Arduino + Android Projects For The Evil Genius: Control Arduino With Your Smartphone Or Tablet
Synopsis

TEAM ARDUINO UP WITH ANDROID FOR SOME MISCHIEVOUS FUN! Filled with practical, do-it-yourself gadgets, Arduino + Android Projects for the Evil Genius shows you how to create Arduino devices and control them with Android smartphones and tablets. Easy-to-find equipment and components are used for all the projects in the book. This wickedly inventive guide covers the Android Open Application Development Kit (ADK) and USB interface and explains how to use them with the basic Arduino platform. Methods of communication between Android and Arduino that don’t require the ADK—including sound, Bluetooth, and WiFi/Ethernet are also discussed. An Arduino ADK programming tutorial helps you get started right away. Arduino + Android Projects for the Evil Genius: Contains step-by-step instructions and helpful illustrations Provides tips for customizing the projects Covers the underlying principles behind the projects Removes the frustration factor—all required parts are listed Provides all source code on the book’s website Build these and other devious devices: Bluetooth robot Android Geiger counter Android-controlled light show TV remote Temperature logger Ultrasonic range finder Home automation controller Remote power and lighting control Smart thermostat RFID door lock Signaling flags Delay timer

Book Information

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Average Customer Review: 3.7 out of 5 stars See all reviews (19 customer reviews)

Customer Reviews

PROS Interesting projects Four ways to interface Android to Arduino Good step-by-step instructions
for building hardware

CONS
No explanation for Android app code
Three of four interface styles require a wire connection between Arduino and Android
Inadequate explanation of workings of the overall project

HIGHLIGHTS
The projects in this book are more interesting than the predecessor, 30 Arduino Projects for the Evil Genius. Part 1 of the book has an assortment of interesting

Android+Arduino projects on a variety of subjects. Part 2 is dedicated to home automation. I have the sense that the book was originally going to be dedicated to home automation, because one of the chapters in the home automation section refers to Chapter 7 as Chapter 1. For a full list of projects with a brief description, visit the book’s site at […] (change "spot" to "." and don’t forget the www or it won’t work). The most valuable thing about this book is four useful interfaces that allow an Android device to control an Arduino. They are: bluetooth, wired USB, wired sound port (you don’t actually hear it), and wired ethernet. Realistically, Android as a controller is best in wireless form, and only the bluetooth interface does that. A TV Remote design that requires plugging the Arduino into the Android via a USB cable is just clunky. The author could have presented Wifi and Zigbee, both of which are wireless and should work with most Android tablets and Arduinos with additional hardware; Zigbee requires an IOIO plug-in for the Android.

Other books in this series, and others by Simon Monk, have been well received and received good to excellent reviews. I had high expectations when I bought this book. Its a serious disappointment. There is very little about Android in this book. It covers the Adruino side fairly well, but each project is a combination of part Android and part Arduino, and the Android side is essentially missing. The book stated repeatedly that covering Android is too complex and would take its own book. OK, but why then does this book’s title claim to do exactly this? The body does not deliver. A typical project will show 30 lines of Java/Dalvik and say “download the rest” with little to no explanation as to what the code does. The author makes some strange engineering decisions, such as using an encoded audio format to transfer data between the Android and Arduino, but does not explain why this choice was made. The very first project uses Bluetooth to transmit data, and both the Andriod phone/table and Adruino boards have USB. One might expect a simple USB data connection rather than the strange audio encoding. The book appears to have been quickly written and sloppily edited. For example, the section about “temperature logger” talks about the IC for the ultrasonic range finder, which is the topic of the next chapter. Clearly a bit too much copy and paste of the text. The theory sections of each project, which is often a key part of each chapter in other books in this series, are very thin and don’t discuss either theory or the rationale behind the engineering decisions in the book. The book contains only a small number of projects, and four of them use exactly the same
Arduino controller board.

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