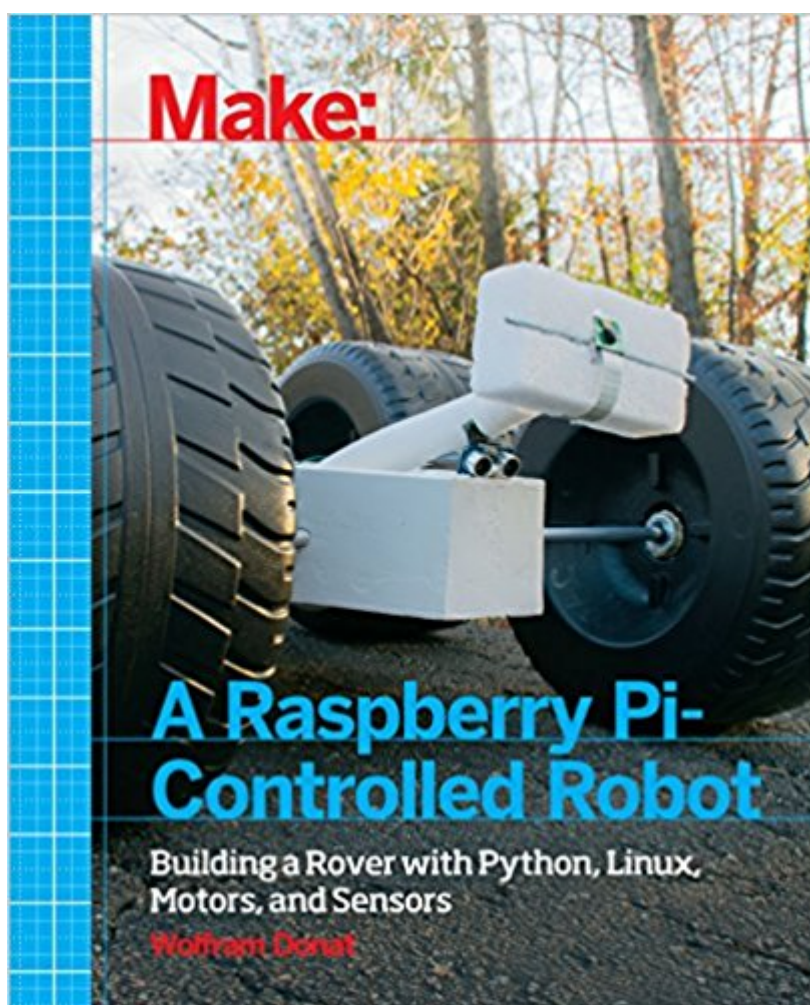## The book was found

Make A Raspberry Pi-Controlled Robot: Building A Rover With Python, Linux, Motors, And Sensors

Synopsis

Make a Raspberry-Pi Controlled Robot teaches you how to build a capable and upgradeable personal robot for around $100. You'll learn how to control servos, respond to sensor input, and know where your bot is using GPS. You'll also learn many ways to connect to your robot and send it instructions, from an SSH connection to sending text messages from your phone.

Book Information

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Average Customer Review: 3.9 out of 5 stars 15 customer reviews

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Customer Reviews

Wolfram Donat is a graduate of the University of Alaska Anchorage, with a B.S. degree in Computer Engineering. Along with an interest in robotics, computer vision, and embedded systems, his general technological interests and Internet expertise serve to make him an extremely eclectic programmer. He specializes in C and C++, with additional skills in Java, Python, and C#/.NET. He is the author of several books and has received funding from NASA for his work in autonomous submersibles.

I wanted very much to like this book, but I just can't... When an author takes on the endevour of teaching the reader about something, they take on the responsibility to do so accurately. This is especially true on technical subject. Unfortunately, this book falls way short.At first I thought the author just wasn't a hardware guy. I've run into this in the past. My freshman year, I had a EE-Digital Design professor that didn't truly understand the analog the digital world is built on. He could quote the "rules" of EE-DD off the top of his head, but didn't know why they existed or how to tweak them

to his use. I thought this after reading things like saying that there's the hall effect sensor is "nothing more than a simple switch". Yes, you can purchase a Hall Effect SWITCH, but the author shows a phidgets 1108 Hall Effect SENSOR - an analog device. Even a simple look at the phidgets page for the part shows it is "provides a voltage output that is proportional to the applied magnetic field." So no, it is NOT "nothing more than a simple switch". He also writes that he sees little use for such a device on a rover "outside a certain small niche of applications". The most common use for the device is rotational speed encoding... like used when trying to keep 2 motors running at the same speed to make a rover go in a straight line. Maybe the author should have look at Make:Sensors on the subject which even mentions speed encoding and talks about how to read it as an analog device.Then a page later or so, he tells about pull up/down resistors. He fairly accurately describes their use and floating inputs, but then writes that we can "do the same in code". The code simply enables the hardware pull up/down resistors that's built into the RPi. There's no software that can fix a floating input.The next page we hit the use of a "reed switch" where how shows a micro-switch. A reed switch is a magnetic switch like those used in burgular alarm systems. Two or three reeds are in a glass capsule with inert gas that switches when in proximity to a magnet. Just in case I was just used to common terms, I searched and could find no reference to a microswitch being called a reed switch.Then I started looking at the code snippets included in the book. Basic generally accepted software constructs like using a constant for pin assignment aren't there. So if we want to change a GPIO pin, we'd need to change it in every line of code that uses it. And if you mix multiple segments, suppose that the same pin for different sensors, we need to fix this BEFORE trying to incorporate it. This severely limits the reusability of the code.So while I wanted to like this book, I just couldn't. I couldn't even finish it. I'm actually a bit sorry I bought it. Maybe I'm expecting too much, but if you're teaching a technical subject, please research - at least the simple things, which this book doesn't.

Not very useful, the book is a general intro and would require a considerable amount of shop tools and skill to actually build the device he describes. The code examples are printed in the book and there does not seem to be any way to download the code for the examples(I checked the book website, there are no links to any example code). I found Dr Simon Monks' book on programming the Raspberry Pi to be more useful, I actually built the little robot he describes and learned some Python along the way.Rob

The book doesn't tell you how to control the GPIO pins in the Python shell. Or in the Graphical User

Interface (GUI).It's a great book, but he even says that he'll leave the software for his readers to figure out,

This is a good book in many ways. The most important thing I got out of this book is the idea that building a decent sized autonomous robot is not a forbidding task. And, indeed, I've started converting an old pedal car into an autonomous vehicle using many of the ideas from this book. Kudos to the author for that kick in the pants!However, this book does not present a cut-and-dried set of instructions. You must be ready to read between the lines in order to get the most out of it. Not necessarily a bad thing but it's when I started doing it myself that I noticed the little things left unexplained. Given that I think anyone high school age and over should be able to do this on their own and what a marvelous project for a younger child and adult to share!And, as a professional and hobby software developer of long repute, I feel I must point out that the code examples are of fairly poor quality. They get the job done but certainly are not the best examples of how to do so! Take it as a challenge to refactor the code to be more efficient and you will be rewarded with developing good coding skills!In summation, if you have any interest in graduating up from tiny toy robots to something substantial than ignore any negative reviews and use this book as one of your guides. A lot of good ideas in here and they should not be ignored because of a few flaws.

the idea is great. but i think for beginner, the quickiest way to get the hardware is to buy them. i bought makeblock for this purpose.

Well someone needs to invent skynet, might as well be me.

Nice intro into Pi projects

Amazing book with very practical examples to run with.

Make a Raspberry Pi-Controlled Robot: Building a Rover with Python, Linux, Motors, and Sensors Python: The Complete Python Quickstart Guide (For Beginner's) (Python, Python Programming, Python for Dummies, Python for Beginners) Python: Programming: Your Step By Step Guide To Easily Learn Python in 7 Days (Python for Beginners, Python Programming for Beginners, Learn Python, Python Language) Raspberry Pi 3: The Ultimate Guide on how to design and build your own projects with Raspberry Pi 3 (Computer Programming, Raspberry Pi 3) (Raspberry Pi ...

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