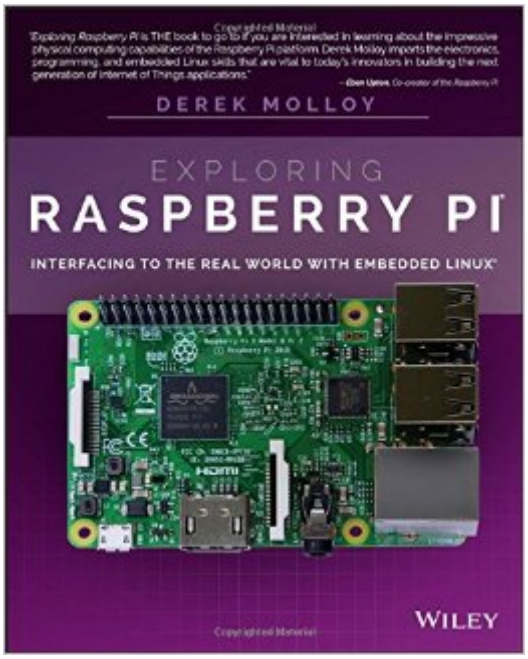
Exploring Raspberry Pi: Interfacing To The Real World With Embedded Linux



Synopsis

Expand Raspberry Pi capabilities with fundamental engineering principles Exploring Raspberry Pi is the innovators guide to bringing Raspberry Pi to life. This book favors engineering principles over a ’recipe’ approach to give you the skills you need to design and build your own projects. You’ll understand the fundamental principles in a way that transfers to any type of electronics, electronic modules, or external peripherals, using a "learning by doing" approach that caters to both beginners and experts. The book begins with basic Linux and programming skills, and helps you stock your inventory with common parts and supplies. Next, you’ll learn how to make parts work together to achieve the goals of your project, no matter what type of components you use. The companion website provides a full repository that structures all of the code and scripts, along with links to video tutorials and supplementary content that takes you deeper into your project. The Raspberry Pi’s most famous feature is its adaptability. It can be used for thousands of electronic applications, and using the Linux OS expands the functionality even more. This book helps you get the most from your Raspberry Pi, but it also gives you the fundamental engineering skills you need to incorporate any electronics into any project. Develop the Linux and programming skills you need to build basic applications Build your inventory of parts so you can always "make it work" Understand interfacing, controlling, and communicating with almost any component Explore advanced applications with video, audio, real-world interactions, and more Be free to adapt and create with Exploring Raspberry Pi.

Book Information

Paperback: 720 pages

Publisher: Wiley; 1 edition (June 13, 2016)

Language: English

ISBN-10: 1119188687

ISBN-13: 978-1119188681

Product Dimensions: 7.4 x 1.4 x 9.2 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 4.9 out of 5 starsÂ Â See all reviewsÂ (21 customer reviews)

Best Sellers Rank: #11,688 in Books (See Top 100 in Books) #1 inÂ Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Embedded Systems #2 inÂ Books > Computers & Technology > Hardware & DIY > Single Board Computers #2 inÂ Books > Computers & Technology > Operating Systems > Linux > Programming

Customer Reviews

This book touches on everything that a designer needs to understand to design a real-world project using the Raspberry Pi. It doesn’t offer specific "cookbook" projects but instead teaches the design principles needed to implement your own projects by integrating the RPi with electronics and software to accomplish a practical task.I am a retired electronics and systems engineer have been designing systems like these since 1970, so I have a pretty good understanding of what is required for this type of project, but only a little experience with the specific tools and development required in the RPi/Linux environment. "Exploring Raspberry Pi" is ideal for me because it give me all the information I need to become comfortable in this environment.The target audience for this book is pretty broad, although I think that it would be best for the user to have at least a basic understanding of programming and electronics. Those with less experience will need to use this book as a guide to show them what topics they need to study using other books or the internet. As you go through the book, if there is anything that you don’t understand, you can then search out the resources needed to learn it.This book is structured in three main sections and the topics get more and more advanced as you go through it.Part 1 is Raspberry Pi BasicsPart 2 is Interfacing, Controlling,and CommunicatingPart 3 is Advanced Interfacing and InteractionSince I am coming to the RPi from other computing environments, I found Part 1 very helpful in understanding the differences between them. It serves as an excellent orientation to RPi.

Projects Programming (Raspberry Pi Books, raspberry pi projects, raspberry pi for dummies) Programming Raspberry Pi 3: Getting Started With Python (Programming Raspberry Pi 3, Raspberry Pi 3 User Guide, Python Programming, Raspberry Pi 3 with Python Programming) Raspberry Pi 2: Raspberry Pi 2 Programming Made Easy (Raspberry Pi, Android Programming, Programming, Linux, Unix, C Programming, C+ Programming) Raspberry Pi 3: Complete Beginners Guide with Over 20 Projects for the Pocket-Sized Computer: Total Beginners Guide to Exploring Linux and Projects for the Raspberry Pi 3 Linux: Linux Guide for Beginners: Command Line, System and Operation (Linux Guide, Linux System, Beginners Operation Guide, Learn Linux Step-by-Step) Analog Interfacing to Embedded Microprocessor Systems, Second Edition (Embedded Technology Series) Linux for Embedded and Real-time Applications, Third Edition (Embedded Technology) Linux for Embedded and Real-time Applications (Embedded Technology) Linux for Embedded and Real-time Applications, Second Edition (Embedded Technology) Linux: Linux Mastery. The Ultimate Linux Operating System and Command Line Mastery (Operating System, Linux) Embedded Systems: Real-Time Interfacing to ArmÂ® CortexTM-M Microcontrollers Embedded Linux Primer: A Practical Real-World Approach (Prentice Hall Open Source Software Development Series) Embedded Linux Primer: A Practical Real-World Approach (2nd Edition)