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CALL FOR PAPERS

Submission Process & Deadlines

November 12, 2021
Full Paper Submission Deadline

December 21, 2021
Author Notification Deadline (Accept or Reject)

January 15, 2022
Final Paper Submission Deadline for ALL Papers (Final Paper, Completed Copyright Form, Completed Author Registration)

Visit the **website** as well as our **LinkedIn** pages and **YouTube** channel to stay informed.

Visit the conference website as well as **Facebook** and **LinkedIn** pages for each specific call and additional news.

IEEE ICCVE 2022 ORGANIZERS

IEEE INSTRUMENTATION & MEASUREMENT SOCIETY®

iamts™
International Alliance for Mobility Testing and Standardization

ROBOWATCH

Global Transaction Center

The transportation industry is transitioning rapidly into the age of electrification and automation to support a society that is based on digital services. In order to scale smart and sustainable mobility services – regulatory frameworks and standards are essential, in particular in context of the mass deployment of **connected and autonomous driving** and mass deployment of **EV charging** infrastructure. Research and innovation in artificial intelligence, sensor technologies, edge computing, embedded systems enabled an ecosystem of OEM's, suppliers, Tech Companies and start-up's to implement software-defined transportation based on scalable system architectures and to leverage new business models through digital transformation at the vehicle as well as infrastructure level. With the connected transportation opining up attack surfaces, cyber-security will be a critical issue for connected and automated transportation systems.

The **2022 IEEE ICCVE** – **International Conference on Connected Vehicles and Expo** – will be organized as hybrid event with participation of multiple physical locations in all major world regions linked by a joint global virtual platform – sponsored by the IEEE Instrumentation and Measurement Society, the IEEE Standards Association, the IEEE Transportation Electrification Community and the International Alliance for Mobility Testing and Standardization (IAMTS). This new event format will allow increased flexibility for researchers, industry experts, policymakers and standardization engineers to interact locally and globally at the same time and to share academic, industrial and regulatory insights leveraged by virtual and physical system demonstrations.

IEEE ICCVE is proposed as a lead event to promote the dialogue between academia, industry and regulators with respect to the connectivity between automated and electrified vehicles and infrastructure. Industry innovations, results of academic research and new policy frameworks and standard developments are being discussed in context to inspire new product and process developments.

The conference focuses on all aspects related to research, development and applications of vehicle and infrastructure connectivity – both with focus on vehicle electrification and vehicle automation. Topics of interest include, but are not limited to:

» Cooperative driving and vehicle platooning

» V2X system architectures

» Situational awareness for connected and autonomous vehicles

» Sensor simulation and stimulation (both vehicle side and infrastructure side)

» Next generation vehicle perception and control systems

» New in-vehicle networking concepts leveraging V2X and AV

» High performance computing leveraging V2X and AV

» Software Defined Networking and Network Function Virtualization

» V2X leveraging next generation communication networks

» New approaches in teleoperation and telemonitoring of AV's

» X-in-the-loop vehicle testing on cyberphysical testbeds

» ADAS/AV operational risk assessment

» Regulatory frameworks for L4-enabled vehicle certification

» New regulatory approaches to get test infrastructure certified for AV's

» Next generation traffic control systems

» Application of machine learning to improve traffic flow

» Innovative methods in virtual and physical testing of CAV's and EV's

» EV charging automation

» V2G system architectures

» Advances in wireless charging methods in context of V2X, AV and EV

» High power charging of EV's

» Cybersecurity in context of AV fleet operation

» The impact of quantum technologies on the V2X ecosystem

» Sharing data to improve vehicle safety

» Use of blockchain and DLT in context of V2X

» Creating intermodal mobility testbeds (support different modes of transportation)

We are hopeful that by 2022 travel restrictions and social distancing regulations will be lifted, however the new event concept will keep us flexible to bring content and the opportunity to engage with experts closer to the customer in his or her home market or even to the home or office directly.

We encourage you to join into the dialogue already now and utilize our virtual event platform and communication channels to receive updates on the event content and the different participation options or ask questions.