



# INTELLIGENT TRANSPORTATION SYSTEMS

<https://www.ieee-itss.org/>



IEEE ITS SOCIETY

NEWSLETTER

*Vol. 21, No. 4 October 2019*

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## Web Archive and Electronic Newsletter Subscription

The IEEE ITS Society Newsletter is published quarterly the first Wednesday of January, April, July, and October, reaching more than 17000 subscribers. You can download any issue for free, here:

<http://its.ieee.org>

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## Information for Contributors

Announcements, feature articles, book and meetings reviews, opinions, letters to the editor, professional activities, Abstracts of reports, and other material of interest to the ITS community are solicited. Please submit electronic material for consideration in any of the following formats: Microsoft Word, OpenOffice, plain ASCII, rich text format (rtf), or portable document format (pdf) to the Editor-in-Chief at [kamijo@iis.u-tokyo.ac.jp](mailto:kamijo@iis.u-tokyo.ac.jp). You can also use this Google form: <http://goo.gl/forms/xpgl8Wlt9F>

## SOCIETY NEWS

### From the Editor

Shunsuke Kamijo

Dear readers, we have the fourth issue of 2019 fully loaded with interesting information.

President of our society gives us the message “ITS Technologies Driving the Future of Industry” in this issue. We announce 2019 IEEE Intelligent Transportation Systems Society Board of Governors Election. We have an introduction for the ITS Society Educational Activities and local chapters. IEEE ITS Society announces Call for Papers for new Open Access Journal with discount available for IEEE society members on article processing charges .

We have a number of CFPs for ITSC, IV and other ITS related conferences coming in 2019 and 2020. This issue also publishes the list of the forthcoming papers in Transaction on IV, ITS and ITS Magazine.



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## Message from the IEEE ITS Society President

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### ITS Technologies Driving the Future of Industry



I have just realized that this is the last message that I will address from this column as President of the IEEE ITS Society. After two years of work, I look back and see how our dear society has continued to grow and make progress. Honestly, I cannot take any credit for that. I believe the level of strength and energy of our members is such that the result would have been very similar with any other person sitting at the President's chair. The thing is that this group is moving forward, launching new initiatives, sharing ideas and information, and starting joint research projects. This is what I see and feel every time we gather in our conferences and events. By the way, I don't know if you are aware of how much we have grown in the last years. Let me give you a quick example. In 2012, I was General Chair of the IEEE Intelligent Vehicles Symposium, one of our flagship conferences. On that

occasion, we had 350 registrations, a kind of new record by then. Today, the ITSC conference has reached 1.000 registrations very recently and the IV Symposium seems to be reaching a similar figure in the near future. That is simply amazing. Such a big gathering of talented and motivated professionals can only lead to an explosion of creativity and new ideas, and this is, I believe, what the society needs, more than any other thing. I feel proud of being part of this group.

Definitely, we are living fascinating times, with tons of technological and societal changes that shape our lives and our relations. ITS technologies are playing a key role in this game. Just think of self-driving cars, V2V technologies, traffic management, etc. As an example, we are witnessing the birth and growth of uncountable companies developing some kind of technology connected to autonomous driving. As a matter of fact, there are today thousands of engineers working at industry, doing jobs that did not exist ten years ago. Who knows what the future may hold for us in the next ten years. The only thing I know for sure is that we will be one of the actors driving such future. In the meantime, let me once more remind you that the ITSS is constantly seeking support from their members. There are many different ways to contribute to the ITSS' activities and initiatives. If you are willing to volunteer, just let us know so that we can find the best fit for you.

In my last message as President of the IEEE ITS Society, I would like to welcome the new ITSS President, Wei-Bin Zhang, from UC Berkeley, whose term will start January 1, 2020. Apart from being an excellent and enthusiastic professional, Wei-Bin is a good friend and a good person. I have no doubt that the ITSS will continue to make progress under Wei-Bin's

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leadership. My best wishes to Wei-Bin Zhang and his team. Last but not least, I would like to thank all of you for these two fascinating years. I have had the privilege of leading a fantastic, energetic and vibrant society, something that has rejuvenated me. I can't describe how much I have learnt from all of you. Let me wish you the very best in your future ITS endeavors. For anything you might need, you know how to reach me.

A handwritten signature in blue ink, appearing to be 'Miguel Ángel Sotelo', written in a cursive style.

Sincerely,

Miguel Ángel Sotelo  
President. IEEE Intelligent Transportation Systems Society

## 2019 IEEE Intelligent Transportation Systems Society Board of Governors Election

Dear IEEE ITS Society member:

Under the IEEE Intelligent Transportation Systems Society Bylaws, 15 members are elected to serve on our Board of Governors to manage the Society's resources, represent the Society within IEEE and arrange for technical publications, conferences and other benefits to the members. The Governors serve for three years, where five Governor positions are available each year.

To help manage the activities of the Society, ITSS Governors shall actively participate in the Board of Governors (BoG) meetings, which are generally scheduled either as a teleconference or in conjunction with our flagship conferences, the IEEE Intelligent Vehicles Symposium and the IEEE Intelligent Transportation Systems Conference. You can see our current Governors here: <http://sites.ieee.org/itss/about/governance/board-of-governors/>

**Nomination:** Nominations, including self-nominations shall be sent via email to [wbzhang@berkeley.edu](mailto:wbzhang@berkeley.edu) with subject 'ITSS BoG Nomination'. Each nomination must include at least the full name, IEEE Member Number, and the email address of the nominee. Format must be in plain text. BoG candidates must be members of the IEEE ITS Society.

**Timeline:** Nominations must be received ON or BEFORE **25 October, 2019** (strict deadline), together with a brief CV and a short statement on their goals for the ITS Society. For a nominee who previously served on the Board of Governors, please also describe their past service.

A list of candidates will be established by the ITSS Nominations & Appointments Committee and will be announced to the Society membership by **1 November 2019**.

In accordance with the Society Bylaws, Article V, sections 9 and 10, for each elective office of the Society, individual voting members eligible to vote in such election may nominate candidates either by a written petition or by majority vote at a nomination meeting of the BOG, provided such nominations are made at least 28 days before the date of election. Petitions must be submitted no later than **15 November 2019** (strict deadline). The policy and procedure for petition candidates can be found here

[https://docs.wixstatic.com/ugd/3a8387\\_7e57c9c6b1fa4981bf1be09d120bea05.pdf](https://docs.wixstatic.com/ugd/3a8387_7e57c9c6b1fa4981bf1be09d120bea05.pdf)

IEEE will contact all IEEE ITSS members (postal mail or email) and ask for a ballot vote in early December 2019.

Newly elected Governors for this cycle will start their term in January 2020 and will conclude their service on Dec. 31, 2022.

Thank you for your attention to this important matter,

Wei-Bin Zhang  
Chair, Nominations and Appointments  
President-Elect, IEEE ITS Society



# Educational Activities ITSS

<https://edu-ieee-itss.org>



Enroll now!

**NEW**  
**Job Offers section!**  
**IEEE Continuing Education**  
**(CEU) Certificates**

## Courses

▼ Collapse all

### ITSS Courses

- Simulation-based Dynamic Traffic Assignment
- Introduction to Intelligent Transportation Systems
- Introduction to Vehicular Robotic Modeling with V-REP
- Short Course in Predictive Analytics in ITS
- Autonomous Vehicles, Platooning and Traffic Flow Control for Connected Vehicles
- A primer on security and privacy in vehicular ad-hoc networks

### ITSS Summer Schools

- IEEE ITSS Summer School on Cooperative Interactive Vehicles (Sep 2018)
- IEEE ITSS Summer School on Cooperative Interacting Automobiles (Sep 2017)
- IEEE ITSS Summer School - Qingdao, China (Jul 2016)

### ITSS Keynotes

- IEEE ICVES 2018
- IEEE ICVES 2017

The screenshot shows the website's navigation bar with links for Home, IEEE, ITSS, DLS, Board, Job Offers, and Certificates. Below the navigation is the 'edu.ITSS' logo and a social media section. A featured article by a woman discusses the IEEE ITSS Educational Activities Board (EAB) and its role in fostering educational programs. The main content area is divided into three columns: 'ITS COURSES' (listing various courses with expand/collapse icons), 'ITS KEYNOTES' (listing keynote speeches), and 'HOW CAN I ENROLL IN A COURSE?' (providing enrollment instructions). A login form is visible on the left side of the main content area. The 'Courses' section is expanded to show a list of courses, including 'Simulation-based Dynamic Traffic Assignment' and 'Introduction to Intelligent Transportation Systems'. The 'ITSS Summer Schools' and 'ITSS Keynotes' sections are also expanded. At the bottom, there is a 'Certificates' section with a form for requesting a certificate.



## ITSS Local Chapters

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Get involved with the Intelligent Transportation System Society at a local level. New [chapters](#) are forming around the world. 2019 has seen the addition of the [German Chapter](#), [Austrian Chapter](#), and Delhi Chapter.

Whether you are part of an existing chapter or are interested in starting a new chapter, the ITS Society wants to support your activities. Submit a [Chapter Support Proposal](#) to provide funds for such things as speaker travel, participant fees, refreshments, etc.

For more information contact Brendan Morris, VP of Membership.

Sincerely,

Brendan Morris

[brendan.morris@unlv.edu](mailto:brendan.morris@unlv.edu)

## IEEE ITS Society Announces Call for Papers for New Open Access Journal with Discount Available for IEEE Society Members on Article Processing Charges

IEEE ITS Society is now accepting paper submissions for its new gold fully open access “The IEEE Open Access Journal of Intelligent Transportation Systems”, spanning the full scope of ITS Society’s fields of interest.

The new open access journal will follow IEEE’s established high standard of peer review, drawing on experts in the Intelligent Transportation Systems technical community to continue publishing the most highly cited content in Intelligent Transportation Systems. The new journal will be fully compliant with funder mandates, including Plan S.

An independent editorial board, led by Professor Ir Bart van Arem, will serve as Editor-in-Chief to drive ITS Society’s commitment to publish high-quality articles including cutting-edge studies and breakthroughs in Intelligent Transportation Systems and is targeting a ten-week rapid publishing schedule. All articles will be published under the CC-BY license enabling authors to retain copyright.

ITS Society members receive a 15% discount on Article Processing Charges. For more information or to submit a paper, visit “<https://www.ieee-itss.org/itss-open-access-journal>”.



 |  **IEEE**

**Get Published in the New  
*IEEE Open Journal of  
Intelligent Transportation Systems***

**Learn More**

### ***Special Issue on Intent-based Networking for 5G-Envisioned Internet of Connected Vehicles***

#### **LIST OF TOPICS:**

Topics of interest to this special issue include, but are not limited to:

- New opportunities/challenges/ use cases for IBN in 5G enabled IoCV
- Machine learning and optimisation-based algorithms, tools and solutions
- Distributed mobility management and network intelligence
- New architecture and communication protocols
- Innovative applications and services
- MIMO/massive MIMO/millimeter wave technologies
- Big data analytics and Industrial IoT Applications
- Role of cloud, edge and fog computing
- Secure, dependable and trustable cyber-physical systems
- Privacy protection and trust management
- Energy-efficient and green communication solutions
- Reliability, dependability, and fault tolerance support for IBN

#### **IMPORTANT DATES:**

First submission deadline: October 01, 2019  
Notification of first decision: December 31, 2019  
First revision submission deadline: March 01, 2020  
Notification of final decision: July 01, 2020  
Final manuscript (camera ready) submission deadline: July 31, 2020  
Issue of Publication: September 2020

### ***Special Issue on Enabling Extreme Fast Charging Technology for Electric Vehicles***

#### **LIST OF TOPICS**

Topics of interest for this issue include, but are not limited to:

- Analysis of battery materials degrading subjected to the XFC.
- Robust battery management system and cell-balancing design of batteries subjected to high rate charging.
- Traction motor and power electronics design and its control for high operating voltage applications to XFC-enabled EVs.
- The application of wide bandgap semiconductor devices to XFC technology.
- High-voltage system architecture reevaluation and design for XFC applications.
- Reliability testing and evaluation of existing vehicles to XFC charger connectors.
- Cyber-physical security and for EVs and XFC infrastructure.
- Modeling of the XFC-capable EV individual and its interactions with infrastructure.
- Advanced charging guidance and control for the XFC-capable EVs.
- Optimal planning of XFC stations and networks.
- Big data applications in XFC system.
- Data processing and communication systems for EV Charging networks.
- Artificial intelligence for EV Charging networks.
- Internet of things for electric vehicles.
- XFC for EV fleet.

#### **IMPORTANT DATES**

##### **Original Full Paper**

Deadline for Paper Submission: 15<sup>th</sup> Oct., 2019  
Expected completion of Review Process: 15<sup>th</sup> Nov., 2019

##### **Revision**

Deadline for Paper Submission: 15<sup>th</sup> Dec., 2019  
Expected completion of Review Process: 15<sup>th</sup> Jan., 2020  
Expected Publication Time: June, 2020

Azim Eskandarian, *Editor-in-Chief*  
Nicholas and Rebecca Des Champs Professor  
Virginia Tech  
Blacksburg, VA 24061, USA



## 2020 Membership Renewal

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As you know, it is renewal time for your IEEE Membership. When you checkout, don't forget to include [ITS Society membership](#) to your account (\$35/\$18 full/student) for all the benefits.

Besides **discounted registration** [ITSS sponsored conferences](#) and access to the [Transaction on Intelligent Transportation Systems](#) (electronic) and [Intelligent Transportation System Magazine](#) (electronic, print), we are excited to offer full electronic access to all ITSS conferences through the new Society **Digital Library**. For the first time ever, all society members will be able to browse conference proceedings on IEEE Xplore while signed-in.

**You can even participate in the Society as a Non-IEEE member (\$111.50). This is a great option for those who do not have access to a IEEE Xplore subscription through a University or Institution.**

Be sure to take advantage of the Society partnerships and add affiliated subscriptions to IEEE Electrification Magazine (\$25), Transaction on Intelligent Vehicles (\$38), Biometrics Council (free), or Council on RFID (free).

If you would like to know more about membership services or additional benefits provided by ITSS please contact Brendan Morris, VP of Membership. Additional information about the society is available online at <https://www.ieee-itss.org/>.

Thank you very for your continued support and we look forward to seeing you in 2020!

Sincerely,

Brendan Morris

[brendan.morris@unlv.edu](mailto:brendan.morris@unlv.edu)

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# ITS Podcast New Episodes and Information

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*Please, circulate this!*

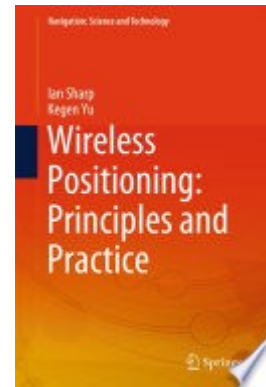
## [ITS Podcast Episode 54: Wireless Technology and 5G in Autonomous Driving](#)



Welcome back dear subscribers,

We apologize for delay in this episode. Ahmedabad University in India has already started its new academic year and beginning is always very hectic for me.

Without any further ado let's get started with the September episode. We have Haluk's book review "Wireless Positioning: Principles and Practice, written by Ian Sharp, Kegen Yu"; after the news mini section. And after that 2 short announcement for IEEE conferences, so stay tuned...



*Dear Listeners, either you are a researcher in Intelligent transportation field or are just interested, don't hesitate to contact us, we are recruiting volunteers and your help will be highly appreciated. Contact us on our email at: [itsspodcast@gmail.com](mailto:itsspodcast@gmail.com) Or just simply message us on any of our social media.*

This podcast is sponsored by IEEE intelligent transportation system society.





# SINGAPORE 2019

26<sup>th</sup> ITS World Congress  
21-25 October


## Smart Mobility, Empowering Cities

### 26<sup>th</sup> World Congress on Intelligent Transport Systems 2019

Suntec Singapore Convention and Exhibition Centre, Singapore

  
**10,000+**  
participants

  
**300+**  
exhibitors

  
**5**  
days of  
programme

  
**20+**  
technical tours and  
demonstrations

### Scientific Programme Themes

  
**Connected &  
Automated Vehicles**

  
**Crowdsourcing &  
Big Data Analytics**

  
**Cybersecurity  
& Data Privacy**

  
**Multimodal Transport  
of People & Goods**

  
**Policies, Standards  
& Harmonisation**

  
**Safety for Drivers &  
Vulnerable Users**

  
**Smarter Travel  
Demand Management**

  
**Sustainable  
Smart Cities**

## Enjoy the Singapore Experience!

**14 highlights not to be missed** while you are at the 2019 ITS World Congress in Singapore:

- 1 Local food
- 2 Melting pot of cultures
- 3 Arts scene
- 4 Charming neighbourhoods
- 5 Iconic architecture
- 6 Museums
- 7 Family-friendly attractions
- 8 Theme parks
- 9 Nightlife
- 10 Sporting events
- 11 Nature parks
- 12 Wildlife
- 13 Offshore islands
- 14 Public transport system

To find out more about Singapore, visit [www.visitsingapore.com](http://www.visitsingapore.com)



Join our mailing list at  
[www.itsworldcongress2019.com](http://www.itsworldcongress2019.com)  
to receive the latest information  
on the 26<sup>th</sup> World Congress on  
Intelligent Transport  
Systems 2019.

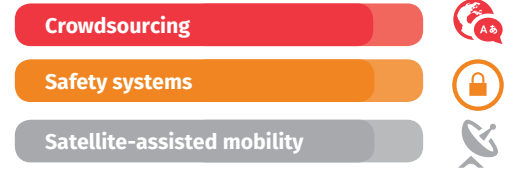
## Why should you attend?



## Examine the wider Smart City ecosystem



## Expand beyond the traditional ITS



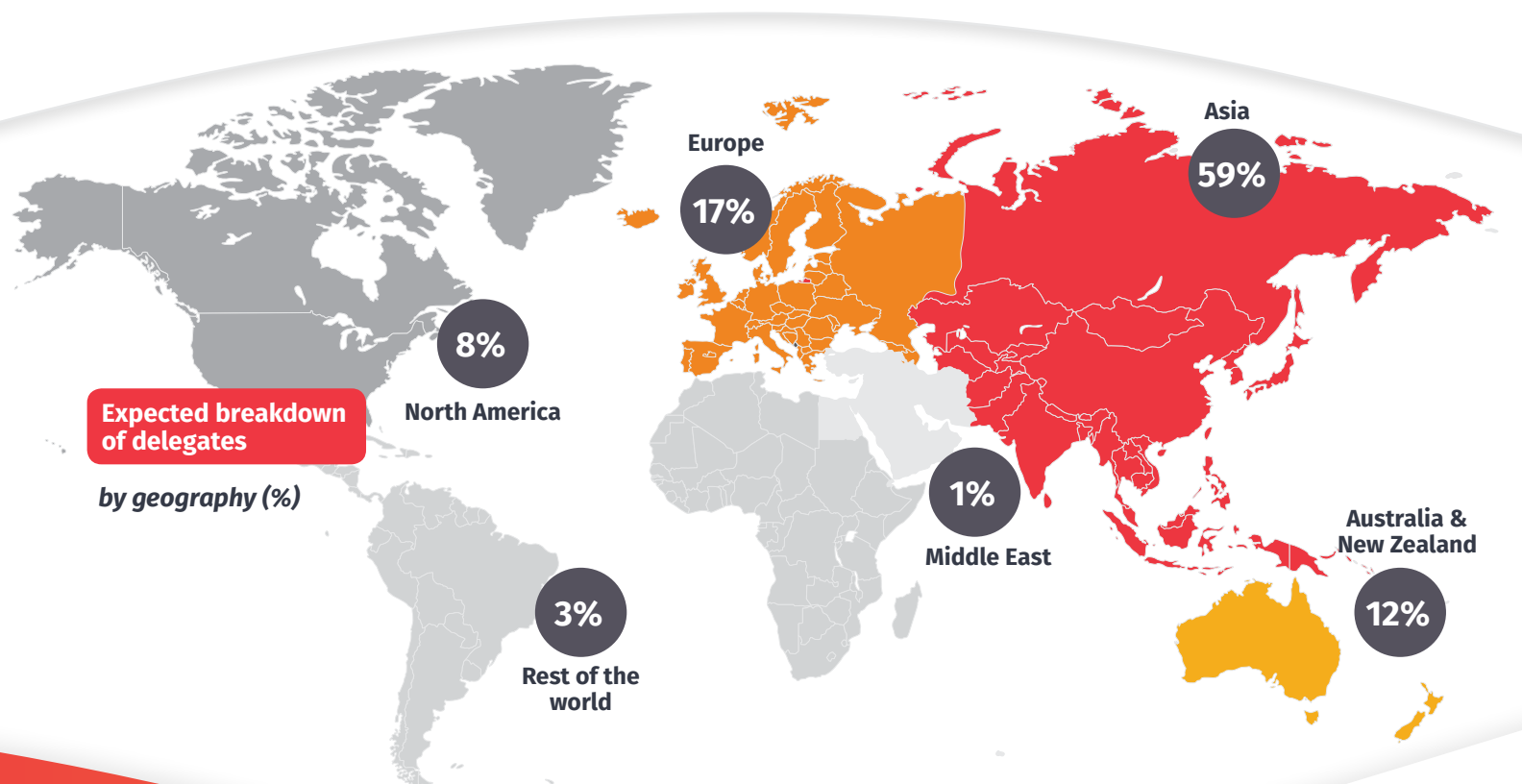
## Who should attend?

### By job titles

- Academics
- Advisors/Consultants
- Analysts
- Board Executives
- Business Development
- Chairpersons
- Chief Executive Officers
- Chief Operations Officers
- Chief Technology Officers
- Commercial Vehicle Operators
- Data Scientists
- Directors
- Engineers
- Executives
- Fleet Managers
- General Managers
- Government Officials
- Heads/Chiefs of Department
- Infrastructure Operators
- Managers
- National Associations
- Public Authorities
- Research Professionals
- Researchers
- Sales and Marketing

### By industry sectors

- Application developers
- Automation
- Automotive manufacturers
- Aviation, rail and sea-ports
- Civil contractors
- Consulting firms
- Cybersecurity
- Emergency and disaster services
- Finance
- Freight
- Infrastructure contractors
- Insurance companies
- Local government
- Municipalities and state agencies
- Public transport
- Regulatory authorities
- Road safety professionals
- Shipping
- Spatial industry
- Start-up community
- System integrators
- Taxi industry
- Technology start-ups
- Telecommunications
- Telematics and autonomous systems
- Toll road operators





**27 – 30 October 2019, Auckland, New Zealand**  
**<http://www.itsc2019.org>**



The 22nd annual flagship conference of the IEEE - Intelligent Transportation Systems Society will be held in New Zealand, for the very first time.

Come and

- Benefit from Networking with 800+ Intelligent Transportation System Solution Innovators, Researchers, Designers, Technology Developers ...
- Explore 10 ITS Program tracks on each and every conference day
- Enjoy One Conference Pass with unlimited access to all ITS Program tracks
- Meet, Interview and attract to your business a global cohort of ITS young practitioners as well as ITS job ready graduate & postgraduate students.
- Showcase your ITS Product(s) & Services, and
- Report on your ITS road/air/sea trials; and
- Consider engaging with the Conference by way of selecting a one of many sponsorship & exhibition opportunities.

The 2<sup>nd</sup> ITSS – ITE Symposium: Where Rubber Meets the Road -- Linking Research and Practice will take place on October 2019 in conjunction with ITSC 2019. This joint symposium brings transport researchers, transport practitioners and transport services end-users together to facilitate exchanges on opportunities and challenges in deploying advanced ITS technologies.

For any further info please contact the Conference General Chair, Professor Emeritus Ljubo Vlacic via [I.Vlacic@griffith.edu.au](mailto:I.Vlacic@griffith.edu.au); +61417633501



ITSC 2019



## ITSS Young-Professionals Social Event

**Date** Monday October 28, 2019

**Time** 18.30 - 21:30

**Location** The Maritime Room

Princes Wharf

Auckland 1010, New Zealand

+64 93023496

<http://maps.google.com/?q=-36.842063,174.764180>

This not-to-be-missed social event aims to provide young professionals, including students, with an opportunity to expand their network of contacts. It is organised by the IEEE Intelligent Transportation Systems Society (ITSS), and it is open for all ITS practitioners in general, and for the ITSC 2019 conference participants in particular.

Attendance is by registration only. IEEE ITSS members of age under 35 and industry partners have free access. Should you meet these requirements, please contact the event organiser. In addition, tickets are available for purchase via the Conference Registration website. Note that IEEE members are not ITSS member by default (ITSS membership is additional, on top of IEEE membership). The number of tickets is limited. Tickets will be made available on a first come, first served basis.

The social event will be held in downtown Auckland, at Princes Wharf in the harbor area, a splendid waterfront location with great atmosphere, adjacent to the New Zealand Maritime Museum. It is only a 25-minutes walk from the Conference Hotel Cordis, or seven minutes by car. For an impression, see: [www.youtube.com/watch?v=BpA\\_-sAjSkA](http://www.youtube.com/watch?v=BpA_-sAjSkA)

Come and join the ITSS Young Professionals social event and experience Auckland's unique and stunning surrounds. This is going to be a memorable evening. A variety of catering including special local drinks will be offered. You will enjoy an experience that you cannot get anywhere else.

Event Organizer:

 Meng Lu

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First Peoples of Australia

2019 IEEE ICCVE Organizers



Messe Congress Graz | Austria

2019 IEEE ICCVE Patrons



[www.iccve2019.com](http://www.iccve2019.com)

## CALL FOR PAPERS

### General Chair

**Daniel Watzenig**  
Graz University of Technology and  
Virtual Vehicle, Austria

### General Co-Chair Europe

**Josef Affenzeller**  
AVL List, Austria

### General Co-Chair Asia

**Yu Yuan**  
Senses Global Corporation, China

### General Co-Chair Americas

**Wei-Bin Zhang**  
UC Berkeley, USA

### Technical Program Chairs

**Anton Fuchs**  
Virtual Vehicle, Austria

**Horst Bischof**  
Graz University of Technology, Austria

**Antonella Ferrara**  
University of Pavia, Italy

**Reinhard Pfliegl**  
IEEE Austria, Austria

**Aldo Sorniotti**  
University of Surrey, UK

### Industry Chair

**Serkan Arslan**  
NVIDIA, Germany

### Local Arrangement Chair

**Julia D'Orazio**  
Virtual Vehicle, Austria

### SUBMISSION PROCESS & DEADLINES

**June 26, 2019**  
Special Session and Tutorials Proposal  
Deadline

**June 7, 2019**  
Full Paper Submission

**July 19, 2019**  
Review Notification (Accept, Reject, Accept  
with Minor Revisions)

**August 5, 2019**  
Final Notification Deadline (Accept or Reject)

**August 9, 2019**  
Final Manuscript Submission for ALL papers  
(Final Manuscript, Copyright Form, Author  
Registration)

**Connected and Automated Vehicles (CAVs)** are seen as game changers and key enabling technologies that considerably will shape our society and will influence future transportation modes and quality of life, altering the face of mobility as we experience it by today. By connecting and automating vehicles we are able to make our mobility safer, faster, cheaper, cleaner, and more enjoyable.

The **2019 IEEE ICCVE** – International Conference on Connected Vehicles and Expo – held in **Graz, Austria** is the brand-new application-driven flagship conference of the IEEE Instrumentation and Measurement Society and is the world's premier conference in that field to bridge the automated vehicle gap: **Science and Technology, Consumer Trust, Homologation and Liability**. Experts, researchers, practitioners, and policymakers from all around the world will present the latest innovations and advances on CAVs, share the experience and insights, forecast the trends and opportunities, and discuss the policy, economics and social implications.

IEEE ICCVE is proposed as a catalyst to promote interactions between industry and academia – a wide spectrum of academic research results will be presented, with potential practical applications in current industrial technology, as well as industry-driven developments.

The conference focuses on all aspects related to research, development, and applications of vehicle connectivity and autonomy. Topics of interest include, but are not limited to:

- Advances in Sensors, Signal Processing, Data Fusion, and Instrumentation of CAVs
- Sensor Simulation and Stimulation (Radar, Lidar, Camera, Ultrasonic, Infrared...)
- Active Perception Architectures and Implementations
- Vehicle Navigation and Situational Awareness
- Vehicle Control (adaptive, fuzzy, cooperative, neuro, emergent paradigms)
- Multi-vehicle Cooperation, Connected Vehicles, Platooning
- Fault-tolerant Algorithms and Fail-operational Architectures
- Real-time Computational Paradigms and Architectures
- Computational and Artificial Intelligence (AI)
- Dependable High Performance Computing (in-vehicle, cloud, fog)
- Cooperative Intelligent Transport Systems (C-ITS)
- Wireless Communications and Vehicular Networking
- Hybrid Simulation and Empirical Testing Paradigms (X-in-the-loop)
- Scenario-based Risk Assessment
- Active Safety and Vulnerable Road Users Protection
- Radical new CAV Concepts
- Virtual Homologation, Validation, and Test of AI-powered CAVs
- Safety Assurance, Cybersecurity, Reliability, Certification
- Applications from different Domains (Automotive, Offroad, Maritime, Avionics...)
- Shared Mobility: from Technology to Business
- Practices, Recommendations, and Standards in CAVs
- Policy, Economics, and Social Implications of CAVs

Many other new initiatives and opportunities to encourage your active participation in the conference are planned, and will make 2019 IEEE ICCVE a vibrant event to meet with people working in the field of connected and automated vehicles.

Visit the [conference website](#) as well as Facebook and LinkedIn pages for each specific call and additional news.

# SOLI 2019

IEEE International Conference on Service Operations and Logistics, and Informatics

Openness & Sharing & Green & Intelligence



## SPONSORS

IEEE Intelligent Transportation Systems Society (ITSS)  
 Chinese Association of Automation (CAA)  
 IEEE Council on RFID (CRFID)  
 Qingdao Academy of Intelligent Industries (QAI)  
 IEEE SMC Technical Committee on Social Computing and Social Intelligence  
 IFAC Economic, Business, and Financial Systems (TC 9.1)  
 Technical Committee on Blockchain, Chinese Association of Automation  
 Chinese Academy of Management-Technical Committee on Parallel Management  
 ACM Beijing Chapter on Social and Economic computing  
 INFORMS Beijing Chapter  
 Qingdao Association of Artificial Intelligence  
 Qingdao Association of Automation

## SCOPE

Service science, service operations, logistics, and informatics are becoming ever more complex and interdependent. They are playing an increasingly important role in today's world economy. Information and communications technology provide cyber-infrastructure and platforms to achieve more efficient and productive services operations. New types of service offerings are also emerging to meet the needs of customers and consumers.

The IEEE Service Operations and Logistics, and Informatics (SOLI) conference series will provide an exciting platform to bring together researchers and practitioners to discuss issues, challenges and future directions, share their R&D findings and experiences in relative areas.

## TOPICS OF INTEREST

**The topics of interest include but are not limited to the following:**

- Service Design, Engineering, Operations, and Innovations
- Logistics & Supply Chain Management
- Artificial Intelligence in Logistic and Sensing Network
- Service/Event Management & Manufacturing
- Information & Communications Technology and Systems
- Electronic Commerce & Knowledge Management
- Business Modelling, Monitoring & Management
- Service Delivery and Operations
- Cloud Computing and the Internet of Things

- Mobile Internet, Cyber-Physical-Social Systems
- Intelligent Transportation Systems (ITS)
- Big Data & Sensors and Sensing Network for Smart City
- Autonomous Vehicle Technologies
- Smart Home Technologies
- Blockchain
- Intelligent Robotics
- RFID Technology & Application

## Brief Introduction to CAA

The Chinese Association of Automation (CAA), as a national academic association organized on a voluntary basis of individual or enterprise committed to R&D, education and application in the automation field, was founded in 1967. It's affiliated to China Association for Science & Technology and headquartered in Beijing. For over 60 years, CAA has made significant contributions to promoting and developing automation resources and technologies in China.

## Brief Introduction to QAI

Qingdao Academy of Intelligent Industries (QAI) is jointly founded by Institute of Automation, Chinese Academy of Sciences, Qingdao National High-tech Industrial Development Zone, and Qingdao Science and Technology Bureau. It is officially registered as a new research institution with independent legal entity in May 2014.

QAI has established an academic and technology committee that composes of many academicians and experts from both China and abroad. QAI aims to maintain an international foresight, create international standards, and lead the development of intelligent industries based on Parallel Intelligence based theories and technologies.

The straight-line distance between south and north, east and west is both about 450 kilometers, and the land area is 101,800 square kilometers, occupying 1.06% of the whole country and making itself one of China's smallest provinces. There are two sub-provincial cities in the province, namely Hangzhou and Ningbo and nine prefecture-level cities, namely Wenzhou, Huzhou, Jiaxing, Shaoxing, Jinhua, Quzhou, Zhoushan, Taizhou and Lishui. Governed by those cities or the province are 36 counties, 22 county-level cities and 32 municipal towns. The number of resident populations of the province is 54.77 million by the end of 2012.

As one of the major genres of Chinese operas, Yue Opera came into being in Shengxian County (now Shengzhou City) in the early 20th century. It is characterized by the beautiful melody and lyrical plot.

In Zhejiang, different schools of painting and calligraphy with varied styles and features hold a significant position in the history of Chinese painting and calligraphy. In the 12th century, Zhejiang was the centre of fine arts in the country. Since the 19th century schools of painting in Zhejiang have made splendid achievements and exercised a great influence over the development of Chinese painting and calligraphy.

A province rich in local artistic traditions, Zhejiang has cultivated varied and colourful folk culture and arts. Folk leisure activities are flourishing throughout the province, including the dragon dance, lion dance, hobby-horse dance, stilt walking, and various lantern shows.

## IMPORTANT DATES

**Paper submission deadline:** ~~July 15, 2019~~ **August 1, 2019**  
**Notification of Acceptance:** ~~August 15, 2019~~ **August 30, 2019**  
**Final Submission deadline:** ~~August 30, 2019~~ **September 15, 2019**  
**Early Birds Registration Deadline:** **September 15, 2019**  
**Common Registration Deadline:** **September 25, 2019**

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# 2019 IEEE Vehicular Networking Conference (VNC)

December 4-6, 2019, Los Angeles, California

## Call for Papers

The 2019 IEEE Vehicular Networking Conference (VNC) seeks to bring together researchers, professionals, and practitioners to present and discuss recent developments and challenges in vehicular networking technologies, and their applications. Topics of interest include, but are not limited to:

- 5G technologies for connected vehicles
- Innovative vehicular network applications (e.g., those in transportation safety, efficiency, and comfort as well as electrical vehicle and power grid integration) and their communication requirements
- Communications and networking for automated and semi-automated vehicles (e.g., collective perception, sensor data sharing, cooperative driving, cooperative maneuvering, cooperative intersections and highways, platooning)
- Field measurements and/or real-world deployments of vehicular networks and applications
- Impact assessments of vehicular networks on transportation (e.g., safety, efficiency, comfort, environmental sustainability)
- Modeling, design, as well as theoretical and empirical analysis of vehicular networks and applications
- Hardware and software platforms for the simulation, emulation, prototyping, measurement, and/or real-world deployment of vehicular networks and applications
- Emerging V2X communication and networking technologies such as cellular V2X (C-V2X), dynamic spectrum sharing, mmWave, massive MIMO, beamforming, and vehicular visible light communications (VLC)
- In-vehicle communication and networking systems (e.g., TSN, FlexRay, TT-CAN, and mmWave)
- Vehicular networking architectures and system design
- Novel physical layer communication technologies for vehicular networks
- Radio propagation aspects of vehicular networks (e.g., channel measurements, propagation models, antenna design)
- Vehicular MAC and link layer protocols (e.g., those for URLLC)
- Vehicular network layer protocols (e.g., real-time information dissemination)
- Transport control and middleware for vehicular network systems (e.g., congestion control, real-time messaging)
- Heterogeneous vehicular networking (e.g., multi-radio, multi-channel, multi-application, multi-technology)
- Network and QoS management for vehicular networks
- Security, privacy, liability, and dependability of vehicular networks

- Communications related to electric and hybrid vehicles
- Integration of V2C with on-board systems and networks
- Edge computing for vehicular applications
- Vehicular networks and IoT integration

All submitted papers will be peer-reviewed. A **Best Paper Award** will be given to a high-impact paper selected by a committee. Accepted papers will appear in the conference proceedings and will be archived in the IEEE Xplore Digital Library.

## Manuscript submissions

The submitted papers must be written in English and be formatted in the standard IEEE two-column format and with a font size no less than 10-point. The mandatory IEEE template in Microsoft Word and LaTeX format can be found at the IEEE templates (<https://www.ieee.org/conferences/publishing/templates.html>) page. Only Adobe PDF files will be accepted for the review process. All submissions must be made electronically through EDAS.

[+ Submit new paper \(https://edas.info/N26705\)](https://edas.info/N26705)

The conference will consider four categories of submissions:

- **Full papers** should describe novel research contributions and are limited in length to eight (8) printed pages including figures, tables, and references. Papers exceeding 8 pages will be declined automatically and will not be reviewed.
- **Short papers** should be more visionary in nature and may report on work-in-progress without fully finished results. They are meant to present novel perspectives, so as to foster discussions about innovative directions and new points of view. They are limited to at most four (4) pages including figures, tables, and references, but might in many cases be even shorter. Accepted short papers will be included in the proceedings and will be given (a shorter) time for oral presentation at the conference.

Please note that the full paper and short paper categories target different kinds of contributions. Papers submitted to a category will NOT be moved to a different category: a paper will either be accepted for the category where it has been submitted, or it will be rejected. Full papers will not be “downgraded” to short papers. Therefore, please be sure to carefully assess for yourself prior to submission which is the most suitable submission category for your paper, and to make sure that the presentation in the manuscript is well suited to the aims of this category.

- **Posters** are especially suited for presenting controversial research directions that may generate discussion, or promising ideas not yet fully validated through complete extensive evaluation.
- **Demonstration (demo) papers** are suited for researchers to showcase their latest prototypes with media, models, or live demonstrations. The demo session will be co-located with the poster session to ensure maximum visibility and a close interaction with the conference audience.

Poster/demo papers should be 2-page papers following standard IEEE 2-column format using 10-point font. All paper submissions must be written in English. The title of the paper should begin with either "Poster:" or "Demo:".

### Important Dates

**Full/short paper submission deadline:**

September 22, 2019, 23:59 AOE  
(Anywhere on Earth, UTC-12)  
(extended and final)

**Demo/Poster paper Submission Deadline:**

October 7, 2019, 23:59 AOE  
(Anywhere on Earth, UTC-12)  
(extended and final)

**Acceptance notification:**

October 22, 2019

**Camera ready paper due:**

November 4, 2019

**Conference:**

December 4-6, 2019

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## IEEE Intelligent Vehicles Symposium - IV2020 June 23-26, 2020 | Las Vegas, NV, United States

**We look forward to your participation in IV2020!**

The 31st IEEE Intelligent Vehicles Symposium (IV2020) is a premier annual technical forum sponsored by the IEEE Intelligent Transportation Systems Society (ITSS). It brings together researchers and practitioners from universities, industry, and government agencies worldwide to share and discuss the latest advances in theory and technology related to intelligent vehicles.

Papers concerning all aspects of intelligent vehicles as well as proposals for workshops and specials sessions are invited for IV2020.

Additionally, related technical Demonstrations and Exhibitions are welcome.



# Call for paper

## Important Dates

**Nov. 20, 2019** Proposal for special sessions/workshops

**Feb. 1, 2020** Submission Deadline **(No Extensions!!)**

**April 1, 2020** Notification Deadline

**April 22, 2020** Camera-ready Deadline

## Topics of Interest

Authors are invited to submit papers that fall into the area of intelligent vehicles. The topics of interest include but are not limited to the following:

- Advanced driver assistance systems
- Advanced sensing and recognition
- Artificial intelligence
- Automated vehicles
- Connected vehicles
- Cognition and Control
- Driver monitoring
- Human factors
- Intelligent electrified vehicles
- Navigation and localization systems
- Policies and regulations for intelligent vehicles
- Vehicle dynamics and control
- Vehicle hardware/software systems
- Vehicle on-board diagnostics
- Vehicular signal processing

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IAV GmbH, Germany

### **Workshop Co-Chair**

Dr. Chunzhao Guo,  
Toyota Research Institute, USA

## CALL FOR CONTRIBUTIONS

There is an urgent need among researchers and practitioners to discuss the future of mobility. This is a discussion that has been happening generally in different venues and many times the different stakeholders are not able to have a joint discussion. Among other topics we define the challenges (and opportunities) for a sustainable future mobility in three main keywords:

### Electrification | Sharification | Connected Automation

In this conference we will promote the discussion between Academia, Industry and Public Authorities by having scientific papers presentations but also inviting practitioners to present their view on the future of transportation.

Submit your paper or abstract here: <http://forum-ists2020.org/1772-2/>

#### Call for workshops and tutorials:

<http://forum-ists2020.org/call-for-workshops-and-tutorials/>

#### TOPICS

The specific topics of the conference are those that connect to ITS and are typical of its conferences:

- Transportation Networks
- Advanced Public Transportation Management
- Ports, Waterways, Inland navigation, and Vessel Traffic Management
- Modeling, Simulation, and Detection of Vulnerable Road Users and Animals
- Air, Road, and Rail Traffic Management
- ITS User Services
- Emergency Management
- Artificial Transportation Systems
- Transportation Electrification
- Emissions, Noise, Environment
- Management of Exceptional Events:
- Incidents and Evacuation
- Security, Privacy and Safety Systems
- Transportation Smartification
- Deep Learning
- Automation and Robotics
- Commercial Vehicle Operations
- Intelligent Logistics
- Sensing, Detectors and Actuators
- Connected and Probe Vehicles
- Big Data and Naturalistic Datasets
- Communication in ITS
- Cooperative Techniques and Systems
- Intelligent Vehicles
- Vision, and Environment Perception
- Electric Vehicle Transportation Systems
- Smart Mobility
- Traffic Theory for ITS
- Modeling, Control and Simulation
- Human Factors, Travel Behavior
- ITS Field Tests and Implementation
- Driver and Traveler Support Systems
- Electronic Payment Systems

#### Deadlines & Important dates

##### Scientific papers:

Paper submission deadline - 15 December 2019

Acceptance notifications - 15 March 2020

Final submission deadline - 15 May 2020

##### Practitioners

Extended abstract - 15 February 2020

Acceptance notifications - 15 March 2020

#### Local Organising Committee

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Local Organising Chair: Nicole Fontein

Workshop Chair: Dr. Simeon Calvert

Chair of Demonstrations: Dr. S. Hoogendoorn - Lanser

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## CALL INTERACTIVE WORKSHOPS

### Interactive workshops

During the Forum on Integrated and Sustainable Transportation Systems 2020 (Forum-ISTS2020), interactive workshops are planned. For the first time, these will be part of the main conference and spread over different conference days. Workshops will be explicitly interactive, hence the name: 'Interactive Workshops'. We want the workshops to be an environment in which active discussions can take place on the workshop topic as well as sharing state of the art developments in presentations as food for discussion.

We envisage the setup of a workshop to follow a schedule resembling:

- Introduction to the workshop and topic by the workshop organisers
- Short presentations\* (e.g. 15-20 mins) on a related state of the art topic or development
- Followed by an open discussion of the questions posed in the presentation (e.g. 10-20 mins)
- After all the presentations have been given, a general discussion on the main topics can be performed, chaired by one of the workshop organisers.
- Workshops will be planned in blocks of 3 hours and shouldn't exceed this. This allows enough time for the introduction, four to five contributions and the final discussion.
- Workshop topics should be aligned to the F-ISTS topics list, which can be found on the website or in the general 'Call for Contributions'
- Workshop organisers may deviate from the suggested format, but we do request that the format remains an interactive one.

\* Presentations should be on a state of the art or recent development in the area of the workshop topic. The presentation should be informative and should conclude by posing some relevant open questions that exist for the community. The questions can be discussed after the presentation.

Participation in a workshop can be by invitation or registration and is part of the conference program. We request that the workshop be setup such that it is a single conference component rather than multiple unrelated presentations. This way, we want to encourage participants to join in one workshop and be active throughout that single workshop. A participant will be asked to explicitly register for specific workshops.

## CALL TUTORIALS 29 JUNE 2020

### Tutorials

A Tutorial session should focus on presenting the fundamental principles, tools and algorithms of an active research area in an instructive manner. The main objective of a tutorial is to disseminate knowledge of a very active area across a general audience. Therefore, topics should be focussed, but accessible to a broad audience.

Tutorials are not part of the main conference program and will take place on Monday the 29th of June, the day before the conference starts in earnest. For this reason an additional fee will be requested for participation in a tutorial upon registration for the conference. Alternatively, a host of a tutorial session has the option to sponsor the tutorial session and in doing so make it free of charge for participants.

## CALL INTERACTIVE WORKSHOPS AND TUTORIALS

### Practical information

All accepted workshops and tutorial sessions will also be listed on the Forum-ISTS 2020 website, along with the names of the organisers. It is strongly recommended that all workshop/tutorial organisers actively promote their workshop, possibly giving details of their workshop/tutorial sessions, such as titles of talk and presenter profiles. The use of a dedicated webpage with a link to the Forum-ISTS 2020 website is also encouraged.

Workshop and Tutorial Session Proposals must be submitted via Paperplaza submission site at <http://its.papercept.net/conferences/scripts/start.pl>

Instructions for submitting Interactive Workshop and Tutorial Session Proposals:

Proposals must address the following items:

- Title
- Total duration
- Organisers
- Aim of the Workshop/Tutorial (50-400 words )
- Topics of Interest
- Intended Audience (up to 200 words)
- Expected Attendance
- Invited Speakers (if known)
- Format/Program
- Equipment required

Please use our online form to develop your proposal and submit it as soon as it is complete. The sooner, we have your proposal, the sooner we can confirm its place in the conference. The initial deadline for interactive workshop and tutorial proposals is November 1, 2019. A final proposal submission deadline is set for February 1, 2020.

Please note that if we have sufficient proposals by the initial deadline, that we will not consider any further proposals for the final deadline.

Please contact the workshop chair, Dr. Simeon Calvert ([workshop@forum-ists2020.org](mailto:workshop@forum-ists2020.org)) to obtain any further information.

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# The 23<sup>rd</sup> International IEEE Conference on Intelligent Transportation Systems

20 - 23 September 2020, Rhodes, Greece

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## ITSC 2020 Call for Papers and Proposals

The IEEE Intelligent Transportation Systems Conference (ITSC) is the annual flagship conference of IEEE Intelligent Transportation Systems Society (ITSS). ITSC 2020 will be held on 20-23 September 2020 in Rhodes, Greece. This conference welcomes papers and presentations in the field of Intelligent Transportation Systems, dealing with new developments in theory, analysis, simulation and modelling, experimentation, demonstration, case studies, field operational tests and deployments. ITSC 2020 particularly invites and encourages prospective authors to share their work, findings, perspectives and developments as related to implementation and deployment of advanced ITS applications.

Original contributions and workshop proposals are solicited in all areas pertinent to Intelligent Transportation Systems. All presented papers will be published by the IEEE and included in IEEE Xplore.

### Important Dates

Please check the IEEE ITSC 2020 website at <http://www.ieee-itsc2020.org> for updates of Important Dates.

Submission Site Open	01 November 2019
Special Session, Workshop, Panel & Tutorial Proposals	31 January 2020
Special Session & Regular Papers	14 February 2020
Workshop Papers	28 February 2020
Acceptance Notification (all paper types)	10 May 2020
Early Bird Registration	01 June 2020
Final Paper Submission (all paper types)	10 June 2020
Workshops & Tutorials	20 September 2020
Conference	21 – 23 September 2020

### Journal and Magazine Publication of Selected Papers

Selected papers of exceptional quality will be invited for submission to special issues of the IEEE Transactions on ITS, or the IEEE Transactions on Intelligent Vehicles or the IEEE ITS Magazine. Authors will be asked to revise their papers in line with the IEEE Publication Policy.

### Topics

The technical areas include but are not limited to:

- Intelligent vehicles
- Automated and autonomous systems
- Cooperative Intelligent Transportation Systems (C-ITS)
- Information and communication technologies
- Field trials, tests and deployment
- Sensor technologies
- Traffic control and management
- Security, privacy and safety systems
- Smart mobility
- Products and services
- Modelling, control and simulation algorithms and techniques
- Air, road, rail, waterways transportation network and systems
- Logistics and supply chain
- Big data and naturalistic datasets
- Deep learning and Artificial Intelligence
- Human factors and behavioral modeling

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## Forthcoming papers on IEEE Transactions on IV

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### IEEE Transactions on Intelligent Vehicles Issue 4 2019

No Blind Spots: Full-Surround Multi-Object Tracking for Autonomous Vehicles using Cameras & LiDARs

Akshay Rangesh, Mohan M. Trivedi

Object detection from a few LIDAR scanning planes

Zoltan Rozsa, Tamas Sziranyi

Performance Optimisation of Parallelized ADAS Applications in FPGA-GPU Heterogeneous Systems: A Case Study with Lane Detection

Xiebing Wang, Kai Huang, Alois Knoll

Automated lane changing with a controlled steering-wheel feedback torque for low lateral acceleration purposes

Jan Loof, I.J.M. Besselink, Henk Nijmeijer

Simultaneous Visible Light Communication and Distance Measurement Based on the Automotive Lighting

Bastien Bechadergue, Luc Chassagne, Hongyu Guan

Robust Tube-Based Model Predictive Control for Lateral Path Tracking

Sara Mata, Asier Zubizarreta, Charles Pinto

Multisensor Poisson Multi-Bernoulli Filter for Joint Target-Sensor State Tracking

Markus Frole, Christopher Lindberg, Karl Granstrom, Henk Wymeersch

Cooperative Automated Vehicles: a Review of Opportunities and Challenges in Socially Intelligent Vehicles Beyond Networking

Seng Loke

Disturbance Observer-Based Fuzzy Adapted S-Surface Controller for Spatial Trajectory Tracking of Autonomous Underwater Vehicle

Girish Vithalrao Lakhekar, Laxman M. Waghmare, Rupam Gupta Roy

Smooth Automatic Stopping System for Ultra-compact Vehicles

Chinthaka Premachandra, Ryo Gohara, Takao Ninomiya, Kiuotaka Kato

A Novel Smart Energy Management System in Pure Electric Motorcycle Using COA

Alireza Farzaneh, Ebrahim Farjah

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## Forthcoming papers on IEEE Transactions on ITS

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[Benchmark data and method for real-time people counting in cluttered scenes using depth sensors](#)

Shijie Sun, Naveed Akhtar, HuanSheng Song, ChaoYang Zhang, JainXin Li, Ajmal Mian

[Forecasting short-term passenger flow: an empirical study on Shenzhen metro](#)

Liyang Tang, Yang Zhao, Javier Cabrera, Jian Ma, Kwok Leung Tsui

[Stop-and-Wait: Discover Aggregation Effect Based on Private Car Trajectory Data](#)

Dong Wang, Jiaojiao Fan, Zhu Xiao, Hongbo Jiang, Hongyang Chen, fanzi zeng, Keqin Li

[Real-time Vehicle Detection Using an Effective Region Proposal-based Depth and 3-channel Pattern](#)

Vinh Nguyen, Dinh Tran, Jin Byun, Jae Jeon

[An extended linear quadratic model predictive control approach for multi-destination urban traffic networks](#)

Yu Han, Andreas Hegyi, Yufei Yuan, Claudio Roncoli, Serge Hoogendoorn

[MBR: A Map-Based Relaying Algorithm for Reliable Data Transmission Through Intersection in VANETs](#)

Jingbang Wu, Huimei Lu, Yong Xiang, Rui Wu, Feng Wang

[Effects of Ground Manifold Modelling on the Accuracy of Stixel Calculations](#)

Noor Al-Ani, Hsiang-Jen Chien, Mahdi Rezaei, Reinhard Klette

[AVARAC: An Availability-Based Resource Allocation Scheme for Vehicular Cloud](#)

Rodolfo Meneguette, Azzedine Boukerche, Adinovam Pimenta

[Long-Term Traffic Speed Prediction Based on Multiscale Spatio-Temporal Feature Learning Network](#)

Di Zang, Jiawei Ling, Zhihua Wei, Keshuang Tang, Jiujun Cheng

[Distributed Weighted Balanced Control of Traffic Signals for Urban Traffic Congestion](#)

Na Wu, Dewei Li, Yugeng Xi

[Tracking Multiple Vehicles Using a Variational Radar Model](#)

Alexander Scheel, Klaus Dietmayer

[Intelligent Positioning Approach for High Speed Trains based on Ant Colony Optimization and Machine Learning Algorithms](#)

Ruijun Cheng, Yong Song, Dewang Chen, Xiaoping Ma

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## Forthcoming papers on IEEE Transactions on ITS

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### [Monitoring Urban Freight Transport based on GPS Trajectories of Heavy-Goods Vehicles](#)

Sheida Hadavi, Sara Verlinde, Wouter Verbeke, Cathy Macharis, Tias Guns

### [Comments on “Traffic Sign Recognition Using Kernel Extreme Learning Machines with Deep Perceptual Features”](#)

Sukirty Jain, Mona Singhal, Sanyam Shukla

### [Reply to “Comments on “Traffic Sign Recognition Using Kernel Extreme Learning Machines with Deep Perceptual Features””](#)

Yujun Zeng

Azim Eskandarian, Editor-in-Chief  
Nicholas and Rebecca Des Champs Professor  
Virginia Tech  
Blacksburg, VA 24061, USA

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## Forthcoming papers on IEEE ITS Magazine

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### Features

#### [ACFR Five Roundabouts Dataset: Naturalistic Driving at Unsignalised Intersections](#)

Nebot, Eduardo; Zyner, Alex; Worrall, Stewart

#### [Autonomous vehicles and their impact on parking search](#)

Bischoff, Joschka; Maciejewski, Michal; Schlenther, Tilmann; Nagel, Kai

#### [Modeling of Smart Cities based on ITS architecture](#)

Pribyl, Ondrej; Pribyl, Pavel; Lom, Michal; Svitek, Mirek

#### [A Distributed Collaborative Urban Traffic Big Data System based on Cloud Computing](#)

Chen, Zhihong; Zhang, Jianqin; Xu, Zhijie; Du, Mingyi; Yang, Weijun; Guo, Liang

#### [ASPIRE: An Agent-oriented Smart Parking Recommendation System for Smart Cities](#)

Rizvi, Syed; Zehra, Susan; Olariu, Stephan

#### [Parallel Closed-Loop Connected Vehicle Simulator for Large-Scale Transportation Network Management:](#)

Hoque, Mohammad (Asad); Hong, Xiaoyan; Ahmed, Salman

#### [ITS+DM Hackathon \(ITSC 2017\): Lane Departure Prediction with Naturalistic Driving Data](#)

Sanchez-Medina, Javier; Alekseenko, Andrey; Dang, Hien; Bansal, Gaurav; Miyajima, Chiyomi;

#### [A Review of Sensor Technologies for Perception in Automated Driving](#)

Martí, Enrique David; de Miguel, Miguel Ángel; García Fernández, Fernando; Pérez, Joshué

### **Special Section on Modeling & Simulation of Application Scenarios for Autonomous Vehicles**

#### [Intelligent Online Learning Strategy for an Autonomous Surface Vehicle in Lake Environments using Evolutionary Computation](#)

Bessis, Nik; Arzamendia, Mario; Reina, Daniel; Toral, Sergio; Gregor, Derlis; Asimakopoulou, Eleana

#### [An Adaptive System based on Situation Awareness for Goal-driven Management in Container Terminals](#)

D'Aniello, Giuseppe; Loia, Vincenzo; Orciuoli, Francesco

#### [Modeling Process of a Third Dimension Universe for Transportation Simulation: Application to Railway System](#)

Galland, Stéphane; Lamotte, Olivier; Koukam, Abderrafaa; Gaud, Nicolas; Yasar, Ansar-UI-Haque; Shakshuki, Elhadi

#### [Transportation Service Redundancy from a Spatio-temporal Perspective](#)

Haddad, Hedi; Bouyahia, Zied; Jabeur, Nafaa

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## Most popular papers on IEEE Transactions on ITS

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5 most frequently accessed documents for [this publication in IEEE Xplore](#)

**[1. Wheel Defect Detection With Machine Learning](#)**

Gabriel Krummenacher ; Cheng Soon Ong ; Stefan Koller ; Seijin Kobayashi ; Joachim M. Buhmann

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