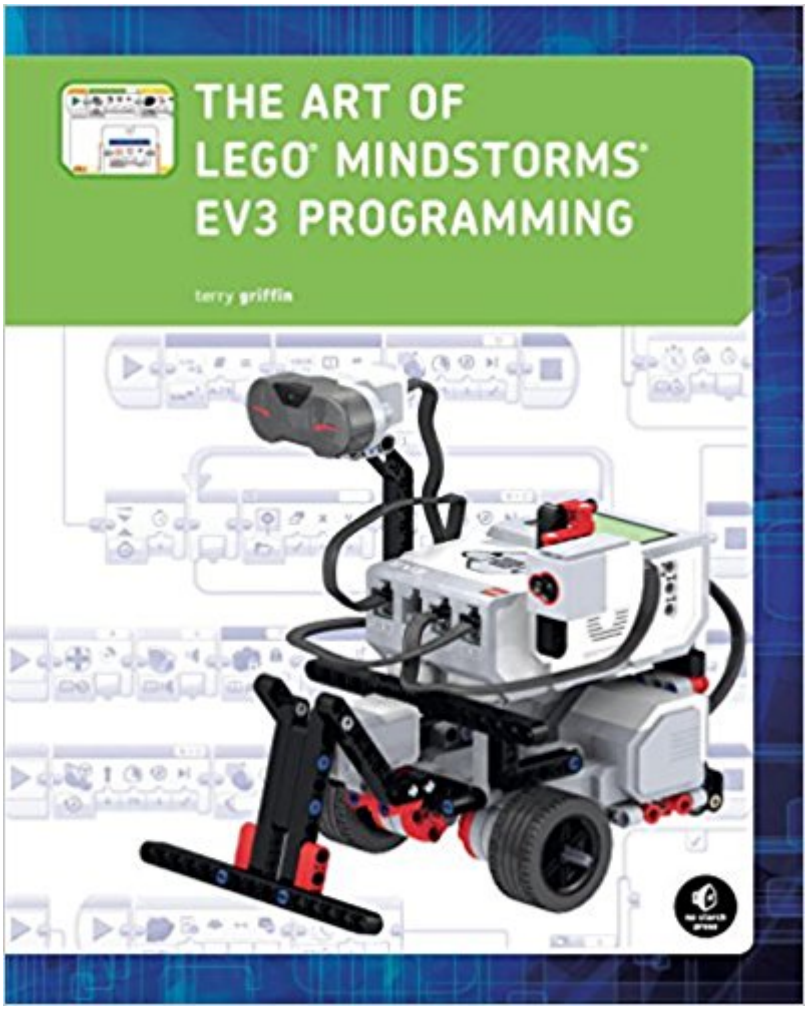
The Art Of LEGO MINDSTORMS EV3 Programming (Full Color)



Synopsis

With its colorful, block-based interface, The LEGOÃ Â® MINDSTORMSÃ Â® EV3 programming language is designed to allow anyone to program intelligent robots, but its powerful features can be intimidating at first. The Art of LEGO MINDSTORMS EV3 Programming is a full-color, beginner-friendly guide designed to bridge that gap.Inside, youÃ¢â ¬â„¢ll discover how to combine core EV3 elements like blocks, data wires, files, and variables to create sophisticated programs. YouÃ¢â ¬â„¢ll also learn good programming practices, memory management, and helpful debugging strategiesÃ¢â ¬â •general skills that will be relevant to programming in any language.All of the bookÃ¢â ¬â„¢s programs work with one general-purpose test robot that youÃ¢â ¬â„¢ll build early on. As you follow along, youÃ¢â ¬â„¢ll program your robot to:Ã¢â ¬â œReact to different environments and respond to commandsÃ¢â ¬â œFollow a wall to navigate a mazeÃ¢â ¬â œDisplay drawings that you input with dials, sensors, and data wires on the EV3 screenÃ¢â ¬â œPlay a Simon SaysÃ¢â ¬â œstyle game that uses arrays to save your high scoreÃ¢â ¬â œFollow a line using a PID-type controller like the ones in real industrial systemsThe Art of LEGO MINDSTORMS EV3 Programming covers both the Home and Education Editions of the EV3 set, making it perfect for kids, parents, and teachers alike. Whether your robotics lab is the living room or the classroom, this is the complete guide to EV3 programming that youÃ¢â ¬â„¢ve been waiting for.Requirements: One LEGO MINDSTORMS EV3 Home OR Education set (#31313 OR #45544).

Book Information

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Age Range: 10 and up

Grade Level: 5 and up

Customer Reviews

Terry Griffin has been a software engineer for over 20 years and has spent most of that time creating software for controlling various types of machines. He works for Carl Zeiss SMT on the Orion Helium Ion Microscope, programming the user interface and high-level control software.

Excellent book. Highly recommended !Got a different book to learn about the EV3 in general but that book focused a little too much in trying to program the robot from the on-board screen/button, which is cumbersome and not practical.This book on the other hand is full of great little projects to help kids (or adults like me) learn how to program efficiently. I am 1/3 into the book, and really like it. My daughter is currently reading it and she also enjoys it. The little projects are specific enough that kids keep engaged while learning.We got the kindle edition and my only complaint is that on the really big programs the graphs are not crisp enough to read all the details, but with some effort is doable.

I think this would be an excellent starting point for anybody that is doing FLL. I think the level of the descriptions and details would work out well with the FLL teams that do not have much experience with programming. The book covers some interesting things that I didn’t know - saving data to files for example and then opening it up in EXCEL to get a good idea on what light level to use for line following.

This is by far the best beginner’s book on Lego Mindstorms EV3 programming. Even if you do not believe yourself to be a beginner, this book will give you a very solid foundation on which to build your EV3 programming skils. It is based on the Home edition of Lego Mindstorms but is equally valid for the Training Version also. This book far surpasses the books that come with Lego Mindstorms Home Edition. It also surpasses most of the on-line EV3 tutorials that I have seen.

Very interesting book with systematic approach to introduction into EV3 world. I do like simple robot construction that let you focus on programming and leveraging all sensors and engines.This book is focused more on EV3 robotics than on LEGO Technics mechanics and designs. But that is what I expected and was looking for.

Excellent organization and examples for me to use. It is also a great resource for information on which components work across NXT and Mindstorms. Not all my middle school students are able to read and follow the instructions. If students are using it, I recommend it as a reference book for 7th grade and up.

If you have been looking for a book that tells you the full story about the EV3 programming environment, look no further. So many of the other materials on the topic are just random examples and fluffy text that it seems amazing to find a book like this. Truly best of breed -- check it out!

This book provides very clear and specific descriptions of the Lego programming blocks. It is also an excellent tutorial for programming, in general. This book helped my son and I solve some nagging programming issues and understand much better the capabilities, bugs and undocumented behavior of Lego EV3 motors and sensors.

I love the book and the resource links. I'm teaching an EV3 programming class and this is a great resource.

Movies! The LEGO Neighborhood Book: Build Your Own LEGO Town! Little Box of Cool Lego Projects: Lego Tips for Kids: Space Knights & Castles (LEGO Nonfiction): A LEGO Adventure in the Real World Dino Safari (LEGO Nonfiction): A LEGO Adventure in the Real World Planets (LEGO Nonfiction): A LEGO Adventure in the Real World Deep Dive (LEGO Nonfiction): A LEGO Adventure in the Real World Volcanoes and other Forces of Nature (LEGO Nonfiction): A LEGO Adventure in the Real World