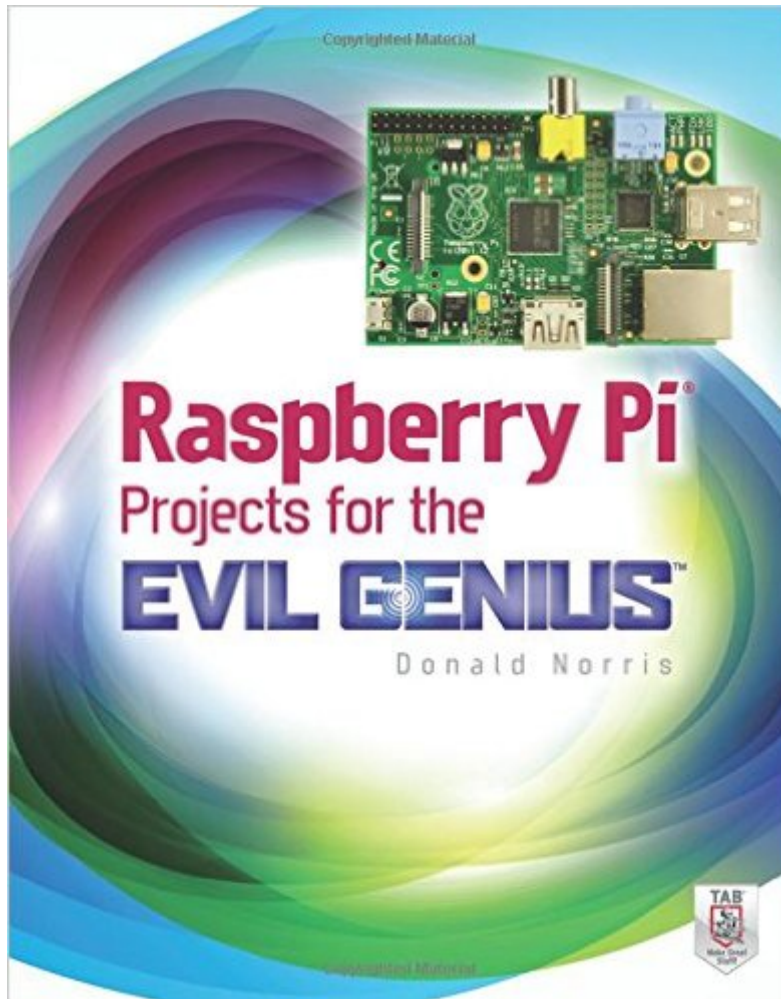# Raspberry Pi Projects For The Evil Genius

Synopsis

A dozen fiendishly fun projects for the Raspberry Pi! This wickedly inventive guide shows you how to create all kinds of entertaining and practical projects with Raspberry Pi operating system and programming environment. In Raspberry Pi Projects for the Evil Genius, youâ ™ll learn how to build a Bluetooth-controlled robot, a weather station, home automation and security controllers, a universal remote, and even a minimalist website. Youâ ™ll also find out how to establish communication between Android devices and the RasPi. Each fun, inexpensive Evil Genius project includes a detailed list of materials, sources for parts, schematics, and lots of clear, well-illustrated instructions for easy assembly. The larger workbook-style layout makes following the step-by-step instructions a breeze. Build these and other devious devices: LED blinker MP3 player Camera controller Bluetooth robot Earthquake detector Home automation controller Weather station Home security controller RFID door latch Remote power controller Radon detector Make Great Stuff! TAB, an imprint of McGraw-Hill Professional, is a leading publisher of DIY technology books for makers, hackers, and electronics hobbyists.

Book Information

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Customer Reviews

Sorry this book is not cleverly or well written. It is wrought with errors. Typos and figures that are continually miss-referenced throughout the book. Minor enough, but seriously who edited this book?

Heck entire lines of code missing from projects and the author continually referenced GPIO designations as pin numbers. Pin numbers are NOT GPIO designations. Pin numbers correspond to the physical pins located on the board and GPIO designations refer to the GPIO assignments that correspond to a specific pin #. For example project 1 where all this starts and continues throughout the book he continually refers to pin 18 when in fact he's referring to GPIO18 which is really physical pin 12. This might not seem like a big deal, but in reality it is. Especially when the author continually states that connecting to the wrong "pin" can destroy your Pi. Note to the author either refer to the actual pin number and include this information as comments in your code or stick to using GPIO designations. Example: it's not PIN 18 it is GPIO 18. Do not confuse the two!Furthermore I find the authors choice in projects irresponsible to the reader and he has condescending and lazy writing style. First he never provides convenient parts lists for any of the projects. You are left as the reader to dig through the text to compile the information into a list so you can go buy the multitude of parts you are going to need to complete these projects. Hint to author a simple section at the beginning of each project describing what is needed with a simple referable table that includes a list of parts and where you sourced them is not too much to ask for. Second and a warning to prospect buyers of this book most of the projects in this book are "expensive" to complete. Control a camera? Well if you don't have a camera like the authors, who is admittedly a self professed "photography buff", then good luck. Not everyone is going to have a camera that has remote control capability like the author's or even the accessories needed if they do. The cost of the projects just goes up from there. So if you are looking for some simple but insightful projects that you can complete on a modest budget I urge you to seek another reference.Then where a project could get interesting he goes off on some tangent that this is a "beginners" book. Never mind the technicality of the project itself like having to physically build a robot or create other rather complex electronic circuits. No no, when it comes to programming in a language he himself calls "easy to learn" he wants to keep things simple. For example the MP3 player project (project #2). I'm thinking yes he has an opportunity to show us how to perform standard input with the Pi and Python. Now now I got ahead of myself. Shame on me. The author provides this gem of a response after correctly concluding that most people reading this are wondering why we are simply binding a CLI command statement to 3 buttons to play 3 static songs and not going further to skip forward or backward through a directory of songs. Yup if you read that that's all his MP3 player does. Push 1 of 3 buttons to play 1 of 3 mp3 files. That's it. No skip, repeat, etc. The author writes and I quote, "Changing or paralleling input device is not a trivial change, so I felt it was not suitable to include it in a beginning project book." What? Beginning project book with projects that cost you $$$ each to build? Building a robot,

beginner? This is a joke right? Nope.The author also sees fits to take you along on a pointless journey into his past life as an acoustical engineer. A journey that is neither interesting nor useful or relevant to the book. It's more like self glorification and being drug along on his anecdotal mind trips.What condescending part you ask? Try this on for size. After the author drones on about this and that he writes, "I will attempt to point out these challenging program areas in the book projects to help avoid confusion on your part." You get that, confusion on YOUR PART. Like your too stupid to understand. He could've just left the sentence as is with out "on your part" and it would've been just fine. But no, his choice of text in my opinion clearly indicates the author has a high opinion of himself and assumes the reader is a buffoon. And of course we aren't ready to handle "std input" but he sure can have you go out and buy $$$$ in parts to build his stupid pointless projects that really don't provide much insight into the Raspberry Pi or Python.No, this book was all frustration for me. The writing and editing errors that started on page 2 to condescending tone to pointless expensive projects that most people will not even attempt to complete. Perhaps you'll like it better. My recommendation is to pass on this one and buy another Pi projects book that doesn't cost an arm and a leg to complete the projects and projects that are more relevant with more insight into the inter-workings of the Raspberry Pi and the use of Python.

Because the Pi is a fully functional PC on a little board, with many features (including multimedia!) in the class of Arduino and Propeller, most project books don't have the space to get into the basics of Pi, like loading the O/S and many other details. Since this is a UK unit, many of the websites (even though this is all open source) are a chore to sort out. Getting the free downloads shown in this book is worth the price of the book itself, DO NOT pay for the O/S on a site, it is free on many others, as shown in this fine little gem!True to the evil genius series, this book is an exception to the completeness issue! Not only are the projects fully detailed, with carefully tested code that works without glitches, the author also takes the time to go over the basics of Pi as well, including getting up and running before the project phases. The book has something in it for everyone because of that, from beginners to advanced designers and hobbyists. As a roboticist and teacher, I'm using the Pi more and more in place of Arduino programs (called sketches) because the motor controls are much more like the most advanced robotics, which often use Linux. The Department of Defense uses Linux in some of their drones! VERY scalable system.A great way to learn not only Pi, but electronics, programming and much more, from grade school to graduate engineer. And in case you're new to Pi, many folks are actually making the cheapest PC's on the planet with this little monster, INCLUDING HDTV interfaces for their monitors! The (non profit educational) Pi developers

were smart enough to include multi media, which is amazing for a chip this size. If you want to go "big time" you can even combine it seamlessly pin to pin with Arduino for automation, or Propeller for multi processing. Highly Recommended.

I teach an Introduction to Computer Science class at a University. The college used some grant money to buy a bunch of Pi kits (Canakit Ultimate Starter Kit, Pi 2), and they bought a load of these books for the students to use. My main issue with this book is in layout and clarity. Not one of the projects has a clearly identified part list a user needs to purchase to complete the project. At the beginning of every chapter, a complete list of parts and part numbers should be listed. Instead you figure out the parts as you read through the chapter. The GPS project looked promising, but the bullet list near the beginning is a bunch of features that the GPS receiver has, which the author then goes on to say that many of those features will not even be used. Huge waste of space and clarity.I appreciate that the author takes the time to indicate an electrical diagram for many of these projects, but that is not worth much of anything for the Pi. The user needs to have a clear indication of how to wire up the components on the project board to the GPIO pins. And to top it off the book is using an old Pi breakout (Pi Cobbler), which is even less understandable when you are using a Pi 2 kit which has the GPIO interface board.For example, in the GPS chapter, the only diagram the user has on how to wire everything up is a black and white small image, where the jumper wires cross over each other making it difficult to see exactly where each is going. Granted the author writes in text to connect TX to RX and so forth, but it would have been very easy and clear to simply draw the layout. Figure 5-15 that diagrams all this is still confusing as some wire is running off into who knows where in the image, and is never explained.Overall this is not a well constructed guide for a beginning user in a learning environment, which maybe it is not intended to be.

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