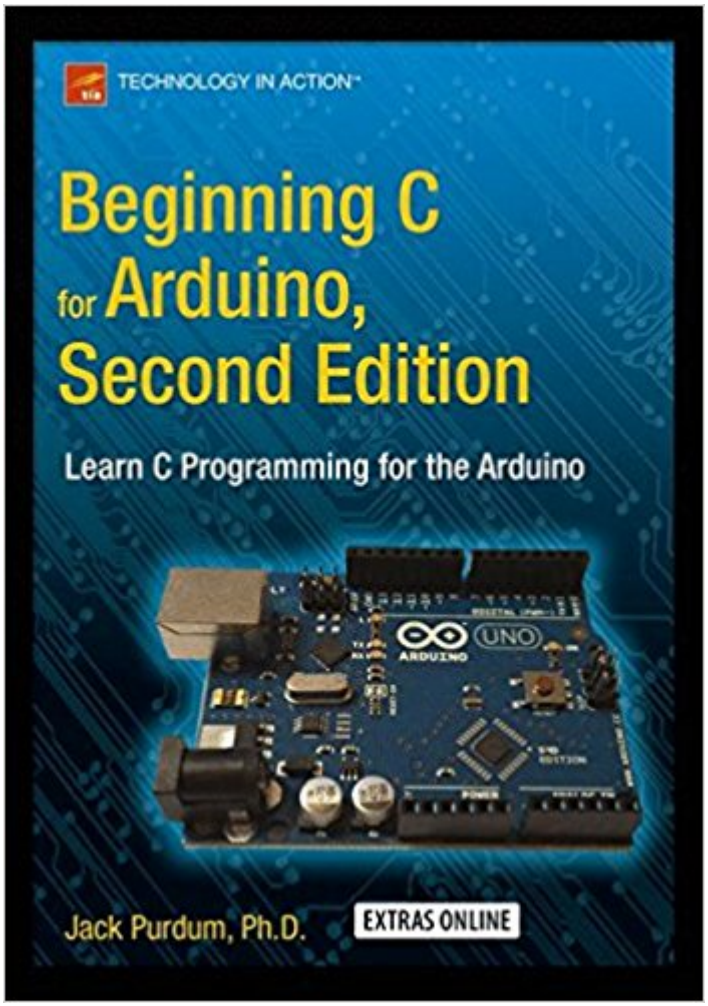
Beginning C For Arduino, Second Edition: Learn C Programming For The Arduino



Synopsis

Beginning C for Arduino, Second Edition is written for those who have no prior experience with microcontrollers or programming but would like to experiment and learn both. Updated with new projects and new boards, this book introduces you to the C programming language, reinforcing each programming structure with a simple demonstration of how you can use C to control the Arduino family of microcontrollers. Author Jack Purdum uses an engaging style to teach good programming techniques using examples that have been honed during his 25 years of university teaching. Beginning C for Arduino, Second Edition will teach you:The C programming language How to use C to control a microcontroller and related hardware How to extend C by creating your own libraries, including an introduction to object-oriented programmingDuring the course of the book, you will learn the basics of programming, such as working with data types, making decisions, and writing control loops. You'll then progress onto some of the trickier aspects of C programming, such as using pointers effectively, working with the C preprocessor, and tackling file I/O. Each chapter ends with a series of exercises and review questions to test your knowledge and reinforce what you have learned.

Book Information

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Customer Reviews

â œThe book is highly readable and starts from basics, like how to install the Arduino integrated development environment (IDE). The appendix of the book has a lot of good information on how and where to order the parts and boards. â | I would strongly advise reading the book in a hands-on

fashion and not just reading it alone. â | High school and beginning college students will have a blast reading it and implementing the programs. I highly recommend it.â • (Naga Narayanaswamy, Computing Reviews, April, 2016)

Jack Purdum, Ph.D. is an educator with 25 years of teaching experience. He has been an amateur radio ("ham") operator for more than 50 years, holds a US patent for imaging software, has authored 16 programming texts, has numerous journal and magazine articles, and is a winner of numerous teaching awards.

I was a programmer from 1969 until I retired in 2006. When I retired I thought I was done programming but in January of 2014 I discovered the world of Arduino. I needed to refresh my skills using the C language which I had learned in 1985. I picked up several books designed to teach you how to program these micro controllers but the first edition of this book remained close to my desk to become my reference guide.The many years that Dr. Purdum has spent as an educator dramatically demonstrates his ability to translate complex programming into simple terms that are very effective in teaching the reader what is going on with the compiler and how to properly write Arduino sketches. As it states on the back cover even if you have no prior experience programming this book is for you. I will add that even if you are a very experienced programmer, like me, who needs a refresher, this book is for you.When I found out that the second edition was available, I purchased a copy and donated my first edition to the local library. The additional chapters, the updated appendices and the improvement in several of the projects makes this version a real value and worth the money.

Absolutely the best book on programming Arduino on the market. I have purchased several books on Arduino. When I say several, I have just about all the ones that I can find for my kindle. The author of this book, teaches in such a way that you just get it. I have read this book cover to cover twice and used it for reference more times than I can count. Where other books do a good job and teach you enough to blink some LED’s. This book teaches you the full power that C and C++ has to offer. Even teaching the power of using pointers! I highly recommend this book. Get this book and read it and stop and do the examples as you go. Make sure you fully understand what is going on before moving to the next chapter. Do this and this book will teach you how to write programs for the Arduino that you never knew possible!

After a 15 year hiatus from being a professional software developer and ham radio, I decided (at the urging of a couple of longtime friends) to get back into both. I purchased a QRP radio kit controlled by one of the Arduino processors. Subsequently, I decided to build a magnetic loop antenna to go with it. That required programming yet another Arduino to control it. Jack's book looked like just what I needed to bring myself back up to speed. It was! I still have my old copy of Kerrnigan and Ritchie left over from my days at BTL, but although that covers all aspects of the "C" language, it is one of the hardest to read books on the subject ever. Jack's book on the other hand is easy to read (print could be bigger for us old folks); he thoroughly explains the concepts and provides real-world examples. Through this book, I was able to get myself back to my old form in just a week or so! Not to say that this isn't a great book for those who have never written a line of code in their lives; it most certainly is. Looking forward to more; maybe "C++"?

A book that guides you through programming steps, explaining in detail what every function does. I started programming by looking at examples of code, but now I am learning to do it systematically. I am now reading it and referring to it for many of the coding I do....Thanks.

Love this book. I've been a programmer for many years, in many different languages, and have now come to the Arduino platform with my ham radio projects. The author does a great job in presenting the language material in terms that anyone from a novice understanding of programming, to veterans like myself needing to use C on this downscale platform. He presents the material in a very conversational manner that really helps one to understand. I've purchased other books from Purdum as well (Arduino Projects for Amateur Radio), and will continue to do so whenever he writes another one. Way to go Jack!

What makes this book different is that it goes into much greater depth about PROGRAMMING and not so much about Arduino and related hardware. It's not a "project" book like almost every other book on Arduino. It even teaches you what pointers are, in enough detail that you can actually understand how they work (although I still don't understand when I would actually want to use them in an Arduino project.) Outstanding book in every respect.I originally purchased and read the first edition of this book, and liked it so much that I bought this updated second edition. The differences are pretty minor, but I wanted to read the whole thing cover-to-cover again anyway, so I bought this one as well.

This is a must have book if you are interested in learning Arduino programming. I had never programmed in C and it made it possible for me to learn the basics and have fun while doing it. Jack has a great way of teaching and even an old guy such as myself had no problems follow what he was trying to get across. I highly recommend this book and all the others that Jack has made available.

Just purchased this book a few weeks ago. Dr. Purdum has done an excellent job of breaking the programming down into pieces and explaining it so a beginner can understand it. With hands on exercises, and review questions at the end of each chapter, it ensures learning and retention. There is no substitute for a having a hard copy of this information right at your fingertips. Thanks for an awesome book.

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