The Art of LEGO MINDSTORMS EV3 Programming

For beginners and advanced users alike, this book will guide you to the next level of EV3 programming. You'll learn how to use the LEGO Education EV3 software to program robots, including instructions for building models of the German Inter-City Express (ICE), the Swiss "Crocodile," and a vintage LEGO train. You'll also find step-by-step instructions for programming robots to perform basic tasks such as detecting objects, avoiding obstacles, and navigating environments.

The book is divided into five main sections:

1. **Introduction to EV3 Robotics**: This section covers the basics of EV3 robotics, including how to install the software, connect motors and sensors, and run simple programs. It also introduces the LEGO Mindstorms Expert Panel, which is a group of experts who write the guide.

2. **EV3 Programming Basics**: Here, you'll learn how to build and program robots using the EV3 software. The book includes instructions for building and programming robots that can follow a line, avoid obstacles, and respond to commands.

3. **Advanced Programming Techniques**: This section covers more advanced programming techniques, including how to create programs that can handle sensor feedback and make decisions based on environmental changes.

4. **Robotics Projects**: The book includes a variety of robotics projects that you can build and program, including robots that can avoid obstacles, follow lines, and respond to commands.

5. **Conclusion and Future Directions**: The book concludes with a look at the future of EV3 robotics and how you can continue to learn and grow as a programmer.

Overall, The Art of LEGO MINDSTORMS EV3 Programming is an excellent resource for anyone interested in learning to program LEGO robots. It's written in a clear and concise style, and the instructions are easy to follow. Whether you're a complete beginner or an experienced programmer, you'll find something to learn in this book.