

# IEEE Intelligent Transportation Systems Magazine

## Special Issue on:

### **Driver behaviour in intelligent transportation systems (ITSs)**

Drivers are the center of road/air/sea transportation systems, and the drivers can be either human beings or artificial beings. The inconsistency between human driver behaviour and artificial driver behaviour will lead to accidents and congestions in ITSs. To make future ITSs trustworthy in traffic safety and acceptable in travel efficiency, developing industrial ITS applications based on drivers' reliable behavioural and cognitive intelligence is essential. However, there are many challenges to be addressed including real-time behaviour prediction, reliable decision-making, safe interaction between human and artificial drivers, etc.

To alleviate these challenges, emerging technologies based on artificial intelligence (e.g., reinforcement learning, adaptive learning, etc.) and internet of things are gradually becoming overwhelming in the related ITS communities. This special issue aims to provide a platform for researchers, engineers, and policymakers to publish their latest research findings or engineering experiences in developing and applying novel technologies to address the challenges concerning driver behaviour in road/air/sea ITSs. **Only application-focused papers on ITSs will be considered, and papers mainly focusing on modeling or autonomous vehicles will NOT be included in this special issue.**

The potential topics of interest include, but are not limited to:

- Real-time driver behaviour detection, tracking, and prediction
- Desired/expected driving behaviour of artificial drivers
- Interaction between human drivers and artificial drivers
- Risk assessment of human drivers and artificial drivers
- Adaptive and reliable decision-making in various ITS scenarios
- Human-machine collaboration
- Cooperative driving among human drivers and artificial drivers
- Traffic forecasting and management based on driver behaviour
- Driver behaviour regulation strategies

#### **Important dates:**

Regular Research Paper may consist of **up to 8 pages**. Please choose “**Special Issue on Driver behaviour**” when submit.

- Deadline of initial submission– March 31, 2021
- Notification of first round decision – July 31, 2021
- Deadline of revised paper submission – October 31, 2021
- Notification of the final decision – December 31, 2021
- Deadline for final paper submission – January 15, 2022

#### **Guest Editors:**

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