Workshop on
5G Technology for Future Intelligent Transport System (ITS)

Organizing Committee

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Call for Papers

Intelligent Transport Systems (ITS) have been developed rapidly all over the world. All the information in vehicles/high-speed trains, roads and the surrounding environments is collected and communicated among vehicles/high-speed trains and humans. Moreover, huge amount of data is stored, computed and processed in the common platform, by which the system can effectively reduce the road accidents, improve the traffic management, and enable people to enjoy mobile Internet application services.

On the way to implement ITS in our real life, many challenges have to be conquered. First of all, it is essential to provide efficient, reliable and in time communications to all vehicles/trains and their embedded sensors. Thanks to the emerging new technologies in the fifth generation (5G) mobile communication networks, feasible solutions, e.g., new signal processing schemes, cloud computing, network virtualization, and so on, can be provided to meet various requirements of ITS services. Empowered with the advanced 5G communications capabilities, it is expected that future ITS can well support the functions of sensing, networking, computing and controlling. Thus, it can greatly improve the efficiencies in transportation infrastructures while reducing the traffic congestions, emergencies and accident. Moreover, the processing and storage technologies of big data in future ITS become very important with the massive number of vehicles/trains connected by 5G networks.

All these issues are being studied in academics, industries, and standardization organizations. The workshop aims to provide a forum for authors to present early research results on 5G technology for future ITS that advance the state of the art and practice in 5G and ITS, including theoretical principles, tools, applications, systems infrastructure, and testbeds.

Topics of interest include (but not limited to) the following:
- ITS architectures and services
- 5G low-latency high-reliability communication technologies for ITS
- Vehicle behavior model and environment awareness
- Social networks for ITS in 5G
- 5G spectrum access technologies for ITS
- Device-to-device communications for ITS
- Cooperative driving intelligent and autonomous vehicles in ITS
- Mobile sensing networking in ITS
- Network and information services in ITS
- Efficient big data analysis for IoV
- Mobile cloud computing for ITS
- Security, privacy and trust in ITS
- Simulation methodology and platform for ITS
- Testbed platform and field trials

Prospective authors are invited to submit high-quality original technical papers following the rules of the Main Track of ICT 2016 for presentation at the conference and publication in the ICT 2016 Proceedings and IEEE Xplore, via EDAS, using https://edas.info/newPaper.php?c=21703&track=78916.