutorial/Knock The system consists...

777. 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...

778. My Ninth Project: Robot Arm with Joystick Shield using Arduino

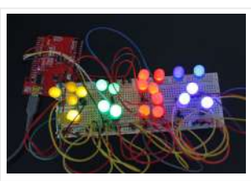


Although it is great controlling the robot arm with computer or mobile phone, I think using joystick is also cool, so I've bought a joystick shield and make a new...

779. 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...

780. 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...

781. 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...

782. 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...

783. 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...

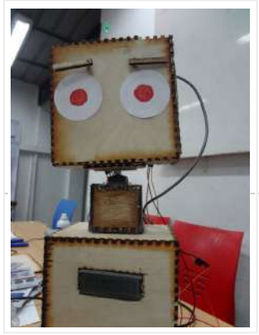
784. 8×8 LED Matrix Animations using an Arduino

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...

785. 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...

786. [DIY a Spelling Game with an Interactive Robot using Arduino]



Did you hear before about Social Robot? Did you you see the Pepper Robot or Jibo robot? These kinds of robots that can hear you, understand you and make a...

787. [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...

788. [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 microcrontroller on board. I designed the...

789. [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?...

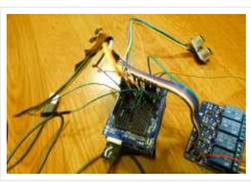
790. [Convert a toy piano to work as a midi device and use it with Synthesia]

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...

791. [Tankbot – Internet Controlled Tank Robot using Arduino]

Do you remember a game called Tank Wars? This is an attempt to make a physical version of that classic arcade game. You, the player drive an Arduino powered tank and...

792. [Garage Genie – Parking & Remote Control using Arduino]



The Garage Genie is a car automation Arduino gadget. Click on the two images above to see the animated explanation. It aims to do a few things: 1. The "traffic...

793. [5×5 LED Cube using Arduino Uno]

This is a step by step explanation of how to build a 5×5 LED cube using an arduino. I did this project for my undergraduate electronics class and it took...

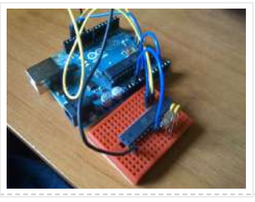
794. [Big Spectrum Analyzer with Arduino]

Let's put together a pixel strip with an HL1606, an Arduino UNO and the Spectrum Shield to build a seven bands "large" Spectrum Analyzer of simple construction. The Strip used...

795. [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: ...

796. [Burning the Bootloader on ATMega328 using Arduino UNO as ISP]

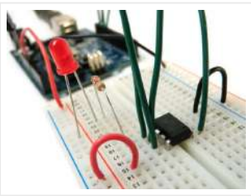


I had one remote controlled project that needed an Arduino running 24/7 but I didn't want to leave my $32 Arduino UNO, so I decided to buy some pieces and...

797. 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...

798. Program an ATtiny with Arduino



Follows are directions for programming the ATtiny microcontrollers using the Arduino IDE. In plain English, this is how to program 8-pin Atmel chips as you would normally an Arduino. This...

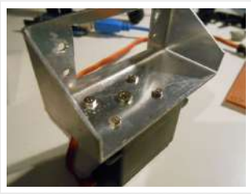
799. Jeopardy Ring-in Buttons with Built-in Rules using Arduino

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...

800. WIN an Arduino Uno R3 Development Board – Like to Win!

In this project, we are building a useful board which should take place on your bench. It is an adjustable electrical load which can sink up to 5A @ 30W...

801. Pan & Tilt Servo bracket controlled by Arduino

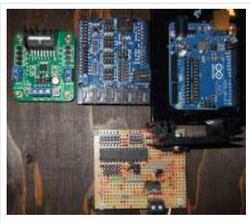


Hi, in this instructable i am showing you how to build a very nice and very sturdy pan & tilt turret for your rc / arduino projects. (Please don`t judge...

802. 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...

803. 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...

804. 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...

805. 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...

806. 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...

807. 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...

808. 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...

809. 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...

810. Simple Wireless Sensor Network for Temperature Sensing

This is one small project which I had done with Abhinav Gupta some months back. In this experiment, I graduate from using simple RF communication to Xbee! Whoa! Ok, so...

811. 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...

812. 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....

813. Stroboscope

Introduction For a Nottingham Hackspace project, I was asked if I could measure the RPM of a motor. "Sure!", I said. What was really needed was quickly bodging together a...

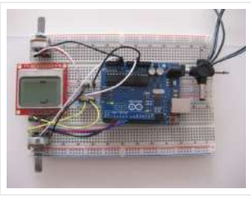
814. Garage Door Opener with iphone using Arduino

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.-)...

815. 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...

816. 2-Player Pong Game with Arduino Uno

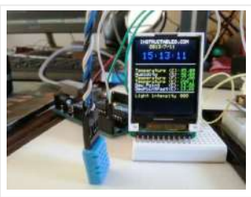


Classical Pong game implemented on an Arduino Uno using a PCD8544 LCD screen which is better known as the Nokia 5110 screen. Player bars are controlled by a potentiometer for...

817. James – Your first Arduino Robot

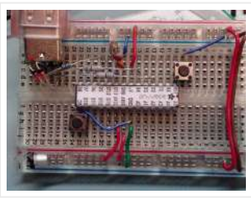
Edit: Thank you so much everyone for voting for James in the Toy Contest! He got first place and I won a $500 Shapeways voucher! Expect to see more robot...

818. 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...

819. 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...

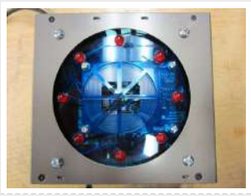
820. Resistor Color Code Calculator with Arduino

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...

821. 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...

822. The Arduino Internet Gizmo

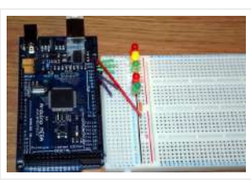


The Arduino Internet Gizmo is a USB, Arduino, and RFID device for web surfing. The gizmo works by placing an RFID tag on the top of the gizmo. The gizmo...

823. Arduino Motors and Transistors

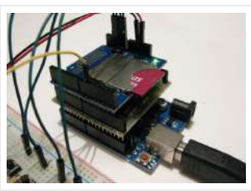
This week, we'll finally be using the Arduino to control some motors! First up, we'll control a standard DC motor running off a 9V battery with the help of an...

824. 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...

825. Arduino SD Cards and Datalogging

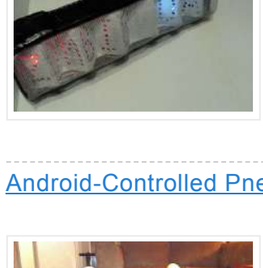


This is my first in a series of more advanced Arduino tutorials. [box type="note" color=" #202020 " bg="#ffbb00 " font="verdana" fontsize="14" radius="20 " border="#000" float="right" head="Attributes"]Thanks to Jeremy , for...

826. Robopod the Arduino Powered Robot

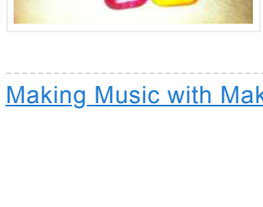
Robopod is a simple arduino robot that uses antennas to detect obstacles. Robopod's motors are controlled by an H bridge and powered by a nine volt battery. Robopods circuit...

827. TSA Zombie Scanner Security Wand



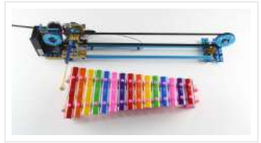
Not even Zombies are exempt from a good pat-down. Scanner security wands are used at the most exclusive nightclubs and venues. Does not detect metal to indicate a presence of...

828. 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...

829. 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…

830. 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…

831. 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: Fritzing Code Written using…

832. 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…

833. 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…

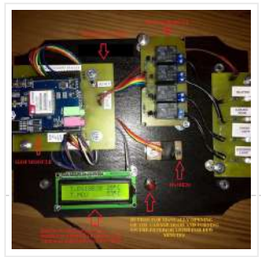
834. Arduino Control via a Web Service with Teleduino

Convert your Arduino into a sofisticated web control platform using Teleduino. Teleduino is both a product and a service. Once the Teleduino sketch has been loaded on your Arduino (the…

835. Hexapoduino: tiny hexapod 3D printed, Arduino controlled

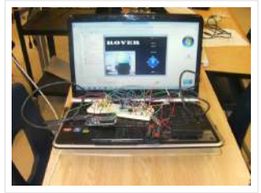
A few time ago, i found out a 3d printed Micro-Hexapod on Thingiverse. I started to work on it in the following ways: – create new accessories/components 3D printable – explore…

836. 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…

837. 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…

838. 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…

839. 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…

840. Arduino PIR Motion Sensor

This Instructable is about how to create an Arduino PIR motion sensor for your room or office, using parts available from your local Radio Shack! Whether you're looking for a...

841. 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...

842. 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...

843. ArduinoPhone

Combining Arduino and other shield modules, we make a mobile phone named Arduino Phone. Meanwhile, we printed a shell for it with the 3D printer. Although it's not such fine...

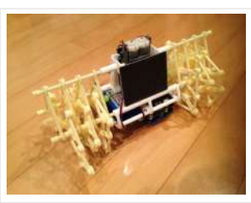
844. Lite Brite LED clock using an Arduino

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...

845. Arduino Pong Clock

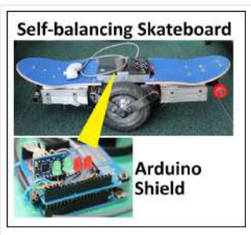
This clock uses the classic video game Pong to tell the time. The 2 players automatically win and lose so their scores show the hours and minutes. It's not too hard to...

846. 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...

847. Self-balancing skateboard/segw*y project Arduino Shield

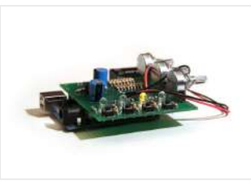


General purpose Arduino shield for self-balancing machines. Why did I make it? I previously made an Instructable in 2010 on how to build a self-balancing skateboard. http://www.instructables.com/id/Easy-build-self-balancing-skateboardrobotsegway-/ There are >500...

848. IOS-Controlled Arduino waveform generatora

This waveform generator is based on the work by Amanda Ghassaei. Waveform generators (or function generators) are used for testing and debugging circuits. e.g. frequency response of op amp or...

849. Arduino Waveform Generator Shield

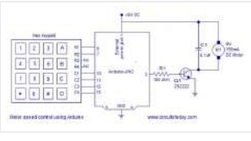


Waveform generators (also called function generators) are useful for testing and debugging circuits. They can be used to test the frequency response of electronic components like op amps and sensors...

850. Bluetooth LE Go-Anywhere Sensor Pack

Introduction In recent years, portable sensor devices have gained a lot of popularity due to their ability to give you instant, accurate information about your local environment. Some of these...

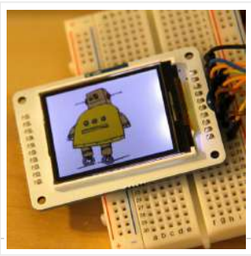
851. PWM motor speed control using Arduino



PWM or pulse width modulation is a very common method used for controlling the power across devices like

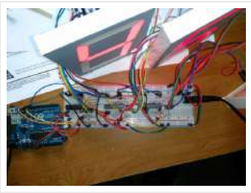
motor, light etc. In PWM method the power across the load is...

852. Your Image on an Arduino! – TFT LCD Screen Guide



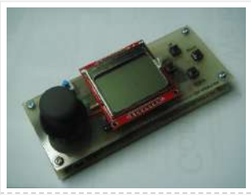
Have you ever heard of TFT LCD screens? They are great ways to display information from your Arduino, or display pictures. The Arduino team just released an official TFT LCD...

853. Multiplexing 7 Segment displays with Arduino and Shift Registers



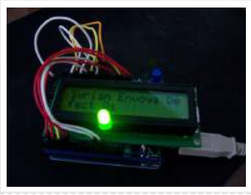
In this instructable, I will be teaching the basics of multiplexing 7 segment displays using an Arduino and a couple of shift registers. This project is well suited for displaying...

854. 2048 on Arduino



I had think of making a game on Arduino quite a while. An idea strikes to my mind while I was playing a quite popular game which is available on...

855. An Arduino RSS Feed Display

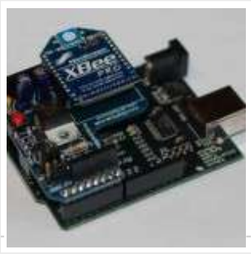


This Arduino project will display RSS feed headlines on an LCD via an Arduino and a USB cable. It works quite well, and lets you keep up with the world...

856. 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...

857. 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...

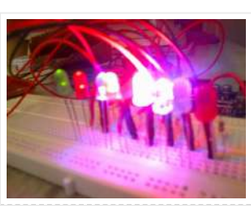
858. Super Simple Arduino Powered Roomba Scheduler

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...

859. 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...

860. How to control 8 leds using Arduino UNO



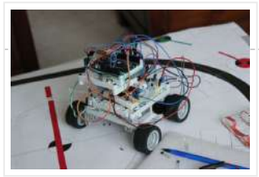
hey guys this is my first arduino project plz comment how u feel. Step 1: Things u need As this is easy project for beginner's so parts are also simple...

861. Digital/Analog Clock – Arduino + PaperCraft

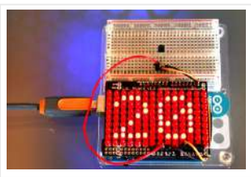
In this instructable we will be recreating a clock inspired by Alvin Aronson's original design. When I first saw this clock I was very impressed by how clean an elegant the...

862. 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...



863. An Arduino Thermometer with Digital Display

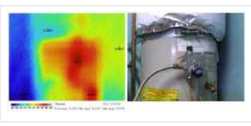


This is a project for Arduino to make a Thermometer with Digital Display, aimed at beginners. Arduino measures the voltage on a TMP36 Temperature sensor, converts the Voltage to Degrees...

864. 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...

865. 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...

866. 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...

867. 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...

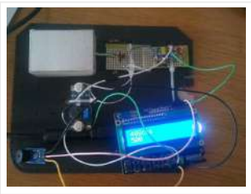
868. The open source hardware and software OLED Watch

Introduction It all started two years ago when I first found this thing called an Arduino. I had seen some projects online people had made with one, so I impulse...

869. Mr. Indecision – a small felt version of yourself that turns its head and looks at you using Arduino

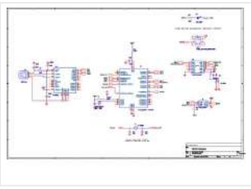
This is a tutorial on how to use 123D Catch to get a 3D scan of your whole body. Once you have the scan or "catch" the tutorial will take...

870. 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...

871. USB RF 433.92 MHz Transceiver module

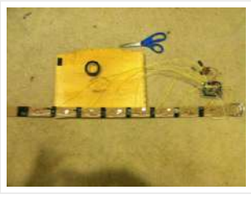


Over time I have tried to extend my home automation system and about a year ago I have bought an Current Cost energy monitor, this was after i have tried...

872. 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...

873. 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...

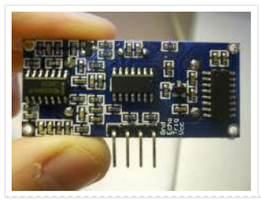
874. Arduino Liquid Crystal Displays

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...

875. 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...

876. 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...

877. 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...

878. 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...

879. 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...

880. An Arduino Based Laser Rangefinder

Here we have it – an affordable Open Source Laser RangeFinder – OSLRF-01 from www.lightware.co.za. You can order it fully assembled and working or just PCB and optics (all other...

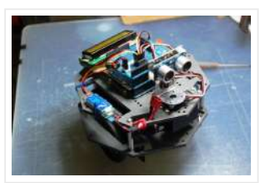
881. Mini invisible MIDI Harp

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...

882. Self Balancing Unicycle

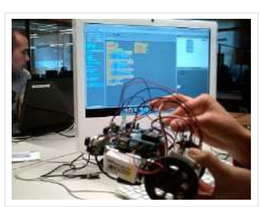
Following the popularity of our self balancing scooter and the SciChair we decided to try something a little edgier, the Self Balancing Unicycle. This project reuses a lot of stuff...

883. 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...

884. 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....

885. 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...

886. 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...

887. Raspberry Pi Alamode CNC Controller

This is my first attempt at an instructable. I hope it helps someone else. Switches and Lights and fans, oh my... I bought a CNC machine some time ago and...

888. 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...

889. 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...

890. 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...

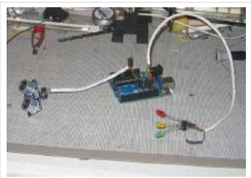
891. Pressure Activated Light-Up Umbrella using an Arduino

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...

892. 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...

893. 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...

894. A decorative LED frame

Here is a small personal project to brighten my home made from a cheap IKEA photo frame, and Arduino and a multicolor "NeoPixel" LEDs strip. The goal is simple: to...

895. 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...

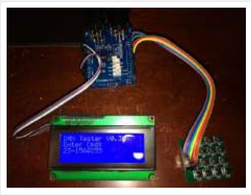
896. Visual Network Threat Level Indicator using Arduino

Network monitoring is very important in todays world. The internet is a scary place. People have taken steps to raise their awareness by installing Intrusion Detection Systems(IDS) such as SNORT....

897. Wireless nunchuk controlled animatronic doll using Arduino

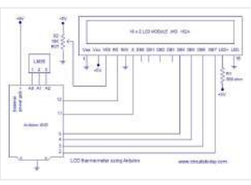
This instructable will attempt to show you how to make an animatronic doll controlled by a wireless nunchuk. This doll can only move its head though. I'm sure there are...

898. Arduino DMX Tester – Inexpensive Tester for Sending DMX-512



Hello All, I work part-time (more of a hobby) in the lighting industry and use DMX since it is the industry standard for communicating or controlling devices (lighting fixtures, controllers,...

899. Interfacing LCD to Arduino uno



LCD modules form a very important part in many arduino based embedded system designs. So the knowledge on interfacing LCD to arduino is very essential in designing embedded systems. This...

900. An Arduino powered, easily extendable GPS Datalogger

By coupling a standard NMEA GPS receiver and an Arduino board we created a super simple and effective Arduino GPS logger. This device allows you to trace the route taken...

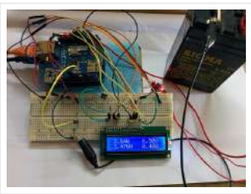
901. Android & Arduino Controlled Projector Screen

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...

902. 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....

903. Arduino Energy meter



I belong to a village of Odisha, India where frequent power cut is very common. It hampers the life of every one. During my childhood days continuing studies after dusk...

904. 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...

905. The useless but mazing QR-clock using Arduino

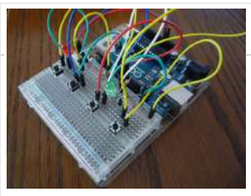
I got this idea for a while but I never had the chance to try it out. Friday, a workmate gave me a LCD shield for Arduino and I thought that was...

906. Building the YaNis EOS Controller using Arduino

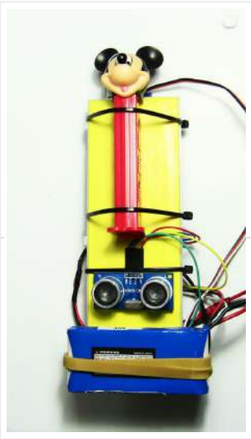
The YaNis EOS controller is a device that allows you to wirelessly control your Canon DSLR from your Android phone. What's really exciting here is that the Android interface allows...

907. 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...



908. 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...

909. Voice Activated Arduino (Bluetooth + Android)

Control your Arduino with voice commands using an Android smartphone! Before we make a voice activated home automation system, we must first learn the basic principles of the experiment. This...

910. 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...

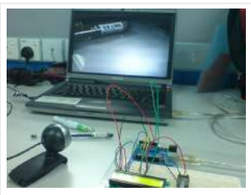
911. RC Paper Tank – Bring your 3D models to life

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...

912. GPS Distance Calculator (for golf)

This device was created for a final project for a class by a group of students at Indiana University. As sport fans, we thought it would be really useful to...

913. Barcode Reading using Roborealm Output on Arduino LCD

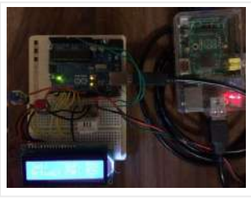


This Instructable shows how to create a Barcode Reader using only a webcam together with Roborealm and Arduino. The webcam used in this demonstration is the Logitech Quickcam and the...

914. A Small GPS Arduino Watch / Clock

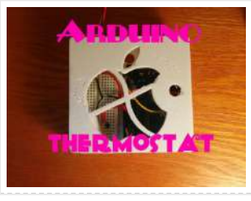
Another Arduino GPS Project – Mini GPS Device Garlow is a mini GPS Watch that is based on the Arduino Nano board. It's not really that "mini" compared to other...

915. Introducing Climaduino – The Arduino-Based Thermostat You Control From Your Phone!



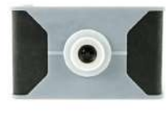
Not everyone lives somewhere with central air, or is willing to pay for a Nest or similar "smart" thermostat. The Climaduino is a DIY Arduino-based thermostat designed to control a...

916. Arduino Thermostat (Mechanical)



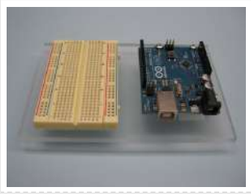
I am currently living in a college dorm. Like most dorms it's about the size of a tissue box but less comforting. Fortunately, my room has a heater/AC with four...

917. 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,...

918. 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...

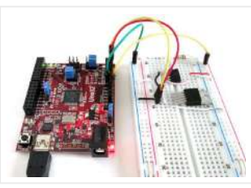
919. Mailbox Phone Alert

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...

920. 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...

921. chipKIT Tutorial 6: Inter-Integrated Circuit (I2C) communication



I2C or IIC (Inter-Integrated Circuit) is a simple bidirectional serial interface, which requires only 2 signal lines for data transfer. It was originally developed by Philips in 1980's to provide...

922. Arduino Camp 2012

Domenica 17 Giugno alle Officine Arduino una quarantina di persone hanno dimostrato la veridicita' dell'affermazione di S. Levy. Dall'anno scorso Arduino organizza in Italia l'Arduino Camp , un evento di...

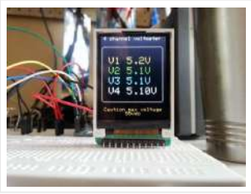
923. Best RGB LEDs for any project (WS2812)

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...

924. 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...

925. Make a Mini Arduino programmable 4 channel DC-DVM



This Instructable will teach you how to use the Arduino Analog ports. Digital Voltmeters (DVMs) are a special case of Analog to Digital converters- A/DCs.- they measure voltage – and...

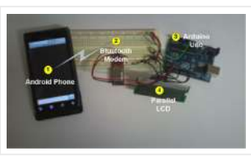
926. DIY Robotic Hand Controlled by a Glove and Arduino

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...

927. Fridge Door Detector Alarm

Has it ever happened to you to go to the fridge and discover that its door is slightly opened ... and probably most your food went to the trash .....

928. 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...

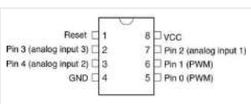
929. [Make another Arduino LCD shield]

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...

930. [Arduino Zero]

Arduino Zero Overview The Arduino Zero is a simple and powerful 32-bit extension of the platform established by Arduino UNO. The Zero board aims to provide creative individuals with the potential...

931. [Simplest and Cheapest Arduino]



Use a ATTiny85 (can be ATTiny45, ATTiny44) to make an Arduino just for US3.00 and name it as Tiny Arduino. Tiny Arduino have only eight pins as shown in figure...

932. [PWM generator and servo tester using ATtiny45]

Hello, in this project I want to show you how to build a PWM generator with a Attiny processor. It is very easy to build and a nice project for...

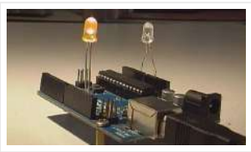
933. [Arduino 4wd robot with ping sensor “J-Bot”]

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...

934. [*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...

935. [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...

936. [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...

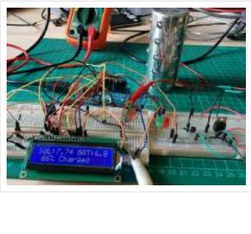
937. [Sleep n’ Tweet using an Arduino]

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...

938. [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...

939. [Arduino Solar Charge Controller (PWM)]

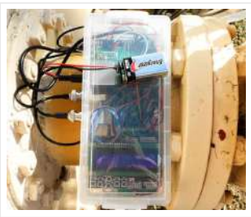


In my previous instructables I described the details of energy monitoring of a off grid solar system.I have also won the 123D circuits competition for that.You can see this ARDUINO...

940. [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...

941. ORP / pH / Temperature Data Logger

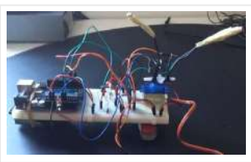


As a Water Quality professional working in the drinking water field, I know how important it is to accurately monitor the disinfectant levels in the drinking water that gets served...

942. Arduino BASIC Shield

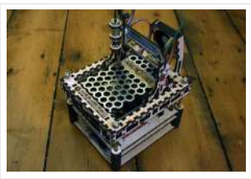
Hi all, this is my first instructable documenting the creation of my project, the Arduino UNO BASIC shield which turns the Arduino UNO into a computer running the BASIC programming...

943. 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...

944. The MicroSlice | A tiny Arduino laser cutter

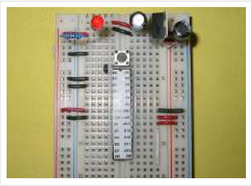


A few years ago I saw an Instructable where Groover had used a pair of DVD-RW drives to make a pocket laser engraver. Inspired by the idea, driven by the recent purchase of...

945. 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...

946. 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...

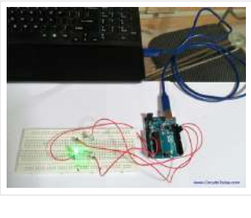
947. Timelapse Panning controller for GoPro Cameras

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...

948. 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...

949. Simple LED Projects using Arduino



This article is another step forward in learning more about Arduino. In our previous article, I have written in detail about blinking an LED using Arduino. We have demonstrated 5...

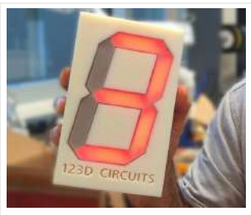
950. Phone Controlled Mood Lighting

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...

951. How to Make a Makeblock Music Robot with the Music Robot Kit（NEW）

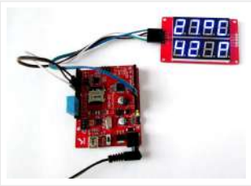
Makeblock is an aluminum extrusion based construction system that provides an integrated solution for aspects of mechanics, electronics and software design. With Makeblock you can make professional robots, toy machines...

952. Accelerometer Dice with 123D Circuits



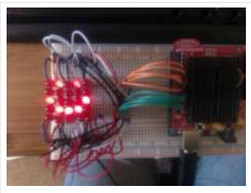
This is the project that got Autodesk's CEO Carl Bass a little extra attention from the TSA on his way to MakerFaire Tokyo. Here's an article about that... We made this as...

953. Step-by-step guide for making a very simple temperature and humidity meter



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...

954. 5X5 dot matrix on Arduino



With this you just type the text you want on your computer and your 5×5 dot matrix shows the message. Used: ~25 leds ~Arduino uno ~5x 100ohm resistor ~and a...

955. 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...

956. 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"...

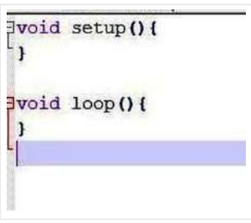
957. Blink LED with Arduino – say Hello World

When we learn a new programming language in computer science (say C, PHP or Java), we begin the learning curve with the classic "Hello World" program. We learn some essential...

958. Arduino PMW enabled high power shield or non-shield on the cheap

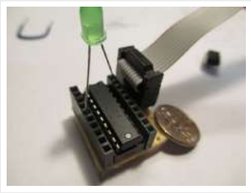
Micro controllers are great, but have you ever wanted to control something bigger then, lets say an LED? If you have, look no further (unless you want more then 0.6Amps...

959. 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....

960. The Idiot's Guide to Programming AVR's on the Cheap (with the Arduino IDE!)



Microcontrollers are, without a doubt, amazing little things. They are versatile, powerful, and extremely tiny. Unfortunately, the latter trait is also shared by both my wallet and my programming skills....

961. 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...

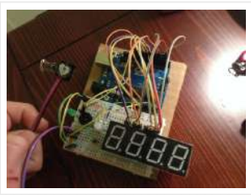
962. Laser Triggered Countdown

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...

963. Build your own Arduino Uno

I often use Arduino to test out my project prototype before complete it. Sometimes, I wanted to test more than one project at the same time. I would need more...

964. 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...

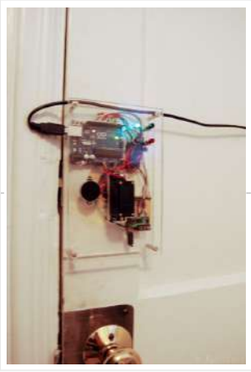
965. Introduction to Arduino

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...

966. 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...

967. Keyfob Deadbolt using an Arduino Board

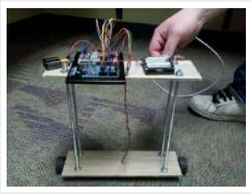


The key to my apartment never worked quite right because it is a copy of a copy of a copy. I am fairly certain that the dead bolt is original...

968. 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...

969. 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....

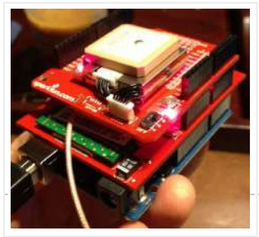
970. 48×8 SCROLLING MATRIX LED DISPLAY USING ARDUINO CONTROLLER

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...

971. Arduino – Tutorial Building A Drone With Webcam Remote Control From PC Through CSharp

YOU WILL NOT FIND OTHER ITEMS AS DETAILED IN WHOLE INTERNET In this article I provide a list of components and links of purchase to create your drone (quadricopter) remote-controlled from...

972. Real-Time Arduino GPS Tracker with iPhone app

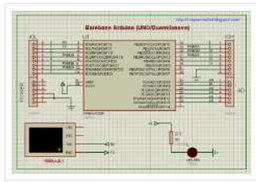


[INTRO] This past semester, I decided to build a GPS receiver with an iPhone app that tracks it for my semester project. Here is a step-by-step tutorial to show you...

973. Wii Nunchuck Arduino Tutorial

Why Wii Nunchuck Arduino? You can create and build endless electronics design and project with the powerful Arduino, for example a robot. By attaching Wii Nunchuck Arduino, you create the...

974. Arduino simulator using Proteus as project simulation

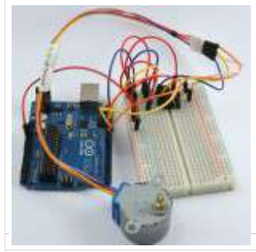


Barebone Arduino in Proteus I use Proteus design a Barebone Arduino: ▲ Barebone Arduino The Barebone Arduino pin completely modeled on the Arduino UNO and Duemilanove: Download Sample ardduino Simulation...

975. Spectrum Analyzer, Arduino project with FFT algorithm

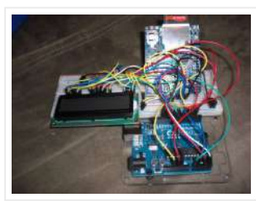
The basic idea was to create color organ / spectrum analyzer on arduino board, trying to minimize quantity of external components, like analog filters, LED display drivers, etc. Spend a...

976. 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...

977. 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....

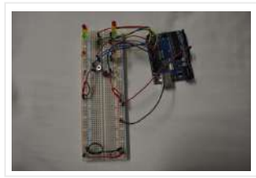
978. Arduino & Visual Basic 6 Light Controller

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...

979. 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...

980. Traffic Lights Beginner Arduino Project

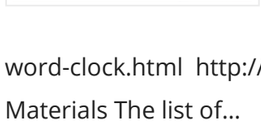


This is a beginners project for the Arduino. I am using the Arduino Uno but should work with little or no modification on other arduino models. Setting up the hardware is...

981. Tyco RC Arduino Robot

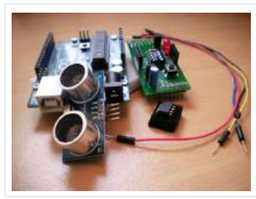
Wanted to make your own robot but couldn't afford the fancy H-Bridge IC's or etch your own PCB? Want a quick and dirty method of making your own wheeled robot?...

982. 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...

983. 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...

984. 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...

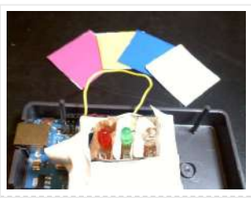
985. Arduino Motor Shield Tutorial

The Arduino Motor Shield allows you to easily control motor direction and speed using an Arduino. By allowing you to simply address Arduino pins, it makes it very simple to...

986. Arduino Ethernet Shield Tutorial

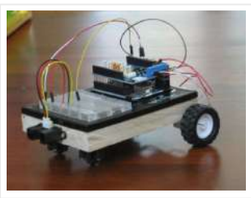
The Arduino Ethernet Shield allows you to easily connect your Arduino to the internet. This shield enables your Arduino to send and receive data from anywhere in the world with...

987. Arduino Color Sensor



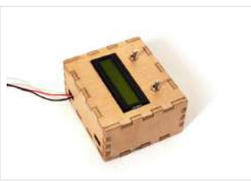
Here we will be learning how to make a color sensor. my model consists of three cardboard compartments containing an LED – one red, one blue, and one green -...

988. Carduino- A simple Arduino robotics platform with its own library



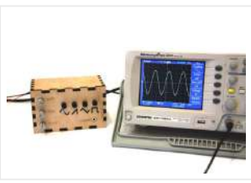
This is, as the title says, an Arduino-based robotics platform, with its own library. The “standard” model comes with two back motors, two omni-wheels in the front, and a distance...

989. Bike Speedometer using an Arduino



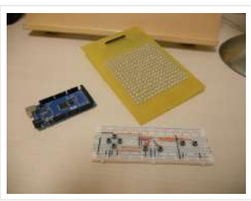
Monitor your road speed using the Arduino. This project uses a magnetic switch (also called a reed switch) to measure the speed of one of the bike’s wheels. The Arduino...

990. 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. ...

991. LED Matrix with Game Controller using an Arduino

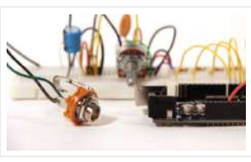


This project was built for my introductory electronics class at the University of Waterloo in Canada. This was my first introduction to electronics and therefore, my first project. Follow these...

992. Sous-vide Arduino Shield

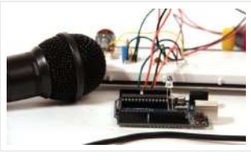
NOTE THIS PROJECT IS DONE BY A GROUP OF STUDENTS FROM SINGAPORE POLYTECHNIC Sous-vide (/suËËˆviËd/; French for “under vacuum”)[1] is a method of cooking food sealed in airtight plastic bags...

993. 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...

994. 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...

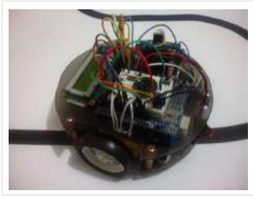
995. DIY Arduino Motor Shield

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...

996. Beginners guide to building Arduino robots with Bluetooth and Android

In this tutorial we are going to go over building a Arduino robot that can be controlled via bluetooth with an Android phone/tablet. This is a beginners guide that is going to briefly go...

997. LINUSBot – Line Follower Robot using Arduino



The operation of this Robot is quite simple. Infra-red sensors placed at the front of the chassis will monitor when our Robot is over a black line or when it...

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