Guest Editorial
Introduction to the Special Issue on the 2018 IEEE Intelligent Vehicles Symposium (IV'18)

THIS special issue contains a set of papers originally presented at the 2018 IEEE Intelligent Vehicles Symposium (IV'18), which was held in Changshu, Jiangsu Province, China, on June 26-30, 2018. IV'18 was a premier annual forum sponsored by the IEEE Intelligent Transportation Systems Society (ITSS). It brought together researchers and practitioners to share and discuss the latest development in theory and technology related to intelligent vehicles. The topics covered include advanced driver assistance systems, artificial intelligence technologies, connected and automated vehicles, human-machine interaction, parallel driving technologies, sensing algorithms, vehicle dynamics and control, and others.

IV'18 featured a five-day technical program: 19 workshops and 1 tutorial session were organized on the first day, followed by a three-day main conference including nine special sessions, and the on-road demonstration "From parallel driving to smart mobility" was held at China Intelligent Vehicle Proving Ground on the last day. IV'18 was very successful: it attracted a record number of 603 submissions from 34 different countries. Following a rigorous review process, a total of 346 paper were accepted. 33 papers with outstanding reviews were invited as oral presentations, while others were scheduled as poster presentations.

For the preparation of this special issue, a call-for-paper was made that was open to all expanded/improved papers from IV'18 with the requirement that all submitted papers should not have an overlap that exceeds 30% with the conference versions. Eventually, 19 papers were received for this special issue. All papers were reviewed subject to the regular review process of T-IV. Subsequently, 12 papers were accepted after a major or minor revision and now included in this special issue.

We would like to thank the authors and reviewers for this special issue. Special thanks go to Prof. Ümit Özgüner, the Editor-in-Chief of T-IV, for his great suggestions and advice. We also would like to thank Ceylan Özgüner, the Editorial Assistant of T-IV, for her outstanding editorial work for this special issue.

Sincerely, Lingxi Li

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