



Association for  
Computing Machinery

## NEWS RELEASE

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### **ACM Launches New Journal on Autonomous Transportation Systems**

#### ***ACM JATS Now Accepting Submissions***

**New York, NY, September 8, 2022** – The potential of autonomous cars, buses and trucks to revolutionize transportation and society is one of the most anticipated subjects in technology. Several companies have already developed working prototypes of autonomous vehicles and billions of dollars have been invested in research and development. At the same time, important challenges remain in the effort to bring autonomous transportation to the general public.

ACM, the Association for Computing Machinery, announced it is now accepting submissions for a new publication, the [ACM Journal on Autonomous Transportation Systems \(JATS\)](#). In launching the new journal, the ACM JATS editorial team recognizes that the area of autonomous transportation systems is at a critical point where issues related to data, models, computation, and scale are increasingly important. Based on the significant growth in research activity around autonomous transportation in areas including computer science, electrical engineering, civil engineering, sensor technology, and artificial intelligence, the new journal is envisioned as a timely addition to the field.

The *ACM Journal on Autonomous Transportation Systems* aims to cover the topics in design, analysis, and control of autonomous transportation systems. The expected topics of interest include, but are not limited to:

- Data Science in autonomous transportation systems
- Communication and real-time control in connected transportation systems
- Smart traffic analysis, management, and control solutions
- Public transit planning and operation
- Algorithm design for autonomous transportation systems
- Mathematical modelling of traffic flow
- Computation in transportation networks
- Algorithms for urban and inter-city logistics systems

- The latest advances in unmanned aerial systems

“Certainly, one of the main questions the public has with respect to autonomous vehicle systems is “Will they be safe?” explained JATS Co-Editor-in-Chief Satish V. Ukkusuri, Professor of Civil Engineering, Purdue University. “Ensuring the reliability of these systems will be a multidisciplinary effort, encompassing subdisciplines of computer science (including data processing and computer vision), electrical engineering (including the design and efficiency of sensors), and civil engineering (including how roadways should be planned to accommodate the specific needs of these vehicles). We envision JATS as a venue that will present outstanding research as well as allow for a continuous dialogue between these essential disciplines—all with a focus on collaboration to move the field forward.”

“Recent developments, especially in computing technology, have allowed for leapfrog improvements in autonomous transportation systems,” added JATS Co-Editor-in-Chief Vaneet Aggarwal, Professor of Industrial Engineering, Purdue University. “Some pressing problems include improved communication and cooperation on the road. Car-to-car communication will need to be seamless, and we must have a functioning infrastructure to process massive amounts of data in real time. Despite these challenges, we are on the cusp of a transformative new technology becoming widely available and the ACM JATS Journal will make a valuable contribution to this field.”

The first issue of ACM JATS is slated to be published in 2023. In addition to Co-EiC’s Ukkusuri and Aggarwal, the JATS editorial team includes 10 Associate Editors. Reflecting ACM’s global membership, the JATS editorial team is made up of professionals working in countries including Australia, China, Singapore, and the United States.

#### **About ACM**

[ACM, the Association for Computing Machinery](#), is the world’s largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field’s challenges. ACM strengthens the computing profession’s collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

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