DIY DRONES FOR THE EVIL GENIUS: DESIGN, BUILD, AND CUSTOMIZE YOUR OWN DRONES
Ian Cinnamon, Romi Kadri, Fitz Tepper

Design, build, and fly fully customized drones - no prior experience necessary!

This fun, hands-on guide shows how to construct personalized drones from inexpensive parts, add custom features, and become a full-fledged drone pilot - all in a matter of days. The book outlines basic aerospace engineering principles and shows how to apply those theories in drone designs that use a palm-sized indoor quadcopter, available for less than $15 online.

DIY Drones for the Evil Genius covers drone safety, mechanics, and flight and then launches into the fundamentals of drone design, assembly, and flight. Anyone - from a student with no experience to an experienced maker - will be able to build a DIY drone. Readers will discover how to add video transmitters, GPS, cinematic camera gimbals, and virtual reality flight add-ons to their creations.

- Designed for beginners, but detailed enough for advanced makers
- Guides readers through the FAA licensing and registration process
- Written by an experienced engineer author and drone expert

Ian Cinnamon is an engineer and entrepreneur obsessed with bringing ideas to life. He authored the Scientific American Book Club bestseller Programming Video Games for the Evil Genius and currently writes a column for the Huffington Post. Ian is an MIT graduate and has been building things since he first fell in love with computer programming.

Romi Kadri began his engineering career at Rolls-Royce manufacturing compressor blades for jet engines before heading to MIT where he graduated in Engineering and Entrepreneurship.

Fitz Tepper writes for the technology news site TechCrunch about a wide range of topics ranging from FinTech and Bitcoin to drones and self-driving cars.
BUILDING WITH VIRTUAL LEGO: GETTING STARTED WITH LEGO DIGITAL DESIGNER, LDRAW, AND MECABRICKS

John Baichtal

Virtually create and build any LEGO model you can imagine with any LEGO part ever made!

This hands-on guide shows, step-by-step, how to create just about anything from LEGO blocks using the latest version of LEGO Digital Designer. Readers will find out how to download and install the software, navigate the LDD user interface, and get up-and-running on their own design projects. Other popular open-standard LEGO CAD programs like LDdraw and Mecabricks are also fully covered.

Building with Virtual LEGO: Getting Started with LEGO Digital Designer, LDdraw, and Mecabricks features start-to-finish projects that illustrate each design tool and technique. The book teaches simple CAD concepts that are applicable to any design program - even professional software like AutoCAD. Readers will discover how to publish and share their creations online and explore some of the best projects that others have already built.

- Shows how to use creative and freely-downloadable design programs
- Teaches computer-aided design concepts that can be applied to any software
- Written by an experienced author and LEGO/DIY expert

John Baichtal has written or edited over a dozen books, including the award-winning Cult of Lego (No Starch Press), Make: Lego and Arduino Projects (Maker Media) with Adam Wolf and Matthew Beckler, and Hacking Your Lego Mindstorms EV3 Kit (Que). John lives in Minneapolis with his wife and three children.
AUTOMATIC CONTROL SYSTEMS, 10/E
Farid Golnaraghi, Benjamin C. Kuo

The classic text on control systems – completely updated and revised.

This completely overhauled Tenth Edition of the renowned textbook delivers practical coverage designed to introduce readers to the essential concepts of automatic control systems without bogging them down with theoretical complexities. Enhanced by all-new chapters, a greater number of solved examples, labs using both LEGO Mindstorms® and MATLAB/SIMLab, and a valuable introduction to the concept of ControlLab, the book provides students with a real-world understanding of the subject and prepares them for the challenges they will one day face.

- Most chapters have been completely revised with new problems and worked examples throughout
- Provides real-world, hands-on application
- Thoroughly revised to be more practical and student friendly
- A full-set of PowerPoint slides and solutions available to instructors

Farid Golnaraghi has been a professor and the Director of Mechatronic Systems Engineering at the Simon Fraser University in Vancouver since 2006. He also holds a Burnaby Mountain Endowed Chair at SFU, and his primary research focuses on intelligent vehicle systems. Prior to joining SFU, Dr. Golnaraghi was a professor of Mechanical and Mechatronics Engineering at the University of Waterloo. His pioneering research has resulted in two textbooks, more than 150 journal and conference papers, four patents, and two start-up companies.

Benjamin C. Kuo was a member of the faculty of the Department of Electrical and Computer Engineering at the University of Illinois, which he joined in 1958 upon the completion of his Ph.D. and where he remained for 31 rewarding years. He was a true visionary pioneer in the field of automatic control, and the impact of his distinguished career as a researcher and educator cannot be overstated.
This highly effective self-study system delivers 100% coverage of all topics on the Structural Engineering SE exam.


Using the tried-and-true "All-in-One" format, the book reviews all topics covered on the test, such as building systems, structural analysis, seismic and wind analysis, structural materials, and non-building structures. Special emphasis is placed on simple and complex code provisions that appear on the exam. Strategies for taking the exam are discussed, giving readers insight into how the test is written and graded.

- Offers complete coverage of every area of the Structural Engineering SE exam
- Includes two practice tests for each portion of the exam and 28 practice essay questions for both buildings and bridges
- Written by an expert with first-hand knowledge of how the NCEES develops and grades the SE exam

Dave K. Adams is a principal associate with BWE in San Diego, California. He is a member of the California Building Standards Commission Structural Design and Lateral Forces Code Advisory Committee and is the author of *The Structural Engineer's Professional Training Manual*. Dave also teaches a number of seminars and webinars for the American Society of Civil Engineers.