

1. Record Nr.	UNISA996210513803316
Titolo	Modelling and Simulation for Autonomous Systems [[electronic resource]] : First International Workshop, MESAS 2014, Rome, Italy, May 5-6, 2014, Revised Selected Papers / / edited by Jan Hodicky
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-13823-5
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (XVI, 388 p. 213 illus.)
Collana	Information Systems and Applications, incl. Internet/Web, and HCI ; ; 8906
Disciplina	003.3
Soggetti	Computer simulation Application software Optical data processing Artificial intelligence Computers Algorithms Simulation and Modeling Information Systems Applications (incl. Internet) Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence Computation by Abstract Devices Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	A PLM-Based Approach for Un-manned Air System Design: A Proposal -- A UAV-Based Visual Tracking Algorithm for Sensible Areas Surveillance -- A Cloud Based Service for Management and Planning of Autonomous UAV Missions in Smart City Scenarios -- Using Virtual Simulation Environments for Development and Qualification of UAV Perceptive Capabilities: Comparison of Real and Rendered Imagery with MPEG7 Image Descriptors -- Plume Tracking by a Self-stabilized Group of Micro Aerial Vehicles -- The Vision-Based Terrain Navigation Facility: A Technological Overview -- Taking Advantages of Modern Distributed

Infrastructures in Modelling and Simulation -- A Simulation Tool for Evaluating Attack Impact in Cyber Physical Systems -- MedALE Project: A Networked Simulation Exercise -- Integrated Simulation Facility for Interoperability Operation -- HLA as an Experimental Backbone for Autonomous System Integration into Operational Field -- Operational Scenarios Simulation to Support Building Design: A Hospital Design Case Study -- Use of HLA Federation for the Evaluation of Naval Operations in Ship Design -- ASCARI: A Component Based Simulator for Distributed Mobile Robot Systems -- Simulation System for Teleoperated Mobile Robots -- Simulation-Based Goal-Selection for Autonomous Exploration -- Integration Scheme for Modular Snake Robot Software Components -- A Modular Approach for Remote Operation of Humanoid Robots in Search and Rescue Scenarios -- A Light-Weight Robot Simulator for Modular Robotics -- Guided Motion Planning for Modular Robots -- Accepted Autonomy for Search and Rescue Robotics -- Harbour Protection Strategies with Multiple Autonomous Marine Vehicles -- An Effect of Sandy Soils on the Movement in the Terrain -- Introduction of Human Views into Operational Capability Development within an Architectural Framework – March 2014 -- Simulation Engineering Tools for Algorithm Development and Validation Applied to Unmanned Systems -- Computer Models of Sensor and Weapon Systems: Assessing Model Utility Early in War-Game Development -- Machine Learning for Parameter Screening in Computer Simulations -- Human-Machine Communications for Autonomous Systems -- Yarp Based Plugins for Gazebo Simulator -- Combining Complementary Motion Estimation Approaches to Increase Reliability in Urban Search & Rescue Missions -- Safe Exploration Techniques for Reinforcement Learning – An Overview -- Improving the Ant Colony Optimization Algorithm for the Multi-Depot Vehicle Routing Problem and Its Application.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the First International Workshop on Modelling and Simulation for Autonomous Systems, MESAS 2014, held in Rome, Italy, in May 2014. The 32 revised full papers included in the volume were carefully reviewed and selected from 50 submissions, of which 46 were presented at the workshop. They are organized in the following topical sections: unmanned aerial vehicle, distributed simulation, robot system, military application, validation, human-machine communication, gazebo simulator, and algorithm.
