Arduino Workshop: A Hands-On Introduction With 65 Projects

DOWNLOAD EBOOK
Synopsis

Learn the Basics, Build the Projects, Create Your Own

The Arduino is a cheap, flexible, open source microcontroller platform designed to make it easy for hobbyists to use electronics in homemade projects. With an almost unlimited range of input and output add-ons, sensors, indicators, displays, motors, and more, the Arduino offers you countless ways to create devices that interact with the world around you. In Arduino Workshop, you’ll learn how these add-ons work and how to integrate them into your own projects. You’ll start off with an overview of the Arduino system but quickly move on to coverage of various electronic components and concepts. Hands-on projects throughout the book reinforce what you’ve learned and show you how to apply that knowledge. As your understanding grows, the projects increase in complexity and sophistication.

Among the book’s 65 projects are useful devices like: A digital thermometer that charts temperature changes on an LCDA GPS logger that records data from your travels, which can be displayed on Google Maps A handy tester that lets you check the voltage of any single-cell battery A keypad-controlled lock that requires a secret code to open You’ll also learn to build Arduino toys and games like: An electronic version of the classic six-sided die A binary quiz game that challenges your number conversion skills A motorized remote control tank with collision detection to keep it from crashing

Arduino Workshop will teach you the tricks and design principles of a master craftsman. Whatever your skill level, you’ll have fun as you learn to harness the power of the Arduino for your own DIY projects.

Book Information

Paperback: 392 pages
Publisher: No Starch Press; 1 edition (May 10, 2013)
Language: English
ISBN-10: 1593274483
Product Dimensions: 7 x 1 x 9.2 inches
Shipping Weight: 1.9 pounds (View shipping rates and policies)
Average Customer Review: 4.6 out of 5 stars See all reviews (129 customer reviews)
Best Sellers Rank: #70,969 in Books (See Top 100 in Books) #27 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics #37 in Books > Computers & Technology > Hardware & DIY > Single Board Computers #43 in Books > Computers & Technology > Computer Science > Robotics

Customer Reviews
John Boxall’s new book, Arduino Workshop: A Hands-On Introduction with 65 Projects (No Starch Press) is a comprehensive book that is well suited to both the neophyte and to the experienced electronic project hobbyist. I’ve read several books on the Arduino platform and have reviewed a few, but Mr. Boxall’s book has raised the bar several notches. I reviewed the paperback version (a whopping 392 pages!) and found it to extremely well written: the prose is clear without being simplistic and each chapter is well laid out. Boxall explains the genesis of the Arduino board and guides the reader through obtaining and installing the Arduino IDE software for the Windows, Linux and Mac OS X operating systems. Each chapter begins with an introduction to explain the goal of the chapter and ends with a "Looking ahead" paragraph that adds further insight and prepares the reader for the next chapter. The book’s 65 projects range from lighting LEDs, a kind of Arduino "Hello world" (though a "Hello world" project occurs in the chapter discussing driving LCDs), to projects incorporating cell phone technologies like SMS text messages, projects about GPS and even several dealing with the construction of a tank-like robot, my personal favorite. Many of the projects start with a simple version then build progressively more sophisticated versions by adding more components or features with the goal of teaching perhaps a specific technology, or as an exercise to encourage the reader to consider the Arduino’s flexibility. For example, the tank robot project starts by using micro-switches to assist with "collision avoidance." Then the reader is guided through modifying the robot to use infrared components to avoid objects, and then to using ultrasonic distance calculation components!

Download to continue reading...
Crochet, Knitting Projects, Cochet Projects, DIY Projects, Crochet For Beginners, Crochet ...
Tunisian Crochet, Make Money With Crochet)

Dmca