
Contents

Optimally Greedy Control of Team Dispatching Systems <i>Vijaytesh G. Rao, Pierre F. Kuhnshu</i>	1
Heuristics for Designing the Control of a UAV Fleet With Model Checking <i>Christopher A. Bohn</i>	21
Unmanned Helicopter Formation Flight Experiment for the Study of Mesh Stability <i>Elaine Shaw, Hoon Chang, J. Karl Hedrick, Shankar Sastry</i>	37
Cooperative Estimation Algorithms Using TDOA Measurements <i>Kenneth A. Fisher, John F. Regret, Marc Pachter</i>	57
A Comparative Study of Target Localization Methods for Large GDOP <i>Harold D. Gilbert, Daniel J. Pack and Jeffrey S. McGuirk</i>	67
Leaderless Cooperative Formation Control of Autonomous Mobile Robots Under Limited Communication Range Constraints <i>Zhihan Qiu, Jing Wang, Richard A. Hull</i>	79
Alternative Control Methodologies for Patrolling Assets With Unmanned Air Vehicles <i>Kendall E. Nygard, Karl Altenburg, Jieping Tang, Doug Schoenfeld, Jonathan Puklick, Michael Hennrich</i>	107
A Grammatical Approach to Cooperative Control <i>John-Michael McNair, Eric Klavins</i>	117

A Distributed System for Collaboration and Control of UAV Groups: Experiments and Analysis <i>Mark F. Godwin, Stephen C. Spry, J. Karl Hedrick</i>	139
Consensus Variable Approach to Decentralized Adaptive Scheduling <i>Kevin L. Moore, Dennis Lucarelli</i>	157
A Markov Chain Approach to Analysis of Cooperation in Multi-Agent Search Missions <i>David E. Jeffcoat, Pavlo A. Krokhmal, Olesya I. Zhupanska</i>	171
A Markov Analysis of the Cueing Capability/Detection Rate Trade-space in Search and Rescue <i>Alice M. Alexander, David E. Jeffcoat</i>	185
Challenges in Building Very Large Teams <i>Paul Scerri, Yang Xu, Jumpol Polvichai, Bin Yu, Steven Okamoto, Mike Lewis, Katia Sycara</i>	197
Model Predictive Path-Space Iteration for Multi-Robot Coordination <i>Omar A.A. Orqueda, Rafael Fierro</i>	229
Path Planning for a Collection of Vehicles With Yaw Rate Constraints <i>Sivakumar Rathinam, Raja Sengupta, Swaroop Darbha</i>	255
Estimating the Probability Distributions of Alloy Impact Toughness: a Constrained Quantile Regression Approach <i>Alexandr Golodnikov, Yevgeny Macheret, A. Alexandre Trindade, Stan Uryasev, Grigoriy Zrazhevsky</i>	269
A One-Pass Heuristic for Cooperative Communication in Mobile Ad Hoc Networks <i>Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, Mauricio G.C. Resende</i>	285
Mathematical Modeling and Optimization of Superconducting Sensors with Magnetic Levitation <i>Vitaliy A. Yatsenko, Panos M. Pardalos</i>	297
Stochastic Optimization and Worst-case Decisions <i>Nalan Gülpinar, Berç Rustem, Stanislav Žaković</i>	317
Decentralized Estimation for Cooperative Phantom Track Generation <i>Tal Shima, Phillip Chandler, Meir Pachter</i>	339

Information Flow Requirements for the Stability of Motion of Vehicles in a Rigid Formation <i>Sai Krishna Yadlapalli, Swaroop Darbha and Kumbakonam R. Rajagopal</i>	351
Formation Control of Nonholonomic Mobile Robots Using Graph Theoretical Methods <i>Wenjie Dong, Yi Guo</i>	369
Comparison of Cooperative Search Algorithms for Mobile RF Targets Using Multiple Unmanned Aerial Vehicles <i>George W.P. York, Daniel J. Pack and Jens Harder</i>	387