



Workshop on Elemental Technologies for Automated Driving with Realistic Onboard Sensors: from Software to Hardware in the Real World and the Cyber World

in conjunction with **IEEE Intelligent Vehicle Symposium 2018**
June 26-30, 2018, Changshu, Suzhou, China

Organizers:

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Supported by:

IEEE ITS Society Nagoya Chapter

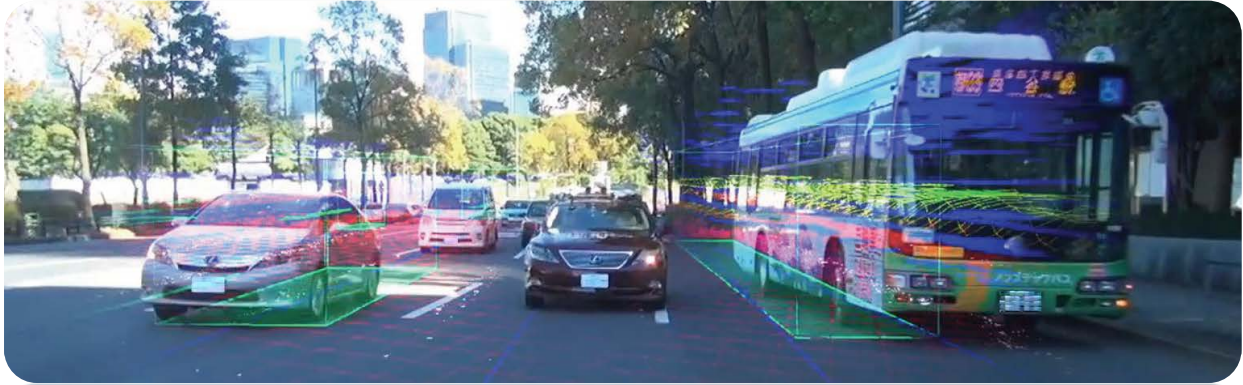
IEEE ITS Society Tokyo Chapter

Abstract:

Next generation cars will be highly or fully automated on regular roads. This could greatly improve the driving comfort and, more importantly, the road safety, thereby potentially saving over a million lives each year. In the last decade, various automated driving systems have been developed and implemented in the real world, which commonly rely on specialized and expensive sensors, such as high-precision GPS and digital maps, high-resolution laser scanners, etc. However, the high cost of such systems prevents their benefits to normal contemporary cars. Whereas, this workshop is focused on highlighting R&D advances for automated driving with more realistic configurations, ranging from software development to hardware design in the real world and the cyber world. We also welcome contributions from academic researchers and governmental organizations, national research labs, etc.

Relevant topics of interest include, but are not limited to:

- Environment perception and scene understanding
- Image, Radar, Lidar signal processing and sensor fusion
- Mapping and localization
- New sensors and devices
- Simulation and evaluation technologies



- Decision making and path planning
- V2X communication and cooperative driving
- Automated driving and ADAS

Important Dates & Submissions:

- Electronic submission of the workshop papers is due by **January 29, 2018** at <https://its.papercept.net> . Submission code of the workshop is "34qpi".
- Notification of acceptance is due by March 31, 2018
- Final paper submission is due by April 8, 2018
- Workshop paper is limited to a total of six pages including references. A maximum of two supplementary pages is permitted at an extra charge.
- Peer-reviewed workshop papers will be included in the Conference Proceedings.

Presentations without submitting a full paper

- Authors intending to present research progress on environment perception at the workshop without submitting a full paper are invited to submit an extended abstract.
- The extended abstract is limited to 1-2 pages of A4 size (including figures), and should be sent to czguo@mosk.tytlabs.co.jp via email before **May 15, 2018**.
- The extended abstract must clearly reflect the contents of the paper, and accompanied by the following information: Title of paper; Name of author(s); Affiliation(s); Abstract; Corresponding author (Name, Affiliation, E-mail address).
- The Organizing Committee will review the extended abstract. Accepted papers will be presented in an oral presentation at the workshop.
- Extended abstract will not be included in the Conference Proceedings; however, they will be distributed to attendees in electronic format.

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