

Adventures in Raspberry Pi & Raspberry Pi User Guide

Andrew Gregory spends some rainy days with the world's favourite Linux machine.

The Raspberry Pi came about because Eben Upton, the PiFather, decided that something needed to be done to improve the quality of students applying to study on his university computer science courses. So far, so sensible, and you can read more about the effect that the raspberry Pi is having on education in our interview with the Pi Foundation's education team on page 46. But the Pi has also found an audience among the massed legions of home tinkerers, shed solderers, robot builders, beer brewers and people who generally have an interest in home hackery.

The two books we're looking at here have these two readerships in mind. *Adventures in Raspberry Pi*, by Carrie Anne Philbin, is aimed squarely at children, teachers and parents looking for a way into computer science. *Raspberry Pi User Guide*, with its oh-so-serious graph paper on the cover (a brilliant idea) is targeted at the older hacker, at adults who have some experience of programming, and who want to transfer their existing knowledge to this relatively new device.

It's not surprising then that *Adventures* is the more accessible of the two. The book is divided into nine adventures, beginning with

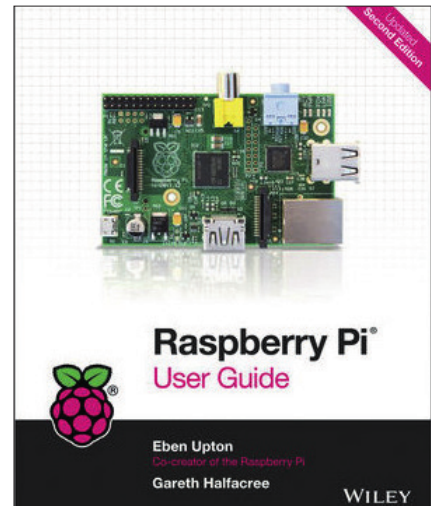
installing Raspbian with Noobs, an introduction to the command line, the Scratch programming language, drawing with a Python turtle (just like we're doing this issue with our Python tutorial on p96). The final project is building a jukebox with the Pi, using a speaker, a breadboard an LCD display and the Pi's GPIO pins. This is the sort of thing that a supportive parent would be likely to find were they to simply Google for Raspberry Pi projects, and for most people it's just too challenging. *Adventures in Raspberry Pi* slowly builds up the difficulty, constantly challenging the newcomer to learn more and improve on their skills, and that's what makes it such an excellent book for teachers, kids, parents or just non-technical humans who want to learn a bit.

Raspberry Pi User Guide

In contrast, *Raspberry Pi User Guide* is very much preaching to the converted. It's a geek fest, and almost seems designed to deter casual readers. There's a discussion on the merits of x86 vs ARM chips for instance, and sections on relatively advanced and stuff like network configuration and HDMI display modes.

Whereas *Adventures* presents a smooth learning curve, *User Guide* feels like it's had facts packed into it rather than projects, diminishing its usefulness as a learning tool. The chapter on Scratch, for example, the programming language aimed at kids, comes after the chapter on using the Pi as a web server. This doesn't make sense to us.

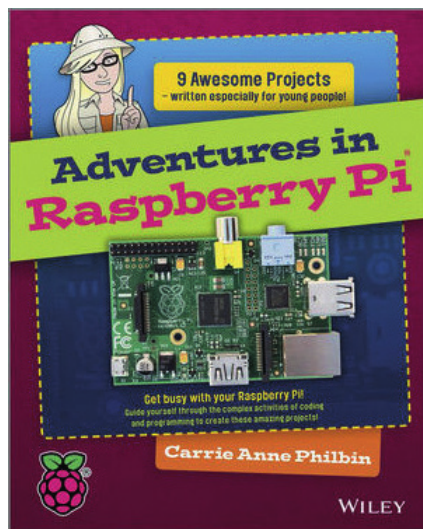
While not that great as a structured programme of learning, *User Guide* is a great



If we had to sum this book up in a word, that word would be: accessible.

reference book. There's (luxury!) a nice index, and its pages speak of authority. Even though it's not especially weighty at 300 pages – OK, so it's not light reading, but computer tomes often come in at around the 800 mark – it feels like a definitive, official work. There's a confidence to the writing that you can feel as a reader. This feels like a definitive work.

Which of these books work for you depends on them. We'd recommend them both in a heartbeat. You won't like both of these, but you will definitely like one or the other, depending on where you are in your Linux journey.



If we had to sum this book up in a word, that word would be: authoritative.

LINUX VOICE VERDICT

ADVENTURES IN RASPBERRY PI

Author Carrie Anne Philbin
 Publisher Wiley
 ISBN 978-1-118-75125-1
 Price £14.99/US \$24.99/CAN \$29.99

Brilliantly thought out, this is the perfect guide to catalyse computing curiosity.



RASPBERRY PI USER GUIDE

Authors Gareth Halfacree & Eben Upton
 Publisher Wiley
 ISBN 978-1-118-79548-4
 Price £17.99/US \$19.99/CAN \$23.99

Contains many facts, all of them true. The definitive reference guide.



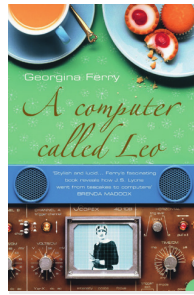
A Computer Called LEO

Ben Everard discovers that tea shops and computers go together.

The story of how Silicon Valley grew to dominate the computing world has been told many times, but it's not the only tale of how computers developed. While IBM were still building adding machines, a British company famed for its teashops built its own computer and ran the world's first office computing jobs. They ran payroll, management accounting jobs and others long before anybody else realised such things were possible.

In *A Computer Called Leo*, Brenda Maddox charts the history of this very British company and how it started the office computer revolution. It's not a technical exploration of how they worked, but a gentle history of what ultimately became a side-note in technology.

It is, perhaps, an important story of how plucky British boffins created some of the best technology in the world, but ultimately failed in the face of international competition. You can read this as a cautionary tale or an entertaining story,



It's just like *Downton Abbey*, just with computers and forty years into the future.

just don't expect a tech-heavy geek fest. It's perfect for reading over a cream tea on a sunny afternoon with the tune of Rule Britannia gently wafting through the air.

LINUX VOICE VERDICT

Author Brenda Maddox
 Publisher Harper Collins
 ISBN 978-1-84115-186-1
 Price £11.99

Computers, tea and cakes. Chuck in a pint of real ale and you've got the perfect way to spend an afternoon.



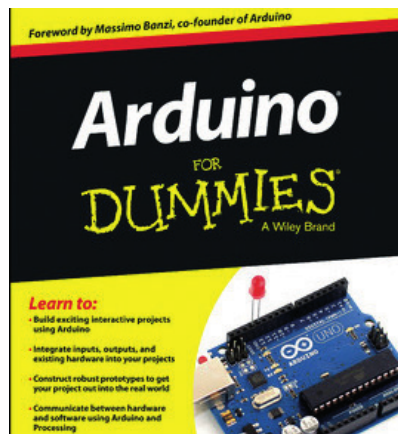
Arduino for dummies

Ben Everard ignores this book's cover, then enjoys the contents.

The Arduino is probably the easiest way to get started in interactive electronics. That said, anything that involves programming or electronics is guaranteed to scare some people. Anything that involves both programming and electronics (as the Arduino does) is going to scare quite a few people.

This reviewer has always steered clear of 'For Dummies' titles because they seem to confuse not knowing about a subject with stupidity. This book is clearly for people who don't know about the Arduino, dummy or not. A dummy who happened to know about the Arduino wouldn't have much use for the book and is probably a very dangerous person to have around (never let them plug anything into your power sockets).

Title aside, this book is a gentle intro to the Arduino starting from the assumption that the reader knows nothing about electronics or programming and building up from there. Despite this, it covers a wide range of hardware and projects.



Ben isn't a dummy, but he enjoyed this book.

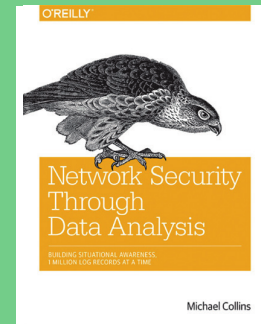
LINUX VOICE VERDICT

Author John Nussy
 Publisher John Wiley and sons
 ISBN 978-1-118-44637-9
 Price £16.99

One of the gentlest introductions to the Arduino, if you can stomach the title.



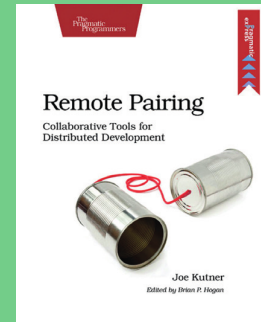
ALSO RELEASED...



Situational awareness is the key phrase for network analysis

Network Security Through Data Analysis

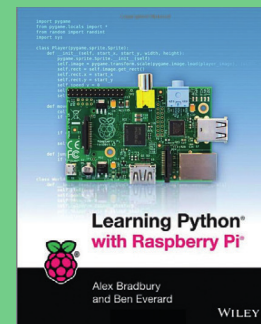
This book looks like the networking security equivalent to *Crystal Maze*. It gives you the tools to snoop on your own network traffic in an attempt to head off the bad guys before they even know they've been found.



Tin cans and a piece of string? You were lucky. All we had were yoghurt pots.

Remote Pairing

Feeling lonely? Paired programming is the latest thing to help isolated programmers develop more of a social life, whilst learning to interact with real human beings. Actually, it's not. It's a cool new methodology that's proving two heads are better than one.



Python and Pi: a match made in heaven.

Learning Python with Raspberry Pi

This book looks so wonderful, so learned and so entertaining we've already enlisted the help of top book reviewer, Brander Eve, to take a look at this title for us. Early reports indicate it's everything we hoped it would be, but we'll wait on Brander's final verdict next month.