

1.	Record Nr.	UNISALENTO991003699779707536
	Autore	Azorín
	Titolo	Obras completas / Azorín [pseud.] ; introducción, notas preliminares, bibliografía y ordenación por Angel Cruz Rueda
	Pubbl/distr/stampa	Madrid : Aguilar, 1954-1962
	Descrizione fisica	9 v. : d14 cm.
	Disciplina	863.62
	Lingua di pubblicazione	Spagnolo
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910879585403321
	Autore	Nagahara Masaaki
	Titolo	Control of Multi-agent Systems : Theory and Simulations with Python / / by Masaaki Nagahara, Shun-Ichi Azuma, Hyo-Sung Ahn
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
	ISBN	3-031-52981-2
	Edizione	[1st ed. 2024.]
	Descrizione fisica	1 online resource (244 pages)
	Collana	Advanced Textbooks in Control and Signal Processing, , 2510-3814
	Disciplina	629.8312
	Soggetti	Automatic control Graph theory Artificial intelligence Robotics Control and Systems Theory Graph Theory Artificial Intelligence
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Nota di contenuto

Introduction -- Linear Algebra and Graph Theory -- Consensus Control
-- Coverage Control -- Formation Control -- Distributed Optimization
-- Viral Spreading Phenomena and Control.

Sommario/riassunto

This textbook teaches control theory for multi-agent systems. Readers will learn the basics of linear algebra and graph theory, which are then developed to describe and solve multi-agent control problems. The authors address important and fundamental problems including: • consensus control; • coverage control; • formation control; • distributed optimization; and • the viral spreading phenomenon. Students' understanding of the core theory for multi-agent control is enhanced through worked examples and programs in the popular Python language. End-of-chapter exercises are provided to help assess learning progress. Instructors who adopt the book for their courses can download a solutions manual and the figures in the book for lecture slides. Additionally, the Python programs are available for download and can be used for experiments by students in advanced undergraduate or graduate courses based on this text. The broad spectrum of applications relevant to this material includes the Internet of Things, cyber-physical systems, robot swarms, communications networks, smart grids, and truck platooning. Additionally, in the spheres of social science and public health, it applies to opinion dynamics and the spreading of viruses in social networks. Students interested in learning about such applications, or in pursuing further research in multi-agent systems from a theoretical perspective, will find much to gain from Control of Multi-agent Systems. Instructors wishing to teach the subject will also find it beneficial.
