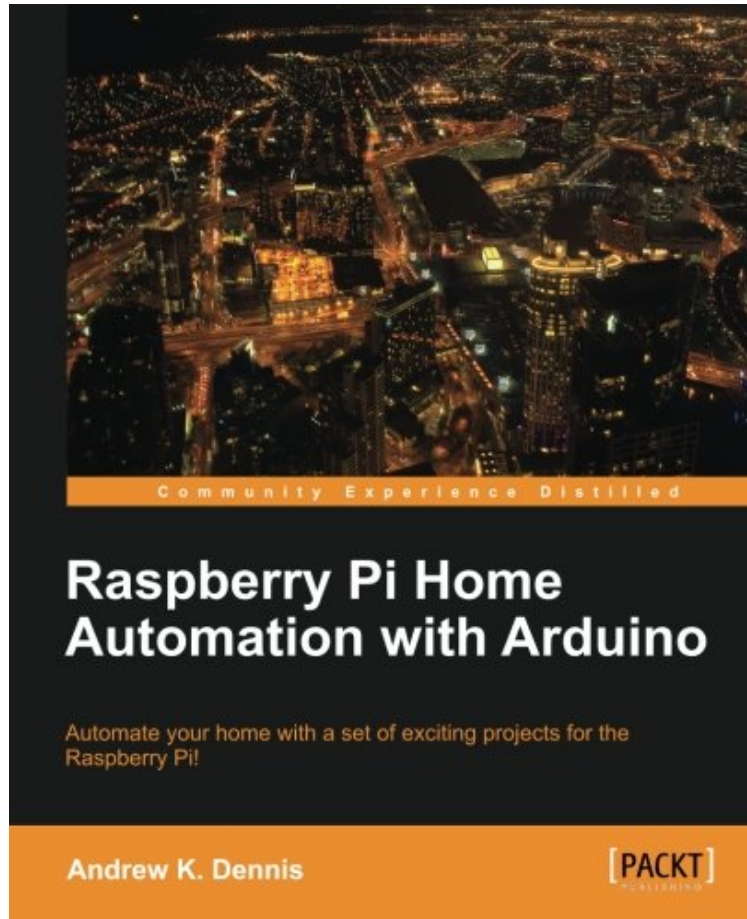


(Library ebook) Raspberry Pi Home Automation with Arduino

Raspberry Pi Home Automation with Arduino

Andrew K. Dennis

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Andrew K. Dennis : Raspberry Pi Home Automation with Arduino before purchasing it in order to gage whether or not it would be worth my time, and all praised Raspberry Pi Home Automation with Arduino:

1 of 1 people found the following review helpful. A how to guide to home automation. By nhevilwench Raspberry Pi Home Automation with Arduino is an introductory guide to building projects for your home using the Raspberry Pi computer and the Arduino to Pi bridge shield. The book starts off with an introduction to the history of home automation and provides some background to the Raspberry Pi, Arduino and Arduino to Pi technology. Following this we learn how to setup a small LED and switch it on and off. This is the "Hello World" program of the electronics realm. Having got to grips with wiring the Pi up to the Arduino shield and subsequently connecting up some electronic components, we move onto some more complex projects. In the following chapters the book covers setting up relays that can switch a fan on and off using mains electricity. You are guided through a basic thermostat circuit and then explore HTSQL, SQLite and Python in order to build a database for storing room temperatures. I'd never used HTSQL before so this was a great introduction to a new technology. The book finishes off with some future projects and gives us a guide to the Gertboard. For those in the US Lady Ada has the vast majority of components you'd need on her

website and they are all pretty cheap. The Arduino to Pi shield I had to order from the Cooking Hacks website. Who would I recommend this book for? 1.) If you already have a bunch of Arduino shields and want to use them with the Pi, this is the perfect book. Since buying the Arduino to Pi shield I have been able to re-use a bunch of electronic components I had sitting around. 2.) You are an absolute newbie and want to learn about the Raspberry Pi and Arduino and a way to combine the technologies. The book was a lot of fun and has given me a way to get new life out of old components. 2 of 2 people found the following review helpful. A good introduction. By Bradley Forschner So, you're interested in custom home automation? This book introduces you to the sensors, controllers, and programming languages to spark your creativity towards home automation. Very detailed with lots of resources to get started on your journey. Good for both novice and intermediate users. 1 of 1 people found the following review helpful. This is a great starter book for those who want to learn how ... By Peter This is a great starter book for those who want to learn how to build their own media center. This is an accessible book and provided you have the hardware expertise or are willing to roll up your sleeves and learn.

If you have the will this book will show you the way to combine the Raspberry Pi with an Arduino board to automate your entire home. With practical projects and insightful chapters, it's a hobbyist's dream. Overview Learn how to dynamically adjust your living environment with detailed step-by-step examples. Discover how you can utilize the combined power of the Raspberry Pi and Arduino for your own projects. Revolutionize the way you interact with your home on a daily basis. In Detail Low-cost and high-performing, with a massively diverse range of uses and applications, the Raspberry Pi is set to revolutionize the way we think about computing and programming. By combining the Raspberry Pi with an Arduino board you'll be able to revolutionize the way you interact with your home and become part of a rapidly growing group of hobbyists and enthusiasts. This essential reference will guide you through a series of exciting projects that will allow you to automate your very own home. With easy-to-follow, step-by-step examples, diagrams, and explanations you will not only find it incredibly productive but also highly engaging and informative. Assuming no prior knowledge, our detailed practical examples will guide you through building hardware and software solutions using the Raspberry Pi and Arduino. You will learn how you can use thermistors and relays to keep cool and stay in the shade whilst also utilizing electrical motors and photoresistors. These meticulously designed tutorials will form the basis of automating your entire home and getting you started with dozens of potential projects. What you will learn from this book Install an operating system for your Raspberry Pi. Set up the Raspberry Pi and Arduino bridge shield. Learn how to work with electronic components to build small circuits. Develop applications that interact with your circuits. Use thermistors and photoresistors to monitor and control your surroundings. Control your own mains power with a relay shield and even connect a motor to your Raspberry Pi. Approach "Raspberry Pi Home Automation with Arduino" is an easy-to-follow yet comprehensive guide for automating your home using the revolutionary ARM GNU/Linux board. Who this book is written for Even if you have no prior experience with the Raspberry Pi or home automation you can pick up this book and develop these amazing projects. Full of detailed step-by-step instructions, diagrams, and images this essential guide allows you to revolutionize the way you interact with your home. If you don't know where to start, then this is the perfect book for you.

About the Author Andrew K. Dennis Andrew K. Dennis is an RD software developer at Prometheus Research. Prometheus Research is a leading provider of integrated data management for research and is the home of HTSQL, an open source navigational query language for RDMS. Andrew has a Diploma in Computing, a BS in Software Engineering, and is currently studying for a second BS in Creative Computing in his spare time. He has over 10 years experience working in the software industry in the UK, Canada, and the USA. This experience includes e-learning courseware development, custom CMS and LMS development, SCORM consultancy, web development in a variety of languages, open source application development, blogging about the integration of web technologies with electronics for home automation, and punching lots of Cat5 cables. His interests include web development, e-learning, 3D printing, Linux, the Raspberry Pi and Arduino, open source projects, home automation and the use of web technology in this sphere, amateur electronics, home networking, and software engineering.