Call for Papers

Journal of Defense Modeling and Simulation: Applications, Methodology, Technology (JDMS)

Special Issue: Modeling & Simulation for Terrain-Vehicle Systems Design, Mobility and Security

Guest Editors

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Introduction

Recent advances in autonomous and automated driving vehicle systems show promise for improved reconnaissance, surveillance, and security in foreign and domestic conflicts. However, terrain-vehicle systems also present new and unevaluated design characteristics to leverage optimal performance from advances in control techniques of vehicle and system dynamics. As such, the modeling and simulation of system designs in terrain vehicles is a critical research area that will ultimately dictate the ways these systems perform in severe environmental conditions. Thus, the goal of this Special Issue is collect comprehensive bodies of descriptive and prescriptive studies on modeling and simulating terrain vehicle locomotion and other vehicle systems, vehicle mobility, active/passive safety technologies, and overall frameworks for vehicle modeling and simulation in highly dynamic and hostile environments. Potential contributions can include, but are not limited to:

- Analytical methods of energy efficiency real-time estimation
- Application of fast control techniques to operational and tactical mobility and agility of vehicles
- Mechatronic system implementation in conventional and driverless terrain-vehicle applications Terrain-Vehicle performance, active and passive safety
- Vehicle sensor modeling and data fusion, automated driving and autonomous terrain exploration methodologies
- Terrain uncertainties and stochastic characteristics of vehicle-environment interaction
- Cyber-physical systems in vehicle sensors and actuators and vehicle cyber-treat protection

Papers submitted should not be concurrently under review at another conference, journal, or similar venue.

Instructions for Manuscript Preparation

For manuscript formatting and other guidelines, please visit the Author Guidelines for JDMS.

Note: Manuscripts must not have been previously published or be submitted for publication elsewhere. Each submitted manuscript must include title, names, authors' affiliations, postal and e-mail addresses, and a list of keywords. For multiple author submission, please identify the corresponding author.

Due Dates

July 1, 2016	Manuscripts Due
September 1, 2016	First Review Decisions
October 31, 2016	Revised Manuscripts Due
December 15, 2016	Final Decisions
Spring 2017	Expected Date of Publication

Submissions for full paper review

All manuscripts must be submitted electronically through the paper submission system to the JDMS Manuscript Submission System. In the title page, author(s) must specifically mark that the paper is intended for this special issue as follows: "Submission for the Special Issue of JDMS: **Modeling & Simulation for Terrain-Vehicle Systems Design, Mobility and Security**. Please follow the guidelines for submission on the Manuscript Central site.

Final paper submissions

Each final submission must be prepared based on the JDMS journal requirements (see the Author Guidelines for JDMS page).

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