IEEE AVVC 2027

IEEE International Automated Vehicle Validation Conference
April 13–15, 2027 | London, UK



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IAVVC.ORG

CALL FOR PAPERS

Submission Process & Deadlines

November 15, 2026
Full & Workshop Paper Abstract Extended Submission Deadline (200–500 words)

November 29, 2026
Abstract Author Notification

December 15, 2026
Full Paper Submission Deadline (6 pages +2 with additional payment)

January 15, 2027
Author Notification (Accept or Reject)

February 15, 2027
Final Paper Submission & Author Registration Deadline

We will regularly update the website with more specific information regarding paper submission and conference content.

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TRANSFORMING TERRESTRIAL, AVIATION, AND MARITIME MOBILITY IN THE ERA OF AI

The mobility sector is rapidly transitioning from human operated vehicles to the incorporation of AI. In addition, recent industrial innovation focus points have been on improving sustainability through powertrain electrification and the implementation of software defined vehicle system architectures. The automotive industry is by far the largest mobility subsector affected by the digital transformation, but similar developments are seen in Aeronautical and Maritime applications.

The mobility ecosystem is evolving to a model where value is created through complementarities between vehicles, software, connectivity and infrastructure, leveraging end-to-end mobility service platforms. The emergence of AI tech companies that provide advanced Generative AI enables a rapid transformation of the mobility ecosystem through Applied AI, which will facilitate developments including:

- Autonomous driving
- Autonomous charging
- Agent-based automated fleet optimisation
- Autonomous maintenance

Societally, the fragmented, owner-based and human operated vehicle fleet will move towards an orchestrated AI-operated mobility system, where value is based on continuous service transactions rather than discrete transactions, such as the purchase of a vehicle. Within the mobility ecosystem as a whole (comprising transportation on land, in the air and on water), automation and automated processes will drive automated vehicles to optimise energy consumption, time spent and cost incurred, both for people and for the transportation of goods.

The IEEE IAVVC 2027 will address all aspects of automation that relate to the design, testing and operation of sustainable, physical AI systems within the mobility domain with a specific emphasis on safety, security, as well as economic resilience. Topics of interest include, but are not limited to:

- AI-enabled system design and test tool frameworks
- AI-enabled validation and verification processes
- SDV platforms to support vehicle automation and infrastructure integration
- AI and quantum enabled computing capabilities to train and operate vehicle fleets
- Secure data models
- Flexible safety and security regulatory and standardization frameworks
- Data and technology sovereignty
- Adaptation to supply chain shocks
- Urban infrastructure planning and policy implications

The IAVVC conference brings together academics, researchers, students, industry practitioners, entrepreneurs, standardization and regulation experts and tech investors to engage in cross-functional workshops, panels and system demonstrations on the campus of a world-leading university, in an international metropolis.

Scientific contributions in dedicated sessions will be brought in context to industry technology updates in moderated information formats to stimulate the research community to address the needs of the applied AI world in mobility while at the same time the industry community will get ideas for new product and process innovations.

Accepted papers will be published in the IEEE IAVVC 2027 proceedings and will be available on IEEE *Xplore®*.