Programming The Raspberry Pi: Getting Started With Python

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**Synopsis**

Program your own Raspberry Pi projects Create innovative programs and fun games on your tiny yet powerful Raspberry Pi. In this book, electronics guru Simon Monk explains the basics of Raspberry Pi application development, while providing hands-on examples and ready-to-use scripts. See how to set up hardware and software, write and debug applications, create user-friendly interfaces, and control external electronics. Do-it-yourself projects include a hangman game, an LED clock, and a software-controlled roving robot. Boot up and configure your Raspberry Pi Navigate files, folders, and menus Create Python programs using the IDLE editor Work with strings, lists, and functions Use and write your own libraries, modules, and classes Add Web features to your programs Develop interactive games with Pygame Interface with devices through the GPIO port Build a Raspberry Pi Robot and LED Clock Build professional-quality GUIs using Tkinter

**Book Information**

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**Customer Reviews**

It amazes me how in around 150 pages this book packs so much in. Although I've been using both Python and my Raspberry Pi for a while now, this book has so many little nuggets of information that I see it as being equally useful to both a complete beginner and an expert too. I wish it had been available a few months ago, since it would have saved me considerable time and effort spent finding out how to get to grips with my Raspberry Pi. Without bamboozling you with jargon, this book quickly demystifies what is required to get the most out of your raspberry pi. The first two chapters of the book give a comprehensive introductory guide that many beginners will warm to, it includes
getting your Raspberry Pi working with a helpful inventory of the extra parts needed and choices available. Then Chapter 3 takes you straight into learning how to program with Python. There is a great balance between a rapid pace and just the right amount of instruction & guidance needed. Chapter 4 takes you on a whistle-stop tour through the real power tools in Python, dictionaries, tuples and lists before arriving at Chapter 5 object oriented programming. Chapter 6 simplifies how to interact with file handling and creating a very basic internet search engine. Chapters 7 and 8 describe how to create visual environments controlled by Python with Tkinter and Pygame tutorials. Chapters 9 through 11 is where the real exciting activity grows with robot interfacing projects. This is clearly a real strength of the author. There are comprehensive instructions and explanations how to build clocks, and robot controlled vehicles with ultrasonic obstacle detectors. This book ideally suited me since I get impatient with lengthy explanations that I don’t require.

I would consider the first two chapters in this book on getting the Raspberry Pi setup to be throw away. While I can appreciate the fact it was there as an introduction, I don’t believe there is enough information presented in these chapters to give someone who actually needs it enough to go on. If you are looking for guidance in getting up-and-running with your Raspberry Pi for the first time, I would look at using sources other than this book. Chapters 3 through 8 are an introduction to Python, however I would certainly not categorize this as being one of the better Python tutorials I have seen. I consider myself to be an intermediate Python developer and even I found some of these chapters to be more difficult to read through than they should have been for something that is supposed to be teaching the language. I will say the GUI chapter as an intro to using TK wasn’t too bad though. It should also be noted that there is nothing in these chapters that is Raspberry Pi specific. As such, I would highly recommend looking at other texts if you are considering using this as your introduction to Python. Finally in the 9th chapter (about 2/3rds of the way through the book) we get to programming for the Raspberry Pi specifically. The first of these chapters is primarily dedicated to interface boards and the Arduino. The next chapter actually starts to cover what I would call programming specifically for the Raspberry Pi platform. The third chapter in the group comes across mostly as a tutorial (or sales pitch) for the authors own hardware interface board. In summary, this was not as good as his Arduino book - I was expecting more.

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