

# The LEGO MINDSTORMS NXT Idea Book: Design, Invent, and Build (Textbook)

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## Book Information



Author(s): Martijn Boogaarts, Jonathan A. Daudelin, Brian L. Davis, Jim Kelly, Lou Morris, Fay and Rick Rhodes, Matthias Paul Scholz, Christopher R. Smith, Rob Torok, Chris Anderson Publisher: No Starch Press Copyright: 2007 ISBN-10: 1-59327-150-6 ISBN-13: 978-1-59327-150-3 Buy the book Errata Page How NI Technology is Used: This book teaches the fundamentals of programming with National Instruments Mindstorms NXT to create working robots.

If you're serious about having fun with LEGO robotics, you've come to the right place. The team behind The NXT STEP blog-the authoritative online source for MINDSTORMS NXT information and advice-has packaged its considerable skills and experience in this book. Inside, you'll find some of the team's best ideas for creating cool and sophisticated models, including instructions for eight robots you can build yourself.

Follow along with the MINDSTORMS NXT experts as they explain the fundamentals of programming and design, accompanied by CAD-style drawings and an abundance of screenshots that make it easy for you to master the MINDSTORMS NXT system. You'll get an overview of the NXT parts (beams, sensors, axles, gears, and so on) and clear instructions for combining them to build and program working robots. The LEGO MINDSTORMS NXT Idea Book delves into the complexities of the NXT programming

language (NXT-G) and offers tips for designing and programming robots, using Bluetooth, creating an NXT remote control, troubleshooting, and much more.

Here are just a few of the robots you'll learn to build in The LEGO MINDSTORMS NXT Idea Book:

- RaSPy, a robot that plays Rock, Scissors, Paper
- 3D PhotoBot, a robot that will help you take photographs that can be converted into 3D images
- Slot Machine, complete with flashing lights and a lever
- ScanBot, a robot that scans black-and-white pictures and displays the images on the NXT's LCD
- Beach Buggy Chair, a roving, rambling robot
- CraneBot, a crane-like grabbing robot

LEGO fans of all ages will find this book to be an ideal jumping-off point for doing more with MINDSTORMS NXT. The only ingredient you need to add is your imagination!

Application Software: LabVIEW Full Development System Development Topic: Programming Fundamentals, Programming Techniques