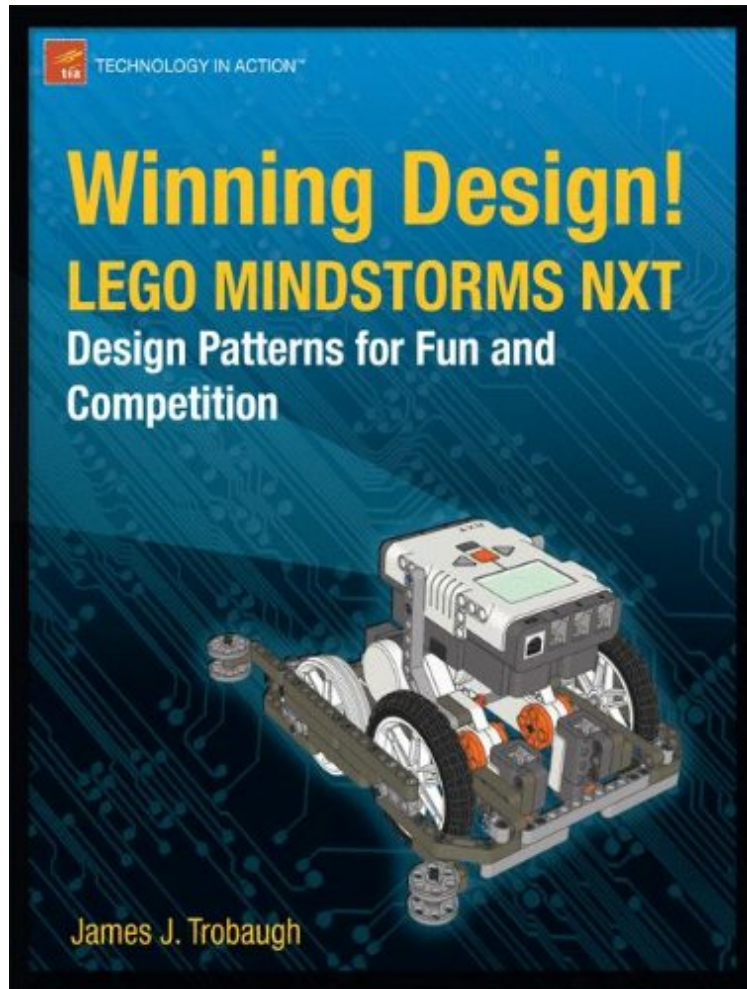


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(Technology in Action)

Winning Design!: LEGO MINDSTORMS NXT Design Patterns for Fun and Competition (Technology in Action)

James Trobaugh

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1 of 1 people found the following review helpful. I want so much to write a good review for this bookBy R. GreenI want so much to write a good review for this book, especially since I found the information useful enough to purchase two more copies for my favorite FLL teams. But I have to vent my extreme disappointment in the demobot graphics.

The print pictures are so terrible as to be almost useless. APRESS has an ebook version with decent graphics but you are required to purchase that for an additional cost. The graphics in the electronic version are color and very nice but in all honesty, Apress should be ashamed at making people have to make an additional purchase for this version even at \$5.00. Not the whole book, but IMHO the color building illustrations should be free to those who can prove they have the print version.

0 of 0 people found the following review helpful. great content
By Matt J. Allington
The pdf I found online is great. Good technical concepts I can use to demonstrate to my FLL team (although an update to EV3 would be awesome). From my scanning, the book is well written, and will be helpful, even with occasional errors like missing words or misunderstandings about the difference between power and torque. HOWEVER, the book that came is NOT in color (other than the cover), contrary to the images on . So I pretty much bought the book so I could feel I wasn't stealing by using the pdf I found online, which was probably pirated.

0 of 0 people found the following review helpful. Very impressed with content - poor illustrations
By Allyn Fratkin
I am very impressed with the content of this book, I call it a "must-read" for every FIRST Lego League team. It has chapters on line following (including light sensor calibration), passive attachments, powered attachments, master program programming, etc.. All very useful to a new, or even experienced, FLL team. It is a shame that the book is printed in black and white (as are most after-market lego books, unfortunately). The line drawings use horrible jpeg compression with very visible artifacts (jpeg is for photos and not appropriate for line drawings). It appears that ebook versions use color illustrations, which would make everything that much easier to understand. If you have an ereader or tablet or phone, you might want to get the ebook version. I rated the book 5 stars based on the content. The print edition really should have a star or two removed for poor printing.

Winning Design! LEGO Mindstorms NXT Design Patterns for Fun and Competition is about design that works. Its about building with LEGO MINDSTORMS NXT for fun, for education, but especially for competition. Author James Trobaugh is an experienced coach and leader in the FIRST LEGO League. In this book, he shares his hard-won knowledge about design principles and techniques that contribute to success in robotics competitions. Winning Design! unlocks the secrets of reliable design using LEGO MINDSTORMS NXT. You'll learn proven design patterns that you can employ for common tasks such as turning, pushing, and pulling. You'll reduce and compensate for variation in performance from battery charge levels and motor calibration differences. You'll produce designs that won't frustrate you by not working, but that will delight you with their reliable performance in the heat of competition. Good design is about more than just the hardware. Software counts for a lot, and Winning Design! has you covered. You'll find chapters on program design and organization with tips on effective coding and documentation practices. You'll learn about master programs and the needed flexibility they provide. There's even a section on presenting your robot and software designs to the judges. Winning Design! is the book you need if you're involved in competitions such as FIRST LEGO League events. Whether coach, parent, or student, you'll find much in this book to make your design and competition experience fun and memorable, and educational. Please note: the print version of this title is black white; the eBook is full color. What you'll learn

- Build winning robots on a foundation of good chassis design
- Reduce variability in robot mechanical movements
- Design modular attachments for quick change during competition
- Solve navigation problems such as steering, squaring up, and collision detection
- Manage software using master programs and other techniques
- Power your robot attachments via motors and pneumatics

Who this book is for
Winning Design! LEGO Mindstorms NXT Design Patterns for Fun and Competition is aimed at students, parents, teachers, and coaches involved in LEGO MINDSTORMS NXT robot design and programming. Teachers and coaches will find the book to be a valuable teaching resource. Students and parents will find insight into good design practices. And all readers will enjoy the increased satisfaction that comes from building designs that actually work, and that can be relied upon to continue to work every time.

Table of Contents

- Design Considerations
- Chassis Design
- Going Straight
- Consistent Turning
- Line Following and Detection
- Squaring Up
- Collision Detection
- Passive Attachments
- Power Attachments
- Pneumatics
- Master Programs
- Program Management
- Documentation and Presentation
- Building DemoBot
- Building the Motor Matching Machine

About the Author
James J. Trobaugh is an experienced coach and leader in the FIRST LEGO League. He is author of the acclaimed book Winning Design!, focusing on the physical aspects of LEGO MINDSTORMS robot design. He has been involved with FIRST LEGO League since 2004 as coach for Team Super Awesome, and as a technical judge at LEGO World Festival. He is also the FIRST LEGO League Director of the Forsyth Alliance in Forsyth County, Georgia. James started out as a LEGO hobbyist by founding the North Georgia LEGO Train Club in 1998, and has found in LEGO robotics a natural blending of his LEGO hobby and his day job as a software architect. An added bonus is the joy of sharing his love of technology not only with his own children, but with kids in general.