






## esp8266 arduino projects list in pdf offline downloadable

### esp8266 arduino projects list in pdf offline downloadable:

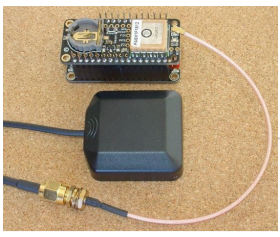
Most of the electronics geeks are asking the whole list of **arduino and esp8266 projects PDF** here we will share list every month as our projects are being updated on daily basis. PDF is a good source to work offline. We will offer direct PDF file download link with info of its release date , number of projects.



<u>List No.</u>	<u>PDF Download Link</u>	<u>Release Date</u>	<u>Number of Projects</u>
1	Click here Esp8266 Arduino Projects List in PDF offline downloadable	May 2018	96
1.	 Laser Tag "Free for All" Circuit Playground Express and ESP8266 This is an easy way to make your boards into a fun laser tag game to play with friends. we combined both boards as described in the pictures. Supplies For...		
2.	 3D Printed Kitchen Scale Using an ESP8266 Hello everyone ! Today I'm going to show you how I built this little kitchen scale during this lockdown ! It can measure weights up to several kilograms, has an...		
3.	 Wordclock - No Special Tools Required! Easy to Build Hi makers, do you want to own a wordclock? There are a lot of nice instructions all over the web, but You've no access to a 3D printer and cnc machines to...		
4.	 Location Tracking "Weasley Clock" As with so many other people, I've always been a massive Harry Potter fan. One of the coolest magical items in the series was almost certainly the Weasley family clock...		
5.	 Inverter Aurora ABB (Power One) Web Monitor (WIM) With Esp8266 Autonomous centraline with an esp8266 that grab and store data from inverter and show charts and various data of production and can send notification email if there are some problems. It is a quite user-friendly browser based monitoring solution, It's allows...		



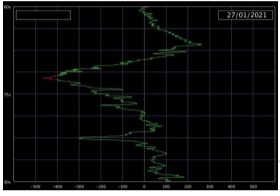
6. Arduino Text I/O for Real World Applications Quick Start This tutorial will take you through the steps you can use to successfully process Real World text I/O You should avoid using any Serial methods in your loop() code...



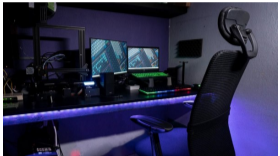
7. The BookMinder: a Bookend Meeting Countdown Device Since more and more of us are working from home, we are all increasing our engagement with our screens (looking at you, Zoom meetings). For myself, when I am taking...



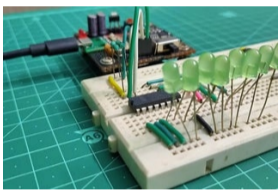
8. How to Make a Balancing Board System for Hip's Muscles Exercise (BalanX) After many happy years as a runner, two years ago I had a problem with my right hip. Unfortunately I had to undergo to total hip replacement surgery. After the...



9. Smart Desk LED Light | Smart Lighting W/ Arduino | Neopixels Workspace Now a days we are spending a lot of time at home, studying and working virtually, so why not to make our workspace greater with a custom and smart lighting...



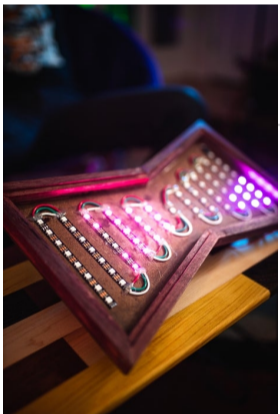
10. Extending GPIOs of ESP8266-01 and IoT | | Exploring ESP8266:Part 3 Hello all! This instructable happens to be part 3 of my ESP series where I continue to experiment and explore the various features of the ESP 8266-01 board. In the...



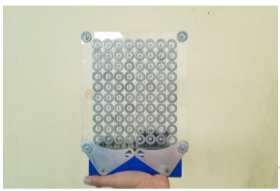
11. Arduino IoT Cloud ESP8266 NodeMCU Alexa Home Automation System | IoT 2021 In this IoT project, I have shown how to make an IoT-based Smart Home with Arduino IoT Cloud & Alexa using NodeMCU ESP8266 to control 4 home appliances with voice commands. If the internet is not available,...



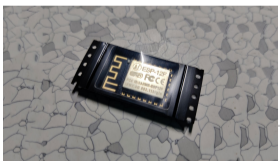
12. LED Hour Glass In this article I describe how we made an hour glass with leds as the sand. We were always interested in making something that visually flows like sand and decided...



13. SEE-THROUGH LED MATRIX WITH WASHERS I do project related works. After the structure contractors finished their building works, they threw away a lot of washers and nuts M10. During I did cleaning, I picked them...



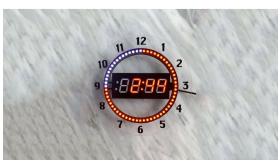
14. Program ESP8266 With NodeMCU Hey everyone what's up! so you got yourself an esp12f module and now you want to program it? here's how you can do that in an easy way that doesn't...





15. Gas Detector Let's create a simple Gas Detector connectable to WiFi. The gadget would offer: web UI including gauges for LPG, CO, Smokesimple data handler returning values in JSONcapable of regularly sending...



16. 7-Segment NeoPixel Clock With Countdown Timer <https://youtu.be/H4J4Cl4Dduc> In this Instructable, my twin brother, Sunyec206, and I will show you how to make a 7-segment NeoPixel Clock with Countdown Timer. The inspiration for this project began with our...

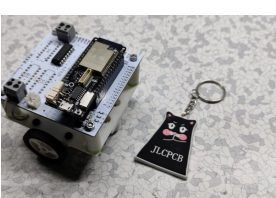



17.  I2C With the ESP8266-01 !? || Exploring ESP8266:Part 1 Hello all ! With this instructable I will be writing and documenting a series of projects mentioning and exploring the various hidden ( rather unexplored ) features of the tiny...


18.  Indoor Air Quality Meter Simple project to check the air quality in your house. Since we stay/work from home a lot lately, it might be a good idea to monitor the quality of the...

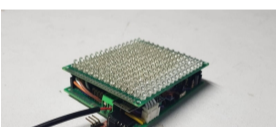
19. Professional Weather Station Using ESP8266 and ESP32 DIY (Please Check the V2.0 Improved Version Link!) PLEASE CHECK THE NEW IMPROVED WEATHER STATION LINEAMETEOSTAZIONE v2.0! LINK VERSION 2.0 LINEAMETEOSTAZIONE HERE LineaMeteoStazione is a complete weather station which can be interfaced with professional sensors from Sensirion as...




20.  MicroBot V1 So this is my microbot V1 which is an ESP32 based robot which is powered by a Wemos d32 pro and controlled by Blynk. Its body is a 3D printed...

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

22.  Reverse Engineered Bumper Sensor Campsite Security Alarm This Instructable is to build a very smart, talking campsite security system that is disguised in an owl decoy. Now, this isn't your typical Arduino ultrasonic distance sensing project. Rather,...

23.  MAXIMIZE THE CAPABILITIES OF ESP-01 ESP8266 ESP-01 ESP8266 is a popular and widely used module because of its low-cost, reliability and easily availability in the market. It can be used as a stand-alone device or connected...

24.  DIY USB Type-C Power Delivery Trigger Board In this video we will have a closer look at a USB Type-C Power Delivery Trigger board. Such boards are used to output 5V, 9V, 12V, 15V or even 20V...

25. DIY Laser People Counter Let's start of with a question: What is a people counter? .... Well, it is a device, that counts the amount of people passing by. They are usually placed in...

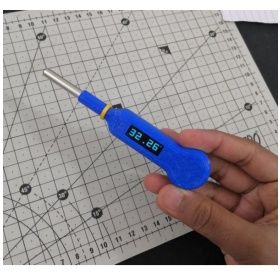


26. Personalized Professional Weather Station DIY, LineaMeteoStazione V2.0! Using EZSBC Boards ESP32, ESP8266, Attiny85 LineaMeteoStazione, in the improved version, is a complete weather station solar powered which can be interfaced with professional sensors from Sensirion as well as some Davis Instrument component (Rain Gauge,...



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





28. **DIY Arduino Smart Digital Scale | ESP8266 + HX711** Hello to everyone, today I am here to show you a very interesting project that I was working on for a while, it consists on a digital scale using the...



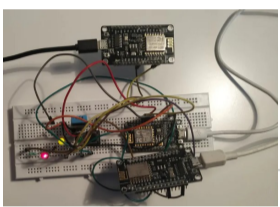
29. **IoT Temperature and Humidity Sensors** About a year ago, I felt like some rooms in my house were colder than other ones. I wanted to check for sure, so I built a few temperature and...



30. **Automate Push Up Routine With ESP8266** For most of us during lock down, we have been practicing a lot of exercises. Either its some stretching or some muscle building exercises. But one issue that I have...



31. **Getting Started With ESP-MESH and 8266 -8266 Introduction** ESP-MESH is a networking protocol built on the top of the Wi-Fi protocol. ESP-MESH allows numerous devices (generally referred as nodes) spread over a large physical area to be...



32. **Make Your Own Arduino AC Dimmer | Drive Motors & Lights** Hi every one, here Chris, and I want to show you how I made my own Arduino AC dimmer that can control AC loads such as motors and lights easily...



33. **Solar Powered WiFi Weather Station V3.0** In this Instructable, we will learn how to make a Solar-powered wireless weather station by using an ESP32 Wifi Module and few common weather sensors available in the market. The...



34. **SafeT-Park System** This device will help protect parking structures by implementing three safety concepts into an IOT device. Automated emergency response system, in the case of parking structure fires Integrated temperature and...



35. **The Ultimate DIY Automatic Fish Feeder Tier 2** The Tier 2 Feeder is a big step up from the Tier 1. This version uses an ESP8266 wifi module to sync the arduino's clock to control the feeding schedule and...



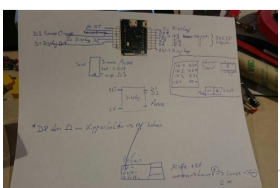
36. **Minimalist IoT Clock (using ESP8266, Adafruit.io, IFTTT, and Arduino IDE)** In this tutorial I show how you can make a minimalist clock synchronized with the internet. I tested it with two different ESP8266 based boards: Firebeetle and NodeMCU. The microcontroller...



37. **YouTube Subscriber Counter With LEDs** This is a YouTube Subscriber counter built with an ESP8266. It uses the YouTube api v3 to poll for changes. It's made specifically for one of my favourite youtubers Henk Rijckaert. It...



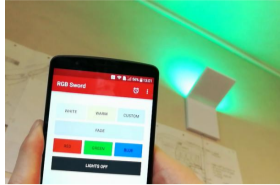
38. **ISS Pointer Robo** <https://youtu.be/0kBK3WHNv5Q> Hi there, This is my contribution to the Space-Contest. There are some ISS-Pointer around the WWW. Some of them use several PSUs and/or quite big motors. My goal was to build something...



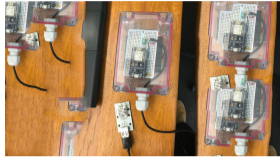
39. Web-Connected SMART LED Animation Clock With Web-based Control Panel, Time Server Synchronized The story of this clock goes back a long way - more than 30 years. My father pioneered this idea when I was just 10 years old, long before the...



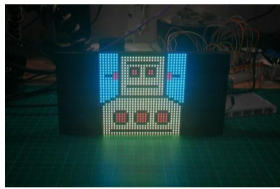
40. DIY IoT Lamp for Home Automation || ESP8266 Tutorial In this tutorial we're going to make an internet connected smart lamp. This will go deep into internet of things and opens up a world of home automation! The lamp...



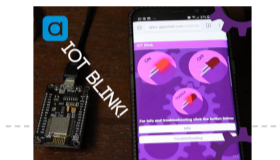
41. NodeMCU Humidity/Temperature Unit n this tutorial we are going to show you how to setup your own temperature and humidity sensor. We are going to use a DHT22 unit, which is a low-cost...



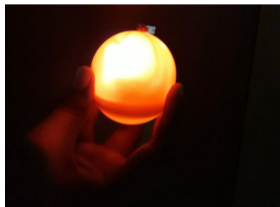
42. RGB LED Matrix With an ESP8266 I think these RGB LED Matrix displays are one of best displays you can get for your Arduino projects, they are incredibly bright and vivid and are actually pretty easy...



43. IOT Blink Anyone who's started learning about microcontrollers and code could tell you that a good place to start is by looking at the most basic example sketches provided. As often times...



44. A Useful Remembrall If you've ever watched the Harry Potter series, then you would have seen Neville receive a gift from his Gran which was a Remembrall. For those Muggles who haven't watched...



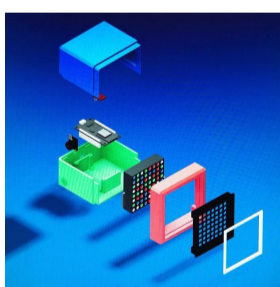
45. IoT Desktop Console. Part : 11 IoT, Home Automation Preamble This article, the 11th in a series on home automation documents how to create and integrate an IoT Desktop Device into an existing home automation system including all the necessary software...



46. Arduino Energy Meter – V2.0 Hello friend, welcome back after a long break. Earlier I have posted an Instructables on Arduino Energy Meter which was mainly designed to monitor the power from the solar panel (DC Power)...



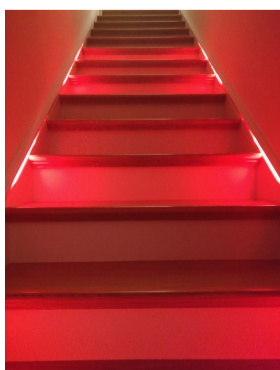
47. RGB Box Clock <https://youtu.be/7inXakX4XOs> This is a clock and decorative RGB Led Matrix It's controlled by a Colorduino Shield and NodeMCU v3 Board using i2C communication. With Blynk app you can setup the...



48. Virtual Reality Flying Machine (Arduino) This project goes through converting a hammock into a VR flying machine. We will use a VR app that is running the WRLD SDK in Unity so you can input...



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



50. iPad Play Timer I think this is a topic every parent is struggling with. How much can the kids play with their iPads (or any other tablet). We tried multiple approaches, like fixed times,...





51.



ESP8266 Temperature Controlled Relay A friend of mine is a scientist who does experiments that are very sensitive to air temperature and humidity. The incubator room has a small ceramic heater but the heater's...

52.



ESP8266 LED Matrix Clock ESP8266 LED Matrix Clock Simple LED matrix Clock based on the popular ESP8266 with Real Time Clock module and time synchronization over WiFi from an NTP server. NEW ! ESP32 version also...

53.



Morphing Digital Clock A quick video about this project. I have since implemented a way to set timezone. Thanks to the work of the Arduino and ESP8266 community, this cool clock is a...

54.



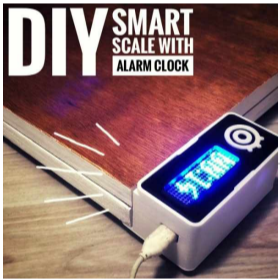
ROOM MAPPING Arduino Robot With Unity 3D This project uses an Arduino robot running a ESP-8266 Node MCU that communicates (and drives around) with a mobile phone. The phone is running an app made in the video...

55.



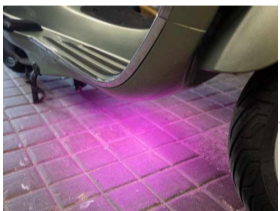
Low-Poly Iron Man With Wifi-Controlled LED Strips This interactive wall art piece is approximately 39" tall and 24" wide. I laser cut the wood at Clemson University's Student Makerspace, then I hand-painted all the triangles and installed...

56.



DIY Smart Scale With Alarm Clock (with Wi-Fi, ESP8266, Arduino IDE and Adafruit.io) In my previous project, I developed a smart bathroom scale with Wi-Fi. It can measure user's weight, display it locally and send it to the cloud. You can get more...

57. How to Install LEDs Under a Scooter (with Bluetooth) Join me in creating ground effect lighting for my scooter using a



bluetooth microcontroller and addressable LED strip. For this project I'm recycling two bits of pixel strip leftover from...

58.



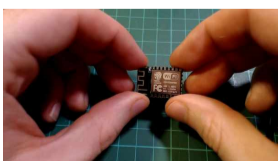
ESP32 Xiaomi Hack – Get Data Wirelessly Dear friends welcome to another Instructable! Today we are going to learn how to get the data that this Xiaomi Temperature and Humidity monitor transmits using the Bluetooth functionality of the ESP32...

59.



D.I.Y SMART RGB MATRIX 8x16 In this project, I'll show you how to make your own 8x16 RGB LED Matrix using Arduino Uno/ Nano. An LED Matrix can show scrolling messages, display animations, music spectrum...

60.



3 Simple Ways of Programming an ESP8266 12X Module If you are not familiar with ESP8266 micro controller, I really feel you have been missing out! These things are incredible: they are cheap, powerful and best of all have...

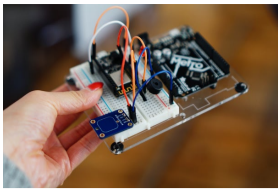
61.



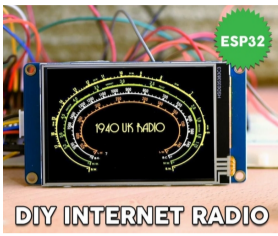
Remote Color Controlled Jack-o-Lantern As usual, this Halloween I decided to create a project related to the season. Using Prusa I3 and Thingiverse, I printed a Halloween decoration where the color is controlled remotely...



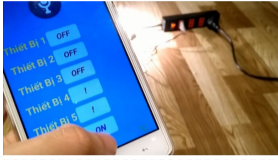
62. Hey Pillow IoT Alarm Know someone that constantly struggle to get out of bed, comes late to work and you are just want to give them a nudge in the morning. Now you can...



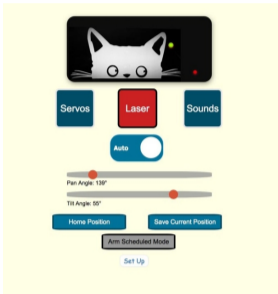
63. Internet Radio Using an ESP32 Dear friends welcome to another Instructable! Today we are going to build an Internet Radio device with a big 3.5" display using an inexpensive ESP32 board. Believe it or not, we can...



64. Controlling Devices With Voice Command Using NodeMCU I just want to say hello to everybody, this is my first time writing an instructable project. English is not my native language so I will try to make short...



65. LaserKitty!! It is a truth universally acknowledged that a single cat in possession of good fortune must be in want of a laser toy. As with single gentlemen in want of...



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



67. Solar Powered WiFi Weather Station V2.0 This Instructable is a continuation of my earlier weather station project. It was quite popular on the web, people around the globe made their own by following it and given valuable feedback...



68. ESP8266 VGA Pong In this Instructables I will show how to build a reproduction of the the classic game Pong for a VGA monitor, using a ESP8266 and few other components. This game is made possible by...



69. Sensor Stations Network for Lighting and Security Control With this sensor stations network configured in a master/slave mode, you will be able to do lighting and security control in your home. These sensor stations (Node01, Node02 in this...



70. The Ultimate Light Switch The goal of this instructable is to explain how I made a wifi-connected light switch (also called remotes further). The goal of these remotes is to turn on and off...



71. Tide and Weather Clock Although you can buy analog tide clocks that have a single hand indicating whether the tide is high or low or somewhere in between, what I wanted was something that...





72. HRV (Home Air Exchanger) Arduino Controller With Air Economizer HRV Arduino Controller with Air Economizer So my history with this project is I live in Minnesota and my circuit board fried on my LifeBreath 155Max HRV. I didn't want...



73. IoT Based Fingerprint Attendance System Using Evive (Arduino Based Embedded Platform) Now, you can easily track attendance and clock working hours with the help of this easy and fun to make DIY fingerprint scanner! We'll be using ThingSpeak to store and...



74. Simple Garage Door Hack After being accidentally locked out of my house on more than one occasion, I decided that there had to be better way to entering my home that did not involve...



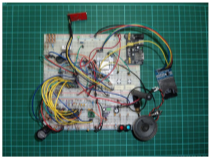
75. Ikea Kids Kitchen Lights Mod For my daughters second birthday, we decided to get her a kitchen set. But I really wanted to make what we got her special and after being inspired by what...



76. YouTube Subscriber Counter Bubble Machine <https://youtu.be/qsFZ6o-1S0E> The idea was born after being selected to expose at Maker Faire Lille, a giant event around Science, inventions and the Do-It-Yourself mindset. I wanted to build something that...



77. Retro Speech Synthesis. Part : 12 IoT, Home Automation [https://youtu.be/MwtR3u\\_uS0M](https://youtu.be/MwtR3u_uS0M) This article is the 12th in a series on home automation Instructables documenting how to create and integrate an IoT Retro Speech Synthesis Device into an existing home automation system including...



78. Steam Linked Display Shelf Back Story My brother has Funko POP figures that represent his characters that his friends play most often in video games. We thought that it would be cool if they...



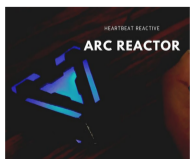
79. Home Presence Simulator and Security Control Device This project allow us to simulate presence and to detect movements in our home. We can configure a network of devices installed in differents rooms of our home all of...



80. HAVE FUN WITH BICOLOR MATRIX 32x32 Today I will share following topics base on a bicolor matrix led 32x32: D.I.Y a bicolor led matrix 32x32.How to control led board above with NodeMCU ESP8266 via B.A.M method.Introduce...



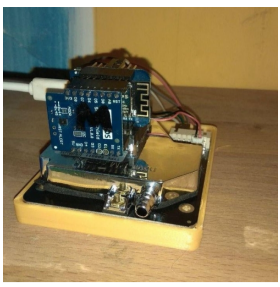
81. Iron Man's Arc Reactor That Pulses With Your Heart Beat <https://youtu.be/bnX99E5VdHI> There are lot of DIY arc reactors out there that look pretty cool. Some look realistic too. But why build something that just looks like that thing and does...



82. CloudyData – ESP8266 to Google Sheets Made Simple I've been looking for cloud data storing for a long time during last years: it is interesting to monitor data from any kind of sensor, but it is more interesting...





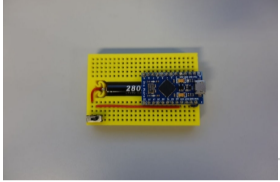


83.



ISS Globe- Blinks When the ISS Passes Overhead <https://youtu.be/CFkH0GL3vdY> Howdy! If you are interested in astronomy and always look up at the stars and not down at your feet, you'll surely know the ISS. The ISS or The...

84.



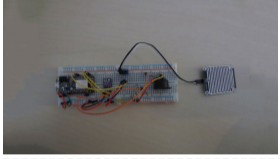
Dev Board Breadboard This Instructables show how to create a tailor-made breadboard for dev board. Step 1: Current Breadboard Breadboard (solderless breadboards) is a very import component for prototyping of electronics. It can...

85.



Crocodile Solar Pool Sensor This instructable shows how to build a rather special pool sensor measuring the pool temperature and transmitting it via WiFi to Blynk App and to a MQTT broker. I call...

86.



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

87. WIFI JOYSTICK Today I will share how to make a WIFI JOYSTICK from an ESP8266 and 4 ways industrial joystick. It can be integrated into the factory's automation system or be used...



88.



DIY Geiger Counter With an ESP8266 and a Touchscreen <https://youtu.be/rmFnbVB5gCM> I designed and built a Geiger Counter - a device that can detect ionizing radiation and warn its user of dangerous ambient radiation levels with the all-too-familiar clicking noise....

89.



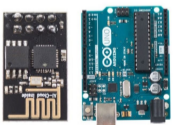
Smart Power Strip With Cayenne Cloud <https://youtu.be/uXSMAoU3B6Y> This instructable shows how you can build your own easy or simple DIY Internet-connected Smart Power Strip to control Electrical Appliances from remotely.You can also automate the daily repetitive...

90.



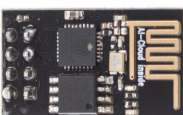
A Beginner's Guide to Arduino After some years of experimenting with Arduino, I decided that the time has come to share the knowledge I've acquired. So I here it goes, a guide to Arduino, with...

91.



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

92.

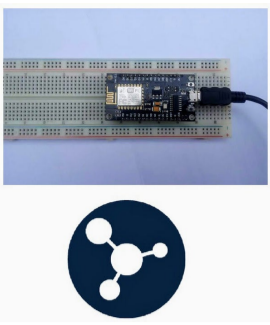



Getting Started With the ESP8266 ESP-01 The ESP8266 ESP-01 is a Wi-Fi module that allows microcontrollers access to a Wi-Fi network. This module is a self-contained SOC (System On a Chip) that doesn't necessarily need a microcontroller to manipulate inputs and outputs as...


93.


How to Connect the ESP8266 NodeMCU to the IoT Cloud This instructable shows you a simple Internet of Things demo using the ESP8266 NodeMCU and an online IoT service called AskSensors. We demonstrate you how to quickly get data from the...






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


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

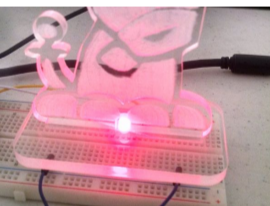
96.  Phone Controlled Computer Starter <https://youtu.be/QhhOxle02Ok> Have you ever wanted to start your computer while you are away from home to access some files? Or maybe you wanted to start a download of a new...


97.  WiFi Enabled Arduino – Interfacing With Web APIs Are you familiar with Arduino, but are looking for a little more connectivity in your projects? This Instructable goes over a new (and cheap) wireless module that has hit the...


98. Motorized Pulldown Curtain (Phone & Radio Controlled) <https://youtu.be/v0-TIGm9BxM> I pull my curtain up and down a couple of times a day. If I watch a movie I pull it down and then, I pull it up to...




99.  esp32 devkit v1 pinout GPIO pins of ESP32 DEVKIT As mentioned earlier, the chip used with this board has 48 GPIO pins, but all pins are not accessible through development boards. ESP32 devkit has...

100.  Notification of Orders in Tindie When you have a new order in Tindie your Arduino warn you. Things used in this project Hardware components Arduino MKR1000 × 1 LED (generic) × 1 Software apps and...

101.  Humidity And Temperature monitoring Using Arduino With The IoT Using the Internet of Things (IoT) in homes and industries it is possible to control any electrical or electronic equipment. Moreover, you can get the information from any sensor and...

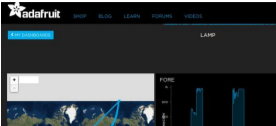
102.  Wi-Fi Controlled Robot Using Arduino UNO And Blynk This Wi-Fi controlled robot can be controlled from anywhere using the ARMA IoT shield for UNO and the Blynk App which provides the user interface. Overview Simple...


103.  Designing Smart Chatbot with IoT for home automation with videos (Hindi & English) In this project, we will be using ESP8266 12e manufactured by Lolin to make a Chatbot that can control our home applications. To chat with our chatbot, we will use Facebook...


104. With your Smart Phone and Arduino MKR1000 Blink a LED The idea is to test the Arduino MKR1000, controlling the on board LED from your smart phone (this case iPhone SE. Hacksterlive Bogota. Things used in this project Hardware components...

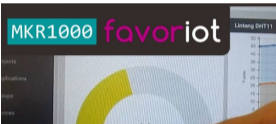




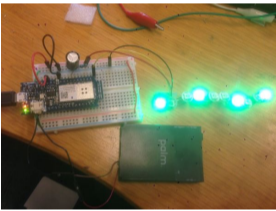
105.  Simulate GPS/Read Photoresistor with MKR1000/ADAFRUIT "ADAFRUIT IO" makes IoT for everyone. Here we publish the data from a photo-resistor and a simulated GPS. Things used in this project Hardware components Arduino MKR1000 × 1 Photo...


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


107.  Smallest IoT Home Automation using ESP8266 - 01 with Videos (Hindi & English) In this project, we will be using the ESP8266 - 01 Wi-Fi Development board to make a small home automation that has Wi-Fi featured in it. The system operates on a...


108.  Arduino MKR1000 & Favoriot A simple IoT experiment, using an Arduino MKR1000 board to monitor a potentiometer and DHT11 sensor via Favoriot IoT platform. Things used in this project Hardware components Arduino MKR1000 ×...


109. Arduino MKR1000/Zero Neopixel Throwie A WiFi controlled NeoPixel display. Designed for the MKR1000 but should work for the Zero too. A little rough around the edges but works! Things used in this project Hardware...

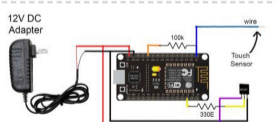



110.  IoT Power Tracker for Your Home The power tracker is an IOT based device that helps us to keep track of our power consumption. It also alerts us when we are exceeding the power usage limit....

111.  IoT Home Automation Using ESP-32 with Videos (Hindi & English) Back in earlier days, when the word Internet of Things (IoT) was not a sound bite, developers of this field used various Wi-Fi shields to enable the Wi-Fi feature in...

112.  MKR1000 to ThingSpeak.com A fairly simple project that attaches everyone's favorite environmental monitor, the DHT, to the Arduino MKR1000 then transmits sensor data. Things used in this project Hardware components DHT11 Temperature &...

113.  ESP32 Internet Radio The cheap MP3 VS1053 codec processor from aliexpress.com is told to be capable of decoding a variety of music formats, including Ogg Vorbis/MP3/AAC/WMA/MIDI audio. VS1053 is also capable of recording...

114.  Connected Message Lamps using ESP8266 | IoT Projects It is not just another Engraved LED lamp that you see on the market nowadays. This is an advanced version of that lamps. In the era of connected devices, I...

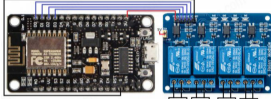
115.  Getting started with NodeMCU development board for IoT Since Internet of Things (IoT) projects are now quite popular, I recently bought a NodeMCU board to try IoT application development. The NodeMCU development board is an open source board...


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






117. Pushbutton → Push Notification How many mundane devices upgrade to IoT because they let you monitor a single data point or a variable? That little nudge over the communication precipice allows you to charge...


118.  Oct Home Automation using ESP8266 & Blynk App – IoT A home automation system is an automating the bulk of electronic and electrical tasks within a home. It uses a combination of hardware and software to enable control and management over appliances and...


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


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


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

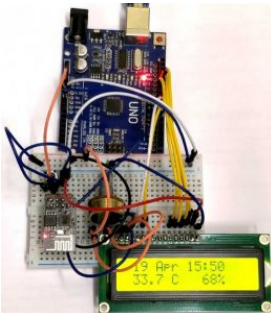


122.  esp8266/Arduino NTC library A thermistor is a type of negative coefficient resistor whose resistance is dependent on temperature, more so than in standard resistors. The resistance of a NTC Negative Temperature Coefficient thermistor (<https://en.wikipedia.org/wiki/Thermistor>) decreases as...

123.  Home Automation System for a Camp with Cellular Internet Wouldn't it be nice if you could start warming up the camp before you leave the house? How about using Alexa to do it for you! Things used in this...

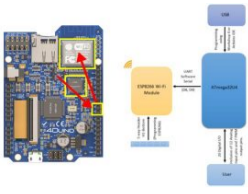
124.  IoT Based Electricity Energy Meter using ESP12 and Arduino We all know about Electricity energy meters which are installed in everyone's house or offices to measure the electricity consumption. At last of every month, many of us get worried...

125.  Amazon Dash Replenishment Pens A pen holder that determines when there are two or less pens and triggers an Amazon pen set replacement. Things used in this project Hardware components Arduino MKR1000 × 1...

126.  Arduino with ESP8266 – Reading Data from Internet The ESP8266-01 has been a great module to quench all our thirsts for IOT projects. Since its release, it has developed a strong community and evolved into an easy to...

127. Getting Started with Wi-Fi In this project, we will learn how to get started with the ESP8266, an inbuilt 4Duino Wi-Fi module and connect to a local access point. The 4Duino display is used...





128. **Dash Button Santa with Arduino MKR1000** Send information to Santa Claus about the status of the gift request. Things used in this project Hardware components Arduino MKR1000 × 1 SparkFun Pushbutton switch 12mm × 1 Jumper...



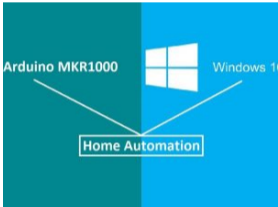
129. **NTP Clock** In this project, we will learn the basics of User Datagram Protocol (UDP). We will request and receive time from the NTP server using the above communication protocol. The 4Duino...



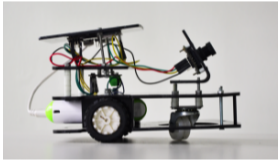
130. **IoT Smart Socket Arduino And Cayenne** A really smart IoT socket. Switch ON/OFF your device by the smartphone using Cayenne Dashboard and Arduino MKR1000. Things used in this project Hardware components Arduino MKR1000 × 1 RobotGeek...



131. **Home Automation with Arduino MKR1000 and Windows 10** Home Automation through Wi-Fi connectivity (Arduino MKR1000) and Windows 10. Things used in this project Hardware components Arduino MKR1000 × 1 Relay (generic) Input: 3V × 1 General Purpose Transistor...



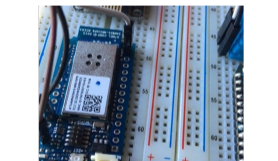
132. **Intelligent Buggy featuring 4Duino-24** 4Duino Intelligent Buggy project demonstrate how does uCAM-II works. This project also utilized two 4duino communicating using Server-Client architecture over TCP. It also uses a buggy car which carry the...



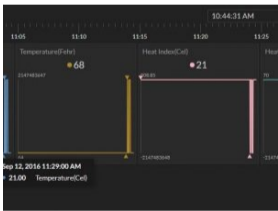
133. **GPIO Control from Web Browser featuring 4Duino-24** In this project, we will learn how to control the on board 4Duino LED via I/O port (D13) from web browser. In built ESP8266 Wi-Fi module is configured as server...



134. **Send MKR1000 Data to Google Sheets** This project allows you to transmit DHT environmental data from your MKR1000 to your own customizable Google Sheet for data logging. Things used in this project Hardware components Arduino MKR1000...



135. **MKR1000 to Initial State DHT Visualizations** This demonstrates how to use your Arduino MKR1000 to connect to InitialState.com to produce colorful visualizations of your sensor data. Things used in this project Hardware components Arduino MKR1000 ×...



136. **Assistance for Visually Impaired featuring 4Duino-24** Blind Assistance is a project designed to help visually impaired people detecting obstacles in their way. It uses 4Duino, three ultrasonic sensors, one vibration motor and an LED. These components...



137. **Voting Machine featuring 4Duino-24** The 4Duino Polling Machine is an inquiry project that involves two or more people and has implemented the ability to send and receive data on both ends. The Polling Machine...



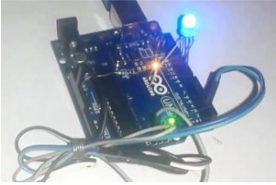
138. **MKR1000 Universal Remonster!** WiFi connected universal remote with smart phone webapp. Things used in this project Hardware components Arduino MKR1000 Arduino Nano R3 General Purpose Transistor NPN Triggers the PNP transistors of IR...



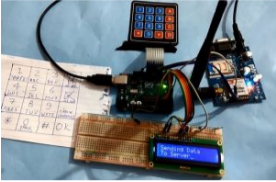
139. Home Security featuring 4Duino-24 Home Security project is a password oriented security device. This uses 4Duino display as the user interface where the password can be entered. 4Duino is also used as the host...



140. 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...



141. How to Send Data to Web Server using Arduino and SIM900A GPRS/GSM Module Today we are here with an interesting project in which we will Send Data to the SparkFun server using Arduino and GPRS. This is an IoT based project in which...



142. 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...



143. Zoned Climate Control with MediaTek's LinkIt™ Smart 7688 Hardware components: MediaTek Labs The MediaTek LinkIt™ Smart 7688 platform × 1 Everything ESP ESP8266 ESP-01 × 1 Arduino Nano R3 × 1 Atmel ATTiny85 × 1 DHT22 Temperature Sensor...



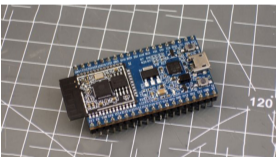
144. IR Controller for Air Conditioner Hardware components: Atmel ATTiny85 × 1 Everything ESP ESP8266 ESP-01 × 1 Arduino Nano R3 × 1 STORY My goal is to make my window AC units more functional....



145. OH HAI! on Windows 10 IoT Core Oh, Hai Hai ('hi') is an integration point for several stand alone smart home technologies. Hai runs on the Raspberry Pi and can be adapted to optimize electricity consumption (lighting/HVAC)...



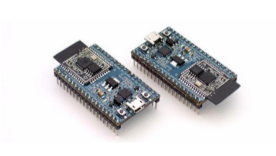
146. How to Get Started with the ESP32 ESP32 is the hottest new wireless chip out there, offering both WiFi and Bluetooth Low Energy radios rolled up with a dual-core 32-bit processor and packed with peripherals of every...



147. ESP32 Tutorials The ESP8266 has become one of those ubiquitous parts that everyone knows. However, the new ESP32 has a lot of great new features, too. If you want to take the ESP32...



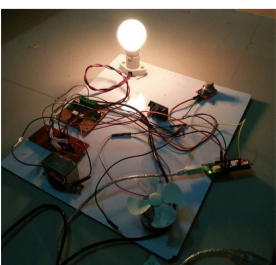
148. ESP32 Hands-On: Awesome Promise The ESP32 is looking like an amazing chip, not the least for its price point. It combines WiFi and Bluetooth wireless capabilities with two CPU cores and a decent hardware...



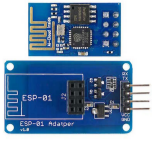
149. ESP32 With Arduino IDE Christmas 2015 yours truly was one of the lucky few in the world to receive the ESP32 for experimenting. The board was not assembled, and it was quite intimidating to...



150. IOT based Home automation and Security system IOT has become huge trend in the last couple of years. With growing needs in connected devices many companies have shifted the attention to iot market. Today we are going...



151. ESP8266 Tutorial: Programming the Onboard GPIO Pins The ESP8266 is a great tool for enabling your project to access the internet. You can plug it into an Arduino easily as shown and allow your project to communicate...



152. ESP8266 Tutorial: How to Control Anything From the Internet! In this ESP8266 tutorial, we are using an ESP-01 module to control an LED over the internet. The ESP8266 is a very cheap yet really effective platform for communicating over the internet...



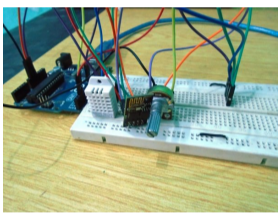
153. Home Automation using Arduino and ESP8266 Module In this project we are going to make a home automation system using ESP8266 WiFi module and Arduino Uno. Using this we will be able to control lights, electric fan...



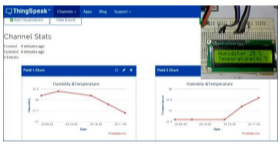
154. IoT Data Logger using Arduino and ESP8266 Today we are going to make an IoT WiFi data logger using Arduino, ESP8266 WiFi module and DHT22 temperature humidity sensor. Arduino is reading temperature and humidity sensed by DHT22 and sending...



155. 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...



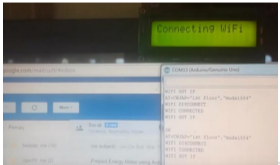
156. Live Temperature and Humidity Monitoring over Internet using Arduino and ThingSpeak Humidity and Temperature are very common parameters for measuring at many places like farm, green house, medical, industries home and offices. We have already covered Humidity and Temperature Measurement using...



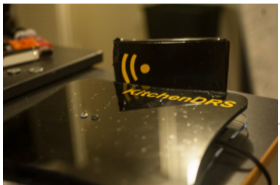
157. How to Send Data from Arduino to Webpage using WiFi Wireless communication between Electronic devices and modules is very important, to make them 'Fit' in the World of Internet of Things. HTTP protocol and HTML language have made it possible...



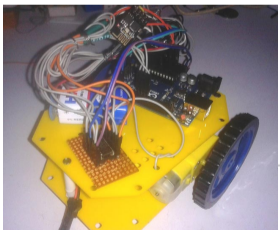
158. Sending Email using Arduino and ESP8266 WiFi Module We are moving towards the World of Internet of Things (IoT). This technology plays a very important role in the Electronics and Embedded system. Sending an Email from any Microcontroller...



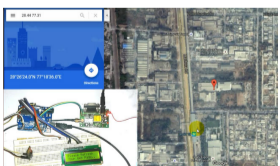
159. Amazon Kitchen DRS The Project This project is a combination of the many smart fridges and pantry's of the past. The idea is to combine all of them while also introducing Amazon's DRS...



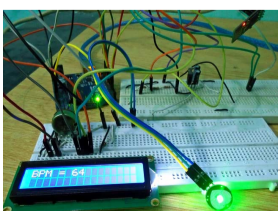
160. WiFi Controlled Robot using Arduino There are many types of Robots, from the simple ones like a Toy car to the advanced ones like industrial Robots. We have already covered many types of Robots using...



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

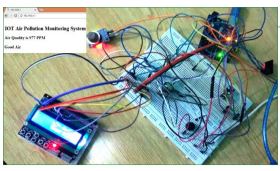



162. Heart Beat Monitoring over Internet using Arduino and ThingSpeak In this project we are going to make a Heart Beat Detection and Monitoring System using Arduino that will detect the heart beat using the Pulse Sensor and will show...



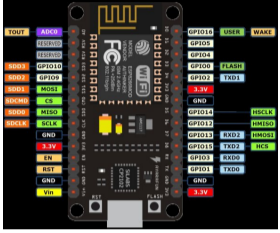
163. IOT based Air Pollution Monitoring System using Arduino In this project we are going to make an IOT Based Air Pollution Monitoring System in which we will monitor the Air Quality over a webserver using internet and will...








164.  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...

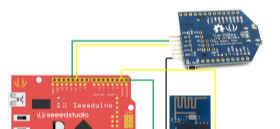
165. Nodemcu arduino interfacing project A guide to getting started with the ESP8266 with the Arduino IDE This assumes that you have a NodeMCU type board with the Silicon Labs CP2102 USB to UART Bridge....




166.  Solar powered wireless Arduino based Geiger counter project. Hello, I have plans to build myself a solar powered wireless Geiger counter using a RH Electronics Arduino IDE Geiger counter connected via a serial connection through a logic level...

167.  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...

168.  Simple Arduino Wireless Mesh Build a low cost simple wireless mesh using arduinos and long range APC220 radio modules. Wireless mesh networks can handle individual nodes not working and are tolerant to environments such...

169.  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...

170.  Chat Server using Arduino A simple server that distributes any incoming messages to all connected clients. To use, open a terminal window, telnet to your devices IP address, and type away. Any incoming text...