

1. Record Nr.	UNINA9910437910503321
Autore	Semsar-Kazerooni Elham
Titolo	Team cooperation in a network of multi-vehicle unmanned systems : synthesis of consensus algorithms // Elham Semsar-Kazerooni, Khashayar Khorasani
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-283-91070-5 1-4614-5073-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (170 p.)
Altri autori (Persone)	KhorasaniK <1960-> (Khashayar)
Disciplina	001 629.89015181
Soggetti	Vehicles, Remotely piloted Vehicles - Automatic control Wireless sensor networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Background -- Semi-Decentralized Optimal Consensus Strategies -- Non-Ideal Considerations for Semi-Decentralized Optimal Team Cooperation -- Linear Matrix Inequalities in the Team Cooperation Problem -- Conclusions and Future Work -- Appendix A: Proofs. .
Sommario/riassunto	Team Cooperation in a Network of Multi-Vehicle Unmanned Systems develops a framework for modeling and control of a network of multi-agent unmanned systems in a cooperative manner and with consideration of non-ideal and practical considerations. The main focus of this book is the development of “synthesis-based” algorithms rather than on conventional “analysis-based” approaches to the team cooperation, specifically the team consensus problems. The authors provide a set of modified “design-based” consensus algorithms whose optimality is verified through introduction of performance indices. This book also: Provides synthesis-based methodology for team cooperation Introduces a consensus-protocol optimized performance index Offers comparisons for use of proper indices in measuring team performance Analyzes and predicts performance of previously designed consensus

algorithms Analyses and predicts team behavior in the presence of non-ideal considerations such as actuator anomalies and faults as well as the evolutions in the structure of the information exchange Team Cooperation in a Network of Multi-Vehicle Unmanned Systems is an ideal book for researchers as well as graduate-level university students who desire to work in the area of networked unmanned systems.
