

1. Record Nr.	UNINA9910483381903321
Autore	Mendoza-Mendoza Julio Alberto
Titolo	Drones to go : a crash course for scientists and makers // Julio Alberto Mendoza-Mendoza [et al.]
Pubbl/distr/stampa	[Place of publication not identified] : , : Apres, , [2021] ©2021
ISBN	1-4842-6788-5
Edizione	[1st edition 2021.]
Descrizione fisica	1 online resource (XIX, 348 p.) : 502 illus., 130 illus. in color.)
Disciplina	629.13339
Soggetti	Drone aircraft - Design and construction Drone aircraft - Control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Drone Design Concepts -- Chapter 2: Modeling -- Chapter 3: Control of Drones -- Chapter 4: Simulation -- Chapter 5: Implementation -- Appendix: Additional Resources.
Sommario/riassunto	Learn the five key skills needed to become a quadcopter developer: design, modeling, control, simulation, and implementation. This book provides a crash course on drone development for beginners and can also serve as a comprehensive reference for those who want a detailed guide for future projects. You'll review key features often missed in other books: a deeper review of controls, step by step modeling, and methods for simulating and designing drones. Although the quadcopter is used as the main example throughout the book, you'll also see how to apply the development knowledge to other aircrafts or aerial systems. Highly visual and easy to understand, this book features Simulink and Matlab tools, but the skills covered can be used in other environments such as Scilab or other programming languages. Drones To Go merges maker knowledge and technical information with scientific knowledge and design essentials. You will: Review the main families of control: geometric, linear, and common dynamic feedback control Understand the mathematics of a quadcopter Follow step-by-step instructions on modeling and control equations Focus on pedagogical development to answer any doubts in the design process.

