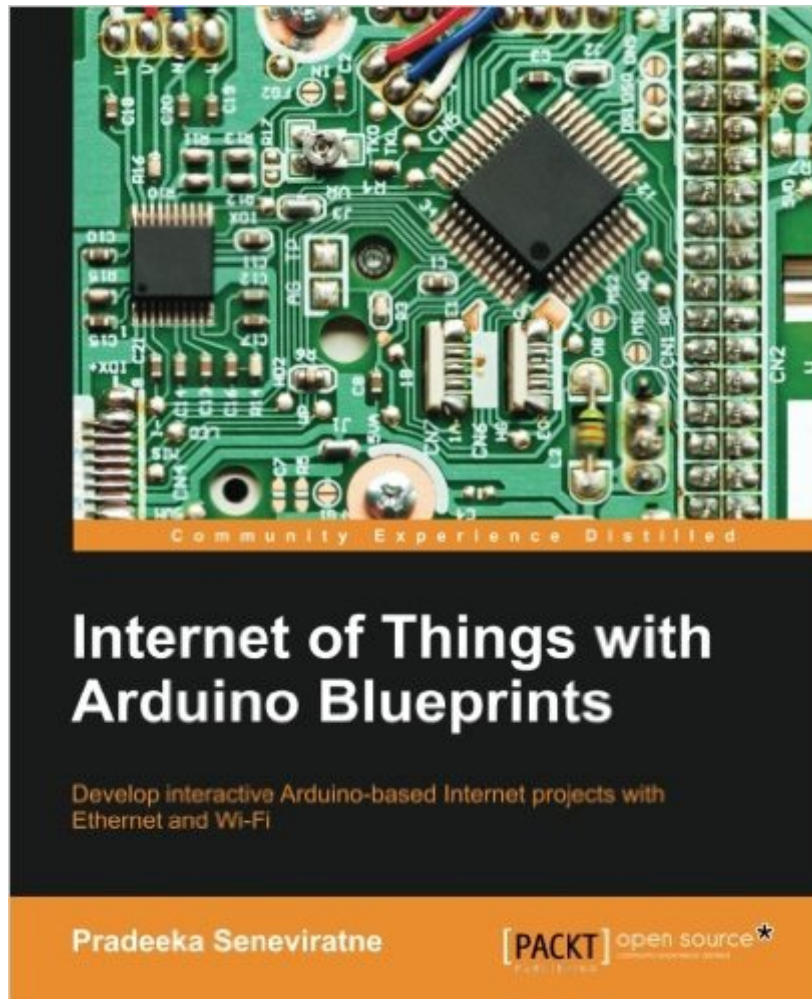# Internet Of Things With Arduino Blueprints

Synopsis

Develop interactive Arduino-based Internet projects with Ethernet and WiFiAbout This BookBuild Internet-based Arduino devices to make your home feel more secureLearn how to connect various sensors and actuators to the Arduino and access data from InternetA project-based guide filled with schematics and wiring diagrams to help you build projects incrementallyWho This Book Is ForThis book is intended for those who want to learn more about Arduino and make Internet-based interactive projects with Arduino. If you are an experienced software developer who understands the basics of electronics, then you can quickly learn how to build the Arduino projects explained in this book.What You Will LearnMake a powerful Internet controlled relay with an embedded web server to monitor and control your home electrical appliancesBuild a portable Wi-Fi signal strength sensor to give haptic feedback about signal strength to the userMeasure water flow speed and volume with liquid flow sensors and record real-time readingsSecure your home with motion-activated Arduino security cameras and upload images to the cloudImplement real-time data logging of a solar panel voltage with Arduino cloud connectorsTrack locations with GPS and upload location data to the cloudControl a garage door light with your Twitter feedControl infrared enabled devices with IR remote and ArduinoIn DetailArduino is a small single-chip computer board that can be used for a wide variety of creative hardware projects. The hardware consists of a simple microcontroller, board, and chipset. It comes with a Java-based IDE to allow creators to program the board. Arduino is the ideal open hardware platform for experimenting with the world of the Internet of Things. This credit card sized Arduino board can be used via the Internet to make more useful and interactive Internet of things projects.Internet of Things with Arduino Blueprints is a project-based book that begins with projects based on IoT and cloud computing concepts. This book covers up to eight projects that will allow devices to communicate with each other, access information over the Internet, store and retrieve data, and interact with usersâ •creating smart, pervasive, and always-connected environments. It explains how wired and wireless Internet connections can be used with projects and the use of various sensors and actuators. The main aim of this book is to teach you how Arduino can be used for Internet-related projects so that users are able to control actuators, gather data from various kinds of sensors, and send and receive data wirelessly across HTTP and TCP protocols.Finally, you can use these projects as blueprints for many other IoT projects and put them to good use. By the end of the book, you will be an expert in the use of IoT with Arduino to develop a set of projects that can relate very well to IoT applications in the real world.Style and approachEvery chapter in this book clearly explains how to assemble components through easy-to-follow steps on while laying out important concepts, code snippets, and expected

output results so that you can easily end up with a successful project where you can also enhance or modify the project according to your requirements.

Book Information

Paperback: 210 pages

Publisher: Packt Publishing - ebooks Account (October 27, 2015)

Language: English

ISBN-10: 1785285483

ISBN-13: 978-1785285486

Product Dimensions: 7.5 x 0.5 x 9.2 inches

Shipping Weight: 1 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars See all reviews (2 customer reviews)

Best Sellers Rank: #1,967,420 in Books (See Top 100 in Books)   #166 in Books > Computers & Technology > Hardware & DIY > Mainframes & Minicomputers   #598 in Books > Computers & Technology > Hardware & DIY > Single Board Computers   #5992 in Books > Computers & Technology > Networking & Cloud Computing > Internet, Groupware, & Telecommunications

Customer Reviews

This book is an excellent project book for intermediate to advanced Arduino users. The projects are clear, well-documented, and include all relevant code (downloadable separately). My principle reason for not giving this five stars is due to the fairly extensive BOM that you will need to build these projects.There are numerous somewhat specialized components required (Power SwitchTail, Arduino WiFi and Ethernet Shields, Adafruit Haptic Controller, liquid flow sensor, Hitachi HD44780 Compatible LCD, etc.), that while relatively easy to source, do represent quite a bit of investment in time and money. The required components are listed as prerequisites, with links to the product URL. It would have been nice to have everything presented as a BOM, with then-current cost and substitutes.Overall it's an excellent book of useful IoT projects for the Arduino.

I purchased this item directly from the publisher (which gives access to a nicely formatted PDF book). In terms of content, the book offers an impressive collection of hands-on projects, which are very useful for understanding how the Arduino can be used in networking applications. Note that the book is not a beginner's guide, in fact assuming a fair bit of experience in electronics and network programming (however, there are other books, also from Packt, that fulfill this purpose). I am docking one star for the following two reasons. First, the book currently requires specific items to be

used, which may not always be available. Perhaps providing guidelines on selecting alternative parts should be more appropriate. Second, Windows is assumed to be the operating system used, which means OSX or Linux users will at times have to cope with surprises and adjustments in the instructions. Perhaps an Appendix detailing modifications needed for other operating systems will be helpful.

Tkinter GUI Application Development Blueprints 40 Things to Give Up for Lent and Beyond: A 40 Day Devotion Series for the Season of Lent The Five Elements First Grade Geography Series: 1st Grade Books (Children's How Things Work Books) Designing Connected Products: UX for the Consumer Internet of Things Hacking: How to Hack Computers, Basic Security and Penetration Testing (Hacking, How to Hack, Hacking for Dummies, Computer Hacking, penetration testing, basic security, arduino, python) Arduino: 101 Beginner's Guide (Tech Geek Book Book 5) Python Programming for Arduino The Maker's Guide to the Zombie Apocalypse: Defend Your Base with Simple Circuits, Arduino, and Raspberry Pi Evernote: Discover The Life Changing Power of Evernote. Quick Start Guide To Improve Your Productivity And Get Things Done At Lightning Speed! (Evernote, ... Declutter, Time Management, Evernote Tips) Internet Literature in China (Global Chinese Culture) Teddy Bears: 15 Things You Must Know About Teddy Bears TV Without Cable: Guide to Free Internet TV and Over-the-Air Free TV (Streaming Devices Book 1) My Tv Without Cable: Your Guide To Free Internet TV And Over-The-Air Free TV Programming Arduino with LabVIEW Arduino LED Cube Projects Make: Bluetooth: Bluetooth LE Projects with Arduino, Raspberry Pi, and Smartphones Hacking: Basic Security, Penetration Testing and How to Hack (hacking, how to hack, penetration testing, basic security, arduino, python, engineering) Arduino: a comprehensive starting up guide for complete beginners Adventures in Arduino Internet of Things with Arduino Blueprints