

## NEW IN 2021!

# Journal of Autonomous Vehicles and Systems

### EDITOR

**Vladimir V. Vantsevich, ScD, PhD**  
The University of Alabama at  
Birmingham, USA

### ASSOCIATE EDITORS

**Dilmurat Azimov, PhD**  
The University of Hawai'i at  
Manoa, USA

**Giuseppe Carbone, PhD**  
The University of Calabria, Italy

**Marco Ceccarelli, PhD**  
The University of Rome Tor  
Vergata, Italy

**Wen-Hua Chen, PhD**  
Loughborough University, UK

**Lyubomyr Demkiv, ScD**  
SoftServe, Inc., Ukraine

**David J. Gorsich, PhD**  
US Army Ground Vehicle Systems  
Center, USA

**Jeremy P. Gray, PhD**  
General Motors Corporation, USA

**Jeffrey W. Herrmann, PhD**  
University of Maryland, USA

**Zhong-Ping Jiang, PhD**  
New York University, USA

**Manish Kumar, PhD**  
The University of Cincinnati, USA

**Pierre M. Larochelle, PhD**  
South Dakota School of Mines &  
Technology, USA

(Continued on back)

### • TIMELY

### • ACCESSIBLE

### • HIGH IMPACT

The purpose of ***Journal of Autonomous Vehicles and Systems*** is to provide an international platform for the communication and discussion of technical knowledge and solutions in the transformative areas of the research and engineering design of autonomous vehicles and systems that operate in all media and inter-medium environments: ground, air, space, and water. The focus of this journal is on an autonomous vehicle system-of-systems approach to modeling, simulation, design, and physical and virtual testing. The vehicle applications include, but are not limited to, personal and cargo transportation, construction and forestry, farming, scientific research, investigation of the underground, air and water, exploration of other planets, infrastructure monitoring, surveillance, and military, etc.

Topic areas include, although not limited to: Autonomous vehicle and multi-domain system dynamics in interaction with multi-physics environment in different media; Transdisciplinary-inspired design concepts for safe and secure performance, energy efficiency, and survivability of autonomous vehicles and systems; Intelligent morphing and dynamics of autonomous vehicles and systems; Intelligent exteroceptive and proprioceptive sensing, actuation, decision-making and controls for agile dynamics and mission/task fulfillment; Localization problems, landscape, air and aquatic environment sampling; Fault-tolerance in severe, uncertain, and adversarial environments; Human-in-the-loop and autonomous intelligent decision making related to dynamics and mission/task learning and fulfillment; Integration of autonomous vehicles into the manned and unmanned traffic of their respective media; Artificial intelligence and social behavior factors and challenges for communication, decision making, and dynamic interaction between (i) autonomous vehicle systems, (ii) autonomous vehicles, and (iii) autonomous vehicles and infrastructure in a particular medium and inter-medium environments; Integration of modeling and simulation with gaming technologies for autonomous vehicle design and training purposes; and Transformative conceptual and engineering design for life cycle management of autonomous vehicles and autonomous systems.

### SCOPE

- Artificial Intelligence
- Intelligent Decision Making, Controls and Observation
- System Models
- Modeling, Simulation and Designing Autonomous Vehicle Systems for their Autonomy
- Payload Models
- Proprioceptive Sensors in Autonomous Vehicle Systems and Exteroceptive Sensors for Autonomous Vehicle and Environment Interactions
- Outdoor and Cyber-physical Indoor Proving Grounds and Research Facilities
- Inputs/Outputs and Environmental Models in Autonomous Vehicle Simulation and Design
- Gaming Environments

Article submission, visit:

[journaltool.asme.org](http://journaltool.asme.org) <<<

(select ***Journal of Autonomous Vehicles and Systems***)

## ASSOCIATE EDITORS (cont'd)

**Jianbo Lu, PhD**

Ford Motor Company, USA

**Gaurav Pandey, PhD**

Ford Motor Company, USA

**Lutz Richter, PhD**

OHB System AG, Germany

**Herman Van der Auweraer, PhD**

Siemens Industry Software NV,  
Belgium

**Junmin Wang, PhD**

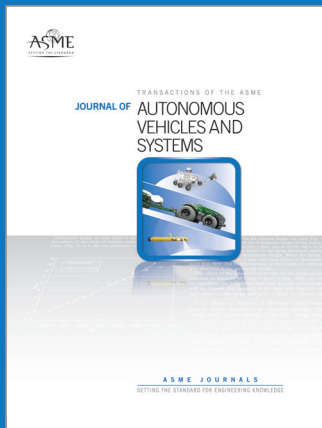
The University of Texas at Austin,  
USA

**Yue Wang, PhD**

Clemson University, USA

**Daniel E. Williams, PhD**

ZF Commercial Vehicle Technology,  
USA



Article submission, visit:

**[journaltool.asme.org](http://journaltool.asme.org)**

(select *Journal of Autonomous  
Vehicles and Systems*)