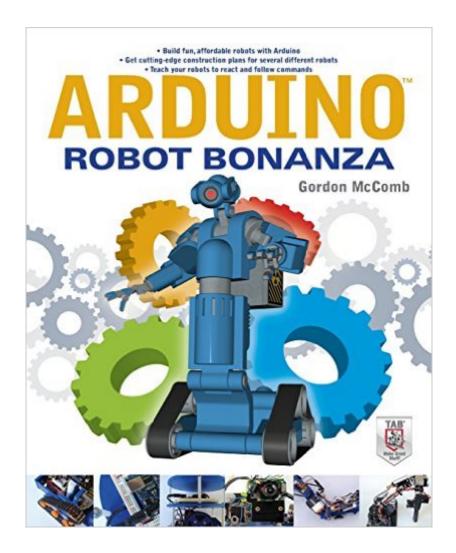


# Arduino Robot Bonanza





## Synopsis

Create high-tech walking, talking, and thinking robots "McComb hasnâ ™t missed a beat. Itâ ™s an absolute winner!" -GeekDad, Wired.com Breathe life into the robots of your dreamsâ •without advanced electronics or programming skills. Arduino Robot Bonanza shows you how to build autonomous robots using ordinary tools and common parts. Learn how to wire things up, program your robot's brain, and add your own unique flair. This easy-to-follow, fully illustrated guide starts with the Teachbot and moves to more complex projects, including the musical TuneBot, the remote-controlled TeleBot, a slithering snakelike 'bot, and a robotic arm with 16 inches of reach! Get started on the Arduino board and software Build a microcontroller-based brain Hook up high-tech sensors and controllers Write and debug powerful Arduino apps Navigate by walking, rolling, or slithering Program your 'bot to react and explore on its own Add remote control and wireless video Generate sound effects and synthesized speech Develop functional robot arms and grippers Extend plans and add exciting features

### **Book Information**

Paperback: 416 pages Publisher: McGraw-Hill Education TAB; 1 edition (April 3, 2013) Language: English ISBN-10: 007178277X ISBN-13: 978-0071782777 Product Dimensions: 7.4 x 0.9 x 9.1 inches Shipping Weight: 1.5 pounds (View shipping rates and policies) Average Customer Review: 4.8 out of 5 stars Â See all reviews (25 customer reviews) Best Sellers Rank: #346,943 in Books (See Top 100 in Books) #112 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics #167 in Books > Computers & Technology > Hardware & DIY > Single Board Computers #188 in Books > Computers & Technology > Computer Science > Robotics

#### **Customer Reviews**

It's a little bit too bad that all the hype about this fine book clouds its real value-- as a great bridge between "toy" and "real" robotics. In order to attract (young scientists?) the promos promise that, without programming, you can create walking, talking, thinking robots from commonly found parts. I probably don't have to tell you to take that with a grain of salt. But I also don't want you to be turned off by it either!The Arduino IS programmable, and this book DOES take you through some of the most up to date and recent applications from (now) several years of applications. You can see the Arduino here: Arduino UNO R3 board with DIP ATmega328P. Even more interestingly, check out the much newer Raspberry Pi here: Raspberry Pi Model B Revision 2.0 (512MB). The Pi is a fully featured "PC" that you can sync with Arduino to do many more advanced robotics projects, including home automation. This book doesn't detail that level of programming but does give many tips about the Arduino interface. The third step up are "Robot Basic" type progams, and those are beyond the scope of this book. Toy robotics, like the very expensive LEGO Mindstorms NXT 2.0 (8547) are a great introduction to robotics for kids. Far beyond that are "real" robotics including reverse kinematics, robot vision, etc.

This book is a very well-written, easy to read introduction to using the Arduino microprocessor system. This product has been making a HUGE splash among hobbyists in the last few years. There is a ton of literature out there, and many folks wanting to help lend a hand. So, choosing this technology is a good choice. Although the title of the book suggests a somewhat narrow focus, ARDUINO ROBOT BONANZA is really an excellent introduction to the product, regardless of whether you will be making "robots" or not. That's because most of what you need to do will be similar, no matter what the final application. So, for instance, understanding how the interface works, or how the power supply works will be the same either way. Ditto on the excellent tips on the types of materials available. Here are some highlights of ARDUINO ROBOT BONANZA:â<sup>™</sup>| There is a good discussion of the basics of Arduino technology.â<sup>™</sup>| Excellent overview of each board and interface, both digital and analog.â<sup>™</sup> I especially like the "Under the Hood" section that explains how you actually develop your programs and hookup to the Arduino. â<sup>™</sup>| On my Kindle, however, some of the photos and accompanying text is a bit tough, even when you enlarge the font.â<sup>™</sup>| Good section on tools required, and even material, such as various plastics.â<sup>™</sup>| Excellent illustrations of materials.â<sup>™</sup>| An appendix called, "Parts Connection" contains an extensive list of sources for electronics and hardware.â<sup>™</sup> Actual book updates and support are available via the Robotoid web site. Finally, speaking from personal experience, I should also note that our hobbyist group in Northern California have used Arduino technology extensively for producing small, interactive "Geocaches" in the San Francisco Bay Area.

#### Download to continue reading...

Arduino Robot Bonanza Arduino: Complete Beginners Guide For Arduino - Everything You Need To Know To Get Started (Arduino 101, Arduino Mastery) Arduino: The Ultimate QuickStart Guide -From Beginner to Expert (Arduino, Arduino for Beginners) Arduino + Android Projects for the Evil Genius: Control Arduino with Your Smartphone or Tablet Arduino for Musicians: A Complete Guide to Arduino and Teensy Microcontrollers Arduino: 2016 Arduino Beginner User Guide Arduino prĂ<sub>i</sub>ctico / Practical Arduino (Manual Imprescindible / Essential Manual) (Spanish Edition) Fancy Nancy: Candy Bonanza Bonanza West (Pap Only) Bonanza: A Viewer's Guide to the TV Legend History of the Big Bonanza (1877): An Authentic Account of the Discovery, History, and Working of the World Renowned Comstock Silver Lode of Nevada Principles of Robot Motion: Theory, Algorithms, and Implementations (Intelligent Robotics and Autonomous Agents series) PiBot: Build Your Own Raspberry Pi Powered Robot 2.0 - Revised and Updated Robot Analysis and Control Robot Building for Beginners MSP430-based Robot Applications: A Guide to Developing Embedded Systems AUTOMATIC SANITARY ROBOT WITH OPTIMIZED PERFORMANCE OF ARBITRARY TRACK SELECTION USING PIC MICROCONTROLLER Robot Programming: A Guide to Controlling Autonomous Robots Adaptive Sampling with Mobile WSN: Simultaneous Robot Localisation and Mapping of Paramagnetic Spatio-Temporal Fields (let Control Engineering Series) Build Your Own Combat Robot

<u>Dmca</u>