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Jan Hodicky (Ed.)

# Modelling and Simulation for Autonomous Systems

Third International Workshop, MESAS 2016  
Rome, Italy, June 15–16, 2016  
Revised Selected Papers

*Editor*  
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ISSN 0302-9743                      ISSN 1611-3349 (electronic)  
Lecture Notes in Computer Science  
ISBN 978-3-319-47604-9              ISBN 978-3-319-47605-6 (eBook)  
DOI 10.1007/978-3-319-47605-6

Library of Congress Control Number: 2016953663

LNCS Sublibrary: SL3 – Information Systems and Applications, incl. Internet/Web, and HCI

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The registered company is Springer International Publishing AG  
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

# Preface

This volume contains the full papers presented at the 2016 MESAS Workshop: Modelling and Simulation for Autonomous Systems, held during June 15–16, 2016, in Rome. The initial idea to launch the MESAS project was introduced by the Concept Development and Experimentation Branch at the NATO Modelling and Simulation Centre of Excellence in 2013, namely, by LTCDR Alessandro Cignoni, who wanted to bring together the Modelling and Simulation and the Autonomous Systems communities and to collect new ideas for concept development and experimentation in this domain. From that time, the event gathers together — in keynote, regular, poster, and way ahead sessions — fully recognized experts from different technical communities in military, academia, and industry. The main topic of the 2016 edition of MESAS was “M&S for Human and Autonomous System Integration and Cooperation.” The community of interest submitted 38 papers for consideration. Each submission was reviewed by three Program Committee members. The committee decided to accept 32 papers to be presented in the four regular streams and in one poster session. Main streams were built upon the following topics: integration, interaction and interfaces, frameworks and architectures, AS principles and algorithms, and UAVs and RPAS operational use. The plenary session and way ahead included an extra four invited presentations. Following a thorough review process after the event, 33 papers were accepted to be included in the proceedings.

August 2016

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The NATO M&S COE supports NATO Transformation by improving the networking of NATO and nationally owned M&S systems, promoting cooperation between Nations and organizations through the sharing of M&S information and serving as an international source of expertise.

The NATO M&S COE seeks to be a leading world-class organization, providing the best military expertise in modelling and simulation technology, methodologies, and the development of M&S professionals. Its state-of-the-art facilities can support a wide range of M&S activities including but not limited to: Education and Training of NATO M&S professionals on M&S concepts and technology with hands-on courses that expose students to the latest simulation software currently used across the alliance; Concept Development and Experimentation using a wide array of software capability and network connections to test and evaluate military doctrinal concepts as well as new simulation interoperability verification; and the same network connectivity that enables the COE to become the focal point for NATO's future Distributed Simulation environment and services.



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