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Autore	Grunn Emmanuel
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Altri autori (Persone)	PhamAnh Tuan (Engineer)
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1.10.3. Drag characteristics: (dimensionless); 1.10.4. Side lift coefficient: CY (dimensionless); 1.10.5. Roll coefficients; 1.10.6. Pitch coefficients; 1.10.7. Yaw coefficients; Chapter 2. Design and Optimization of anUnmanned Aerial Vehicle (UAV); 2.1. General design of the drone; 2.2. Weight estimation; 2.3. Size estimation; 2.4. Mass and inertia evaluation; 2.4.1. Mass evaluation; 2.4.2. Measurement of the roll inertia (A)
2.4.3. Measurement of pitch inertia (B)2.4.4. Measurement of yaw inertia (C); 2.5. Convergence toward the target; Chapter 3. Organization of the Auto-Pilot; 3.1. Position of the drone in open space; 3.2. The Dog Law; 3.3. Flight tests; 3.4. Altitude control system; 3.5. Altitude measurement on an actual drone; Bibliography; Index

Sommario/riassunto

In the field of aeronautical dynamics, this book offers readers a design tool which enables them to solve the different problems that can occur during the planning stage of a private project. The authors present a system for the modeling, design and calculation of the flying qualities of airplanes and drones, with a complete mathematical model by Matlab/Simulink. As such, this book may be useful for design engineers as well as for keen airplane amateurs.The authors expound the various phases involved in the design process of an airplane, starting with the formulation of a design tool, un

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Autore	Thirunavukkarasu I
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Collana	Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 1236
Altri autori (Persone)	KumarRoshan
Disciplina	629.8
Soggetti	Automatic control Robotics Automation Electronics Signal processing Power electronics Control, Robotics, Automation Electronics and Microelectronics, Instrumentation Digital and Analog Signal Processing Power Electronics
Lingua di pubblicazione	Inglese
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Nota di contenuto	Automation -- Bio medical Instrumentation -- Control Systems -- Computing Data Analytics -- Digital Signal Processing -- Distributed Control System.
Sommario/riassunto	This book presents the select proceedings of the Control Instrumentation and System Conference (CISCON 2023) held at Manipal Institute of Technology, MAHE, Manipal. It examines a broad spectrum covering the latest trends in instrumentation, sensors and systems, and industrial automation and control. The topics covered include image and signal processing, robotics, renewable energy, power systems, and power drives, performance attributes of MEMS, multi-sensor data fusion, machine learning, optimization techniques, process control, safety monitoring, safety-critical control, supervisory control, system

modeling, and virtual instrumentation. The book is a valuable reference for researchers and professionals interested in sensors, adaptive management, automation and control, and allied fields.