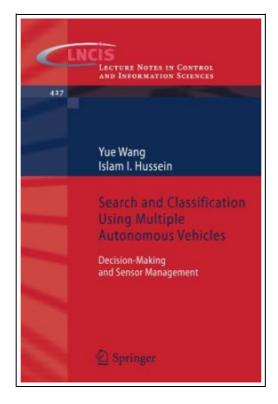
Search and Classification Using Multiple Autonomous Vehicles



Filesize: 9.61 MB

Reviews

Simply no words and phrases to clarify. It really is full of knowledge and wisdom You wont feel monotony at at any moment of the time (that's what catalogs are for relating to when you question me).

(Paolo Spinka)

SEARCH AND CLASSIFICATION USING MULTIPLE AUTONOMOUS VEHICLES



Springer-Verlag Gmbh Apr 2012, 2012. Taschenbuch. Condition: Neu. Neuware - Search and Classification Using Multiple Autonomous Vehicles provides a comprehensive study of decision-making strategies for domain search and object classification using multiple autonomous vehicles (MAV) under both deterministic and probabilistic frameworks. It serves as a first discussion of the problem of effective resource allocation using MAV with sensing limitations, i.e., for search and classification missions over large-scale domains, or when there are far more objects to be found and classified than there are autonomous vehicles available. Under such scenarios, search and classification compete for limited sensing resources. This is because search requires vehicle mobility while classification restricts the vehicles to the vicinity of any objects found. The authors develop decision-making strategies to choose between these competing tasks and vehicle-motion-control laws to achieve the proposed management scheme. Deterministic Lyapunov-based, probabilistic Bayesian-based, and risk-based decision-making strategies and sensor-management schemes are created in sequence. Modeling and analysis include rigorous mathematical proofs of the proposed theorems and the practical consideration of limited sensing resources and observation costs. A survey of the well-developed coverage control problem is also provided as a foundation of search algorithms within the overall decision-making strategies. Applications in both underwater sampling and space-situational awareness are investigated in detail. The control strategies proposed in each chapter are followed by illustrative simulation results and analysis. Academic researchers and graduate students from aerospace, robotics, mechanical or electrical engineering backgrounds interested in multi-agent coordination and control, in detection and estimation or in Bayes filtration will find this text of interest. 160 pp. Englisch.



Read Search and Classification Using Multiple Autonomous Vehicles Online



Other eBooks



Speak Up and Get Along!: Learn the Mighty Might, Thought Chop, and More Tools to Make Friends, Stop Teasing, and Feel Good about Yourself

Free Spirit Publishing Inc., U.S. Paperback / softback. Book Condition: new. BRAND NEW, Speak Up and Get Along!: Learn the Mighty Might, Thought Chop, and More Tools to Make Friends, Stop Teasing, and Feel Good about...

Download ePub »



I Am Reading: Nurturing Young Children's Meaning Making and Joyful Engagement with Any Book

Heinemann Educational Books, United States, 2015. Paperback. Book Condition: New. 234 x 185 mm. Language: English . Brand New Book. It s vital that we support young children's reading in ways that nurture healthy...

Download ePub »



Becoming Barenaked: Leaving a Six Figure Career, Selling All of Our Crap, Pulling the Kids Out of School, and Buying an RV We Hit the Road in Search Our Own American Dream. Redefining What It Meant to Be a Family in America.

Createspace, United States, 2015. Paperback. Book Condition: New. 258 x 208 mm. Language: English . Brand New Book ***** Print on Demand *****. This isn t porn. Everyone always asks and some of our family thinks...

Download ePub »



Homeschool Your Child for Free: More Than 1,400 Smart, Effective, and Practical Resources for Educating Your Family at Home

Random House USA Inc, United States, 2009. Paperback. Book Condition: New. 2nd. 229 x 185 mm. Language: English. Brand New Book. Provide a solid education at home without breaking the bank. Introduced in 2000,...

Download ePub »



The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

WW Norton Co, United States, 2016. Hardback. Book Condition: New. 4th Revised edition. 244 x 165 mm. Language: English . Brand New Book. The Well-Trained Mind will instruct you, step by step, on how to...

Download ePub »