INTELLIGENT TRANSPORTATION SYSTEMS

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IEEE ITS SOCIETY **NEWSLETTER**

Vol. 19, No. 2 April 2017

Editor: Shunsuke Kamijo,
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SOCIETY NEWS

From the Editor

Shunsuke Kamijo

Dear readers, We have the second issue of 2017 fully loaded with interesting information.

At first, our President, Daniel Zeng announced Board of Governors election result. Congratulations for the new BoG members! We have a number of CFPs for ITSC and other ITS related conferences and workshops coming in 2017. We are publishing transactions on ITSC and IV. Transactions on IV started almost one and a half year ago and the number of publishing papers are getting increased.
There is announcements about Call for Nominations for "IEEE ITS Awards" and "Best Ph.D. Dissertation Award". We have also announcements about "Summer School on Cooperative Interacting Automobiles" and "Summer School on Intelligent Vehicles". We are also publishing the conference report of ITSC2016 and some interesting information about joining our society.

Membership has a lot of benefits plus the pride of helping out the ITS Society serving our community and colleagues. Think of it!

Message from the President

Crosscutting IEEE Initiatives – Please Consider to Contribute!

Dear IEEE ITS Society members:

As you have probably seen from our society's website and email announcements, several new officers were elected at the last IEEE ITS Society Board of Governors' meeting as part of IEEE ITSC 2016. The term of these new officers started on January 1, 2017. Professor Miguel Ángel Sotelo from University of Alcalá is the society's President Elect. Professor Matthew Barth from University of California Riverside serves as the Vice President for Financial Activities. Professor Javier J. Sanchez Medina from University of Las Palmas de Gran Canaria serves as the Vice President for Technical Activities. Professor Cristina Olaverri from Technikum Wien starts her official term as the Vice President for Educational Activities after a successful interim appointment. Professor Azim Eskandarian from Virginia Tech serves on as the Vice President for Administrative Activities. To fill the vacancies left by the election, with the BOG confirmation, I have appointed Professor Ljubo Vlacic from Griffith University as the interim Editor in Chief of the IEEE ITS Magazine, Professor Shunsuke Kamijo from the University of Tokyo as the Editor of the ITS Newsletters, and Professor Maryam Kaveshgar from the National Technical University of Ukraine as the Editor of the ITS Podcast.

The ITS Society members also elected five new BOG members with their term ending on December 31, 2019: Professor Fernando Garcia from Universidad Carlos III de Madrid, Professor Lingxi Li from Indiana University-Purdue University Indianapolis, Professor Jeffrey Miller from University of Southern California, Professor Jonas Sjoberg from Chalmers University of Technology, and Professor Kazuya Takeda from Nagoya University.

On behalf of the society, I would like to thank the ongoing officers and BOG members for their exemplary services and contributions to the community. The society will continue to rely on your expertise and leadership in various endeavors. For newly elected or appointed officers

and BOG members, congratulations! Thank you all for your willingness to step up and lead efforts to make our community stronger and bigger!

More good news. One of our own, Professor Alberto Broggi from University of Parma and VisLab, who served as the President of our society and the Editor in Chief of IEEE Transactions on ITS in the past, won the prestigious 2017 IEEE Medal for Environmental and Safety Technologies for his "leadership in vehicular environmental perception, and for setting worldwide milestones in safe and reliable intelligent vehicles." This is a huge honor! We will celebrate together Professor Broggi's accomplishments and this important IEEE recognition in one of our flagship conferences this year.

Among newly-elevated IEEE Fellows for the Class of 2017, two are from the ITS Society: Professor Pitu Mirchandani, from Arizona State University, for his "contributions to stochastic dynamic networked systems in intelligent transportation and production systems," and Professor Li Li, from Tsinghua University, for his "contributions to intelligent transportation systems and vehicles." Congratulations!

We have accomplished a lot collectively in 2016. In addition to further developing and expanding various valuable and impactful projects we have already started, lots of new opportunities are knocking on our door in 2017, particularly in the space of crosscutting IEEE initiatives involving multiple technical communities. IEEE recognizes that emerging technologies typically cut across multiple fields of studies and that their potentials can only be realized through true partnership and interactions between technical communities and the general public. This message summarizes several initiatives of strong relevance to ITS.

- "Design for Ethics": The ethical and societal impacts of technology are attracting increasing attention from the technical communities, the policy makers, the legal community, and the general public. Along with the fast-paced development of intelligent vehicles and autonomous transportation systems, ITS has already become one of the featured technology areas in the broad technology ethics discussions. Within IEEE, multiple communities are working together to define the research agenda for technology ethics studies and foster dialogs in both technical and nontechnical settings. Our community should have a commanding presence in this growing area of importance.
- "North and South Poles": The IEEE has started a committee to "identify ways in which IEEE can efficiently contribute to the different ongoing and planned initiatives to study and address changes that the North and South poles are experiencing from the environmental, communications, transportation, educational, and outreach points of view." Many of these challenges have direct relevant to ITS and could broaden the scope of our field. Our community should play a significant role in this worthy endeavor.
- "Food Engineering": A multi-disciplinary team is being formed by the IEEE to explore how to engage a diverse set of IEEE technologies to facilitate food production throughout its entire lifecycle. The goal is to aim for energy/water/fertilizer/pesticide efficiency and safe food production and delivery. ITS is clearly a major component of this potentially impactful initiative.
- IEEE has set up a formal mechanism called "Future Directions Initiatives" to encourage

joint efforts from multiple IEEE technical communities (http://www.ieee.org/about/technologies/index.html). Many of these initiatives (e.g., Smart Cities, 5G, Green ICT, Big Data, Internet of Things) have direct ITS relevance.

If you are interested in any of these crosscutting efforts, you are welcome to email me at zeng@email.arizona.edu. We are in the process of setting up technical subcommittees to organize events and activities tackling the relevant ITS challenges. Please consider to contribute!

I look forward to meeting many of you at IV 2017!

Sincerely,

Daniel Zeng
President, IEEE ITS Society

IEEE INTELLIGENT TRANSPORTATION SYSTEMS SOCIETY

Changing How the World Moves

MOVING FAST

The road less traveled, made famous by American poet Robert Frost's 1916 poem "The Road Not Taken," has become much busier for the majority of global citizens.

According to the United Nations, more than 50 percent of the world's population lives in urban areas. Today, the most urbanized regions include Northern America (82 per cent living in urban areas in 2014), Latin America and the Caribbean (80 per cent), and Europe (73 per cent). And that number is expected to grow.

Keeping people safe as they travel is an imperative – one that has been the mission of IEEE's Intelligent Transportation Systems Society for nearly 20 years.

From the early days of loop detectors for traffic light signal management to civilian use of GPS, to tomorrow's connected cars and advanced automation, the ITS industry not only enhances the quality of life, it increases passenger safety and reduces pollution.

JOIN NOW

Become a member of the IEEE ITS Society and join colleagues from around the world, spanning not just continents and countries but multiple disciplines in the ITS field.

ITS Society Membership includes access to ideas, events and colleagues that are moving transportation in a whole new direction.

> **The global intelligent transportation system (ITS) market is expected to reach US $66.5 billion by 2024.**
> The usage of ITS to reduce road accidents and increase safety is a major driving force for the ITS market."
>
> source: www.businesswire.com

RATES

IEEE members receive special prices for Society memberships. If you are not an IEEE member, you may wish to join as an Affiliate.

IEEE Professional Member	US $35.00
IEEE Student Member	US $18.00
Society Affiliate	US $109.50

IEEE
Advancing Technology for Humanity

Publications

- IEEE Transactions on Intelligent Transportation Systems (electronic)
- IEEE Intelligent Transportation Systems Magazine (electronic and print)
- IEEE Transactions on Intelligent Vehicles (discounted)
- IEEE RFID Virtual Journal (electronic)
- ITS Newsletter (electronic)
- ITS Podcast

Conferences

The Intelligent Transportation Systems Society hosts several annual conferences offering opportunities to hear first-hand from colleagues around the world who are advancing the field.

- IEEE Intelligent Transportation Systems Conference (ITSC): annual flagship conference covering all things ITS.
- IEEE Intelligent Vehicles (IV) Symposium: premier forum for intelligent and cooperative vehicle research and applications.
- In addition, a number of more tightly-focused conferences take place each year including:
  - International Conference on Vehicular Electronics and Safety
  - Service Operations and Logistics, and Informatics (SOLI)
  - International Conference on Intelligence and Security Informatics (ISI)
  - International Conference on Megatronic and Embedded Systems and Applications (MESA)
  - Forum on Integrated and Sustainable Transportation Systems (FISTS)

Awards

The ITS Society recognizes the accomplishments of members in all aspects of the field from leadership, research, development and implementation.

- IEEE ITS Institutional Lead Award
- IEEE ITS Outstanding Application Award
- IEEE ITS Outstanding Research Award
- IEEE Lifetime Achievement Award
- IEEE ITSS Best Dissertation Award

Educational Offerings

The Society offers a growing range of courses to develop relevant skills for research and industry.

- A Primer on Security and Privacy in Vehicular Ad-Hoc Networks
- Frontiers in ITS: Transportation 5.0
- Introduction to Vehicular Robotic Modeling with V-REP
- Autonomous Vehicles, Platooning and Driver Personalization

Chapters

Leverage local colleagues to enhance your professional network and continue industry connections outside of annual conferences while attending lectures by experts in the field.

Trending Topics

Stay up to date on emerging ideas including:

- Autonomous and cooperative driving
- Transportation communication
- Transportation management
- Smart Cities Initiative
- Driving assistance programs
- Advanced transportation sensing and analysis

“**The North America ITS industry is anticipated to reach US $26.29 billion by 2024.** Increased government focus on passenger safety and implementation of traffic management projects and initiatives are propelling the demand for intelligent transportation system.”

source: www.businesswire.com

IEEE
Advancing Technology for Humanity

2017 IEEE ITS Awards

Call for Nominations

The prestigious

- IEEE ITS Outstanding Research Award,
- IEEE ITS Outstanding Application Award, and
- IEEE ITS Institutional Lead Award

are conferred annually to honor ITS researchers, practitioners, and research/development teams who have made significant contributions to research in ITS related fields (for ITS Research Award), developed and deployed successful ITS systems or implementations (for ITS Application Award), and demonstrated leadership in promoting ITS technologies (for ITS Institutional Lead Award). These awards have been established to recognize, promote, and publicize major research contributions, application innovations with real-world impact, and ITS institutional leadership.

In addition, exemplary contributions to Intelligent Transportation Systems over are career can be recognized through the IEEE ITS Lifetime Achievement Award. To be eligible for the lifetime award, the nominee should be retired and no longer active in ITS. Additionally, should be IEEE Life Member eligible.

- **Nomination Materials**

Each application must consist of the following materials:

1. A 5 page summary statement providing sufficient detail for the evaluation of the innovations and impact of the work.

2. At least 3 letters of recommendation from recognized peer researchers, customers or users of the developed application, and organizations attesting to the work's significance and impact.

- **Evaluation**

A dedicated selection committee will evaluate all qualified nominations for these IEEE ITS Awards. Awards will be announced in October at the ITSC 2017 conference in Yokohama, Japan where the recipients will give featured presentations of their work.

- **Submission Deadline**

Please submit the nomination materials by email before **July 1, 2017** to Brendan Morris, ITSS Vice President for Membership, at brendan.morris@unlv.edu.

IEEE ITSS Best Ph.D. Dissertation Award

Call for Applications

IEEE ITSS Best Dissertation Award is given annually for the best dissertation in any ITS area that is innovative and relevant to practice. This award is established to encourage doctoral research that combines theory and practice, makes in-depth technical contributions, or is inter-disciplinary in nature, having the potential to contribute to the ITSS and broaden the ITS topic areas from either the methodological or application perspectives.

- **Application Materials**

Each application must consist of the following materials:

1. A doctoral dissertation written by the applicant in any language, no more than 18 months prior to the submission deadline.
2. A summary of the dissertation in English of up to 3 pages in length written by the Ph.D. candidate, highlighting the significance of the problem, the technical approach taken, application context and potential, and the scope of the dissertation.
3. Sample published paper(s) in English based on the dissertation written primarily by the Ph.D. candidate in scientific journals such as the IEEE Transactions on ITS, IEEE ITS Magazine, or IEEE Transactions on Intelligent Vehicles.
4. Listing of all publications by the applicant in the related field(s).
5. A letter of recommendation from the applicant's dissertation advisor that assesses the significance of the research, attests to the originality of the work, and comments on the engagement of the applicant in the ITS field and the IEEE ITS Society.

- **Prize and Presentation**

The winners will receive a cash prize and invitation to be recognized and present their work in October at the at the ITSC 2017 conference in Yokohama, Japan. Awardees' work will be featured in ITSS Transactions, ITS Magazine, and ITS Newsletter, when appropriate.

Place	Prize Amount (USD)
1st	$2000
2nd	$1000
3rd	$500

- **Evaluation**

A dedicated selection committee will evaluate all qualified applications for the IEEE ITS Best Ph.D. Dissertation Awards and make selections.

- **Submission Deadline**

Please submit the application materials by email before **July 1, 2017** to Brendan Morris, ITSS Vice President for Membership, at brendan.morris@unlv.edu.

19th IEEE International Conference on Intelligent Transportation Systems ITSC 2016

Convention Center, Windsor Oceanico Hotel, Rio de Janeiro, Brazil, November 1-4, 2016

Intelligent Transportation for Smarter Societies

Introduction

We are very pleased to bring to our community this small summary reporting the main features of the 19th edition of the flagship conference of our Society, the IEEE International Conference on Intelligent Transportation Systems. Brought for the first time to South America, IEEE ITSC 2016 was held in Rio de Janeiro, from 1st to 4th of last November, at the Convention Center of Windsor Oceanico Hotel. The City of Rio is one of the major economic and cultural hubs of South America, and sits at the heart of the Southeastern Region, contributing greatly for the Brazilian GDP. A cosmopolitan metropolis, known worldwide for its scenic beauty and its natural resources, the city provides a harmonious and agreeable environment for its residents and visitors, both for leisure and work. These combined with Rio's infrastructure render it an important center for commerce and services, with the advantages of a modern and diversified industrial sector.

We are very confident that those who had the opportunity to attend ITSC 2016 had a great time in Rio!

Technical Program

We were enormously delighted to have a very interesting, attractive and contemporary technical program during IEEE ITSC 2016. This was only possible due to the collaboration of the whole community, especially those organizing special sessions, workshops, and tutorials during the event, and of course due to all authors that contributed a great number of high-quality submissions, which allowed us to produce the resulting program for the conference.

We had in total 752 submissions from 44 countries and 6 continents. As it has been happening in the previous editions of ITSC, the top 3 countries in terms of submissions were: China (134), Germany (114) and USA (99). However, we were surprised with 85 submissions of Brazilian authors, making it the 4th country in number of submissions. That was quite exciting as we attracted the attention from the home community to participate at IEEE ITSC in Rio. The total number of submissions from South America was 96, including papers from Colombia, Chile, Argentina and Paraguay. Based on the review process, we noticed that the quality of the submissions was very high overall. After a very careful evaluation process, the program committee decided to accept 361 papers for presentation and publication in the regular sessions. Other 40 papers were selected to compose the sessions of the 5 workshops, equally chosen as a result of a very rigorous evaluation system.

Overall the technical program was organized in 9 parallel tracks and 87 sessions. Among the topics (keywords) that appeared more frequently in the submissions we can highlight: Sensing, Vision, and Perception (99), Simulation and Modeling (77), Driver Assistance Systems (62) and Data Mining and Data Analysis (62). We had a total of 27 sessions dedicated to these topics specifically.

Of course, it would be impossible to organize such a large event without the valuable help of the 157 Associated Editors and 1207 reviewers. We would like to express our deep gratitude for their hard work during the review process and extremely important comments and suggestions that led to the successful technical program of our conference in Rio.

Invited Speakers

Besides the technical sessions, we also had the privilege of having 3 distinguished keynote speakers as part of the program: Prof. Mohan M. Trivedi (University of California at San Diego-USA), Prof. Susana Sargento (University of Aveiro-Portugal) and Prof. Antonio A. F. Loureiro (Federal University of Minas Gerais-Brazil).

Prof. Mohan M. Trivedi

The title of Prof. Trivedi's plenary seminar was "Looking at Humans in the Age of Self Driving Vehicles," in which he emphasized "the need and the implications of utilizing an holistic approach, where driving in a naturalistic context is observed over long periods to learn driving behaviors in order to predict intentions and interactivity patterns of all intelligent agents," and discussed on "new research avenues in dealing with learning, modeling, active control, perception of dynamic events, and novel architectures for distributed cognitive systems," vehicles with higher autonomy.

Prof. Susana Sargento

Prof. Susana Sargento, co-founder of Veniam, was the recipient of the 2016 EU Prize for Women Innovators. She talked about the "The Role of Vehicular Networks in Intelligent Transportation Systems," and described the "latest advances in vehicular network mechanisms and how real and large-scale vehicular network infrastructure is able to provide meaningful performance results, test new network mechanisms and develop new applications for both citizens, transportation and the city, in an Intelligent Transportation System perspective."

Finally, Prof. Loureiro presented a perspective entitled "Vehicular Traces Are More Than Just Points on a Map." In his talk, he discussed and showed that "existing real vehicular mobility traces present spatial and temporal gaps that affect their use to evaluate VANET solutions." He detailed "a method to fill those gaps, leading to 'calibrated' traces. While applying his approach to calibrate existing traces," he discussed how results revealed that indeed those gaps might yield a network topology that differs greatly from reality.

Prof. Antonio Loureiro

All plenary sessions happened in the main conference room, America III.

Workshops and Tutorials

The main conference was preceded by a day of workshops and tutorials, with a great participation of the attendees. The workshops collocated with IEEE ITSC 2016 were the following.

8th International Workshop on Planning, Perception and Navigation for Intelligent Vehicles – A bridge between Robotics and ITS technologies Organized by Christian Laugier (INRIA, France), Philippe Martinet (Ecole Centrale of Nantes, France), Urbano Nunes (Coimbra University, Portugal), Christoph Stiller (KIT, Germany)
6th International Workshop on Artificial Transportation Systems and Simulation Organized by Alberto Fernandez (URJC, Spain), Fenghua Zhu (CAS, China), Shuming Tang (CAS, China)
2nd International Workshop on Intelligent Public Transports – Toward the Next Generation of Urban Mobility Organized by Luís Moreira-Matias (NEC Laboratories Europe, Germany), Oded Cats (TU Delft, The Netherlands), Daqing Zhang (Institut TELECOM & Maga, France)
International Workshop on Advanced perception, Machine learning and Data sets Organized by Patrick Shinzato (University of Sao Paulo, Brazil), Cristiano Premebida (Institute for Systems and Robotics, Portugal), Jose Eugenio Naranjo (Universidad Politecnica de Madrid, Spain), Brendan Morris (University of Nevada, USA)
International Workshop on Simulation of Intelligent Industrial Transportation and Logistics Systems Organized by Luís Dias, Guilherme Pereira, António Vieira (U. Minho, Portugal), António Brito, C. Bragança de Oliveira (FEUP, Portugal), Ana Luísa Ramos (U. Aveiro, Portugal)
Workshop on Intelligent Transportation Systems in Operation in Rio de Janeiro Organized by Paulo Cezar Ribeiro (PET-COPPE, UFRJ, Brazil), José Mauro Marquez (UVA, Brazil)

Additionally to workshops, we were very please to include two tutorials/short courses in the technical program of the first day of our conference in Rio, as listed below.

Next Generation Sensor Fusion and Environment Perception for Automotive Intelligent Systems Presented by: • Bharanidhar Duraisamy (Daimler AG, Germany) • Ting Yuan (Mercedes-Benz R&D North America, USA) • Tilo Schwarz (Daimler AG, Germany) • Martin Fritzsche (Daimler AG, Germany)
The Impact of 5G on Connected Vehicle Technology Organized by: • Mary Lynne Nielsen (IEEE Standards Association, USA) • Bill Ash (IEEE Standards Association, USA) With participation of: • J. Roberto de Marca, IEEE Past President • Roberto Nishimura, New Business Manager, Sercomtel • James Irvine, Reader, University of Strathclyde • André Noll Barreto, Professor, University of Brasilia

Both workshop and tutorial sessions were highly participated during. Below are some photos from sessions on the first day of the conference.

Sessions of workshops and tutorials/short courses on the first day of IEEE ITSC 2016.

Main Tracks and Special Sessions

Besides regular sessions of IEEE ITS Conferences, special sessions are also an important part of the technical program, promoting the appropriate environment to foster discussion and collaboration on specific topics of interest. The purpose of special sessions within IEEE ITSC 2016 was to provide a forum for focused discussion on new topics, consolidated research trends, or innovative applications of established approaches in fields of interest to the conference. The Special Sessions integrated in the conference program were the following.

Designing and Managing Communication in Intelligent Transportation Systems Organized by Cristiano Maciel Silva (UFSJ, Brazil), Andreas Pitsillides (U. Cyprus, Cyprus)
Wireless Vehicular Communications Li Zhu (Beijing Jiaotong University, China), F. Richard Yu (Carleton University, Canada), Tao Tang (Beijing Jiaotong University, China), Bin Ning (Beijing Jiaotong University, China)
Recent Advances in Motorway Traffic Control Claudio Roncoli (TU Crete, Greece), Silvia Siri (U. Genova, Italy)
Cooperative (de-)centralized traffic management Bernhard Friedrich (TU Braunschweig, Germany), Jörg P. Müller (TU Clausthal, Germany), Fidler Markus (Leibniz Universität Hannover, Germany)
2nd Special Session on Human Factors in Intelligent Transportation Systems (HFITS) Cristina Olaverri Monreal (UAS Technikum Wien, Austria), Fernando Garcia (University Carlos III, Spain)

Throughout the days of the conference, all sessions were quite participated, with active discussions among attendees.

Opening Ceremony

After the workshops and tutorials/short courses day, the technical program of the main tracks and special sessions of IEEE ITSC 2016 started with the Opening Ceremony. Prof. Rosaldo Rossetti, as the General Chair of ITSC 2016, chaired

the opening session. In the panel also were Prof. J. Roberto de Marca (former IEEE President), Mr. Alberto Nygard (Coordinator of Rio Municipality's Department of Transportation), Prof. Daniel Zeng (President of IEEE ITS Society), and Prof. Denis Wolf (Program Chair).

Opening Ceremony of IEEE ITSC 2016.

Social Activities

One important characteristic of IEEE ITSC 2016 was that every events and activities happened in the same venue. The Convention Center of Windsor Oceanico Hotel offered the appropriate infrastructure that allowed us to run all activities, from technical sessions and social events at the same place. This contributed enormously to the integration of all participants that were able to meet outside technical sessions for coffee breaks and lunches. The Welcome Reception and Gala Dinner also were hosted at the same place.

Welcome Reception

After a long day of workshops and tutorials/short courses, all participants gathered in the evening of the first day of ITSC 2016 to enjoy some typical Brazilian drinks and food. It was a very relaxing moment!

Welcome Reception gathered all participants in the evening of the first day of ITSC 2016.

Coffee Breaks and Lunches

During the whole conference, participants enjoyed coffee breaks and lunches together, taking the moment outside technical sessions to relax and socialize. All coffee breaks were at the foyer connecting all session rooms whereas lunches took place a few meters away, in room Americas II.

Coffee breaks were a relaxing time between sessions.

Lunches were a great time for socialization and networking.

Gala Dinner

The Gala Dinner of IEEE ITSC 2016 took place at the Convention Center, Windsor Oceanico Hotel, the same place as the conference. Besides members of the IEEE ITS Society, Prof. Barry L. Shoop, the IEEE President, joined us for the Gala Dinner at IEEE ITSC 2016.

Gala Dinner took place in room Americas II.

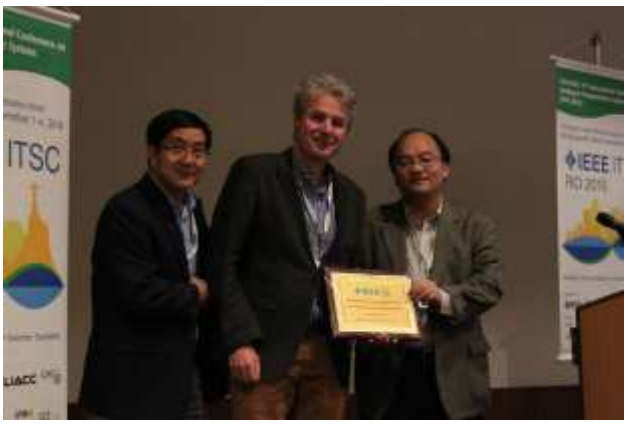
Members of IEEE ITS Society and Prof. Barry L. Shoop, IEEE President, joined the event.

Awards Ceremony

The Gala Dinner of IEEE ITSC 2016 was preceded by the Awards Ceremony. The awards of the IEEE ITS Society were presented by Prof. Daniel Zeng, the Society's president. Besides the IEEE ITS Society's awards, traditionally presented at ITSCs, we were pleased to host the IEEE Transportation Technologies Award, given by IEEE and presented by its President and CEO, Professor Barry Shoop, during the event.

Professor Petros Ioannou was the recipient of the IEEE Transportation Technologies Award, presented by Professor Shoop, the IEEE President

Professor Matthew Barth was the recipient of the Society's IEEE ITS Outstanding Research Award. Unfortunately, Prof. Barth wasn't able to attend the event



Professor Christoph Stiller was the recipient of the Society's IEEE ITS Outstanding Application Award, presented by Profs. Daniel Zeng and Yaobin Chen

Professor Ernst Dickmanns was the recipient of the ITSS Lifetime Achievement Award, presented by Professor Joe Wuensche

The IEEE ITS Best Dissertation Award is given annually for the best dissertation in any ITS area that is innovative and relevant to practice. The award was presented by Profs. Miguel Ángel Sotelo and Cristina Olaverri.

Dr. Mohammad Shokrolah Shirazi was awarded the second prize, with the thesis entitled "Vison-Based Intersection Monitoring: Behavior Analysis & Safety Issues" (didn't attend the event)

Dr. Matthias Schreier was awarded the second prize, with the thesis entitled "Bayesian Environment Representation, Prediction, and Criticality Assessment for Driver Assistance Systems"

Dr. José Ramón D. Frejo was awarded the first prize, with the thesis entitled "Model Predictive Control for Freeway Traffic Networks"

IEEE ITSC 2016 also recognized the best papers of the conference, with the Best Paper award. Selecting the awardees from among high-quality submissions were a hard task. The Conference awarded three papers with the Best Paper prize, which were presented by Prof. Denis Wolf and Rosaldo Rossetti.

In 3rd place was the paper entitled "Clustering for set partitioning with a case study in ridesharing," by Cathy Wu, Ece Kamar, Eric Horvitz

In 2nd place was the paper entitled "Compressing Continuous Point Cloud Data Using Image Compression Methods," by Chenxi Tu, Eijiro Takeuchi, Chiyomi Miyajima, and Kazuya Takeda

In 1st place was the paper entitled "Stable Hybrid Model PredictiveControl for Ramp Metering," by Sarah Koehler, Negar Mehr, Roberto Horowitz, and Francesco Borrelli

The Awards ceremony concluded with the presentation of the 20th edition of IEEE ITSC, to be held in Yokohama, Japan, on 16 – 19 October, 2017.

The ITSC Bell rang announcing the 2017 edition, to be held in Japan

Awards Session

On the last day of the Conference the awardees presented highlights of their achievements in a plenary session, chaired by Prof. Yaobin Chen.

Profs. Yaobin Chen, Petros Ioannou, and Ernst Dickmanns, and Drs. Matthias Schreier and José Ramón D. Frejo, after the Awards Plenary Session

Technical Visits

Prior to the start of the Conference, on 31st October, we organized two pre-conference technical visits for the IEEE ITSC 2016 participants, one to the Rio Operations Center (COR), the modern Advanced Traffic Managem and Control Center of Rio de Janeiro, operating since 2010, and another to the Metro Operational Control Centre (CCO), responsible for monitoring and controlling 64 trains distributed between Lines 1 and 2 and transporting around 800 thousand passengers per day, in the City of Rio.

COR Rio

Metrô Rio (CCO)

WIE Scholarships

In the spirit of the "Women in Engineering" initiative, Prof. Cristina Olaverri launched the "Women in Intelligent Transportation Systems" scholarships program to foster the ITS field among female students to equalize the gender diversity in workplaces, and at the IEEE ITS Society's events. In order to honor the women fellows working in ITS who were attending IEEE ITSC 2016, a number of free registrations were distributed among women participants. A total of then scholarships were distributed among a very high number of applications.

Students Activities

On Monday, October 31st, ITSC 2016 offered a pre-conference social activity for the students participating attending the event in Rio. We are proud to have organised a special bodyboard lesson, with a very prominent instructor in Rio de Janeiro! Bodyboard is an exciting water sport, very appreciated by locals due to the perfect water conditions and good waves of Rio's beaches. Students enjoyed a great time, learning and practicing the basics of bodyboarding on Barra da Tijuca beach. Different techniques of how to ride waves, how to position oneself on the board and many other tricks were taught to attendees that had a great fun along with Thiago Rúbio, the ITSC 2016 Students Activities Chair.

Students attending the bodyboard lessons on Barra da Tijuca Beach.

Acknowledgment

It was with great pleasure and excitement that we welcomed all ITS community to Rio and to IEEE ITSC 2016! In its 19th edition and having travelled many countries already, we were highly honored to lead the organization of the prestigious flagship conference of the IEEE Intelligent Transportation Systems Society, held for the first time in the Southern Hemisphere, more specifically in Brazil. What a great historical moment to our community, and we are very proud to be part of it!

Organizing an important and prestigious event such as IEEE ITSC is only possible with the hard work and dedication of a team of volunteers. We'd like to leave a word of great appreciation to our Program Co-chairs, to all members of our Organizing Committee, to the International Program Committee, and to all reviewers, who dedicated a great effort to make ITSC 2016 a reality! In particular, we'd like to acknowledge and thank the contributions of NuIEEE, the IEEE Student Branch at *Universidade do Porto*, in a number of tasks during the organization of this Conference. The institutional support from IEEE ITS Society, as well as from FEUP, LIACC, and ICMC-USP, as organizing institutions was ultimately important and greatly appreciated throughout the whole process. Also, other partners have joined our efforts on the way, whose support we also acknowledge with gratitude, namely IPT, FAFQ, IEEE PES, UVA, APBS, and Fuseami, who provided us with the mobile app during the conference.

In recognition of their very close support and untiring assistance during the organization of the Conference, we'd like to give special thanks to Valdir Grassi Jr, Deborah Perrotta, Brendan Morris, Cristina Olaverri, João Pedro Dias, and Gil Domingues. We're also greatly indebted to the students that helped at the Reception Desk throughout the whole duration of the Conference (Our crew in blue!), namely Fernanda, José Netto, Tatiane, Julia, Samuel, and "Viçosa." These guys are awesome!

Finally, and more importantly, IEEE ITSC 2016 wouldn't be possible without the interest of our community, whose authors contributed with great enthusiasm with special

session, workshop and tutorial proposals, as well as with the submission of high-quality manuscripts, sharing their most recent findings and research results. To all proposers and authors, a great thank you!

Rosaldo Rossetti and Denis Wolf

ITS Podcast New Episodes and Information

Please, circulate this!

ITS Podcast Episode 39: Computer Vision, Inside-Out Perception

In this episode apart from the News mini-section we will have Prof. Haluk Eren from Firat University in Turkey that has prepared a review of a book recently Published by Springer, "The Advent of Unmanned Electric Vehicles: The Choices between E-mobility and Immobility" written by Van Temsche.

It is March and to celebrate the role of our women in this field of engineering Prof Jeffrey Miller from USC has conducted an interview with one of our prominent researchers Dr. Anya Petrovskaya .

Her research interest is in areas of Computer Vision, Artificial Intelligence, and Robotics. She mainly focuses on Bayesian methods for Artificial Perception in robotics and consumer applications. She has developed new efficient algorithms for autonomous vehicles, mobile manipulation, and tactile object localization.

Dr. Petrovskaya is an entrepreneur as well. She is the co-founder of "Eonite Perception".

We hope you enjoy our Podcast.

Volunteer Recruiting Campaign:

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.

Summer School on Cooperative Interacting Automobiles

Announcement 2017 Summer School on "Cooperative Interacting Automobiles"

August 8-11, 2017 in Schwäbisch Gmünd, Germany

The Summer School on "Cooperative Interacting Automobiles" aims at gathering Ph.D. students and Young Professionals from Universities and Research Institutions for tutorials, keynotes, poster presentations and interactive workshop sessions on
+ Cooperative Perception
+ Cooperative Motion Planning
+ Implicit & Explicit Interaction

It is jointly organized by Karlsruhe Institute of Technology (KIT, Germany) and MINES ParisTech (France). We gratefully acknowledge support from the Priority Programme "Cooperative Interacting Automobiles" of the German Science Foundation (DFG), the IEEE Intelligent Transportation Systems Society and the International Research Chair Drive for All (MINES ParisTech).

Applications are now open until **May 15, 2017.**

For more information please visit:
http://www.mrt.kit.edu/spp1835/SummerSchool2017

We are looking forward to a fruitful and inspiring event.

Christoph Stiller and Arnaud de La Fortelle

Organizers & Sponsors

Summer School on Intelligent Vehicles

A Summer School on the Intelligent Vehicles subject will be held in Compiègne, France, next July, from 2nd to 7th, 2017. PhD students are mainly concerned but researchers and engineers in the ITS domain are also welcome.

This week summer school, realized on the context of the Interdisciplinary Training Network in Multi-Actuated Ground Vehicles (ITEAM) - a Marie-Curie European project (https://iteam-project.net/), has the objective to study in a common forum the ***Automation problem*** related to modelling, estimation and control of vehicle dynamics to the ***Robotics problem*** related to on-boarded perception and navigation of robotic vehicles.

Starting by reinforcing the **knowledge of the Vehicle Dynamics**, where the problem associated to the **estimation of unmeasured variables/parameters** is considered at the context of state observer techniques, it goes ahead by revisiting and understanding **new methods and new trends on vehicle dynamics control and stabilization**.

Having established the background of vehicle dynamics modelling and control, the second part is devoted **to the autonomous navigation: perception, decision and control**. After introducing main issues about **environment perception**, the bases and latest developments on **vehicle autonomous navigation** are stated, and considered on the **sensor based navigation framework**.

In this context, the lectures will take in a common training framework: (i) Vehicle dynamics control and stabilization - a low-level layer near to the actuators; (ii) Robotic perception and vehicle navigation - a high-level layer near to the decisional navigation frame.

For more details and registration, please access :
http://intelligent-vehicles-summer-school.webnode.fr/

Call for Expression of Interests in becoming an Associate Editor of ITS Magazine

ITS Magazine is considering engaging additional associate editors.

Details of the Magazine's current scope can be obtained from http://www.ieee-itss.org/its-magazine.

Could you please contact the Magazine's EiC, Ljubo Vlacic, via l.vlacic@griffith.edu.au should you be interested in committing to the role.

Please submit your short work profile and list of topics of your interest.

Expertise in one of the following areas is highly desired:

- datamining;
- big data analysis (real-time), modelling & visualisation;
- deep learning and other machine learning concepts;
- integration of multi-modal transportation systems

The final decision will be made by the ITSS ExCom/BoG. The submission deadline is 30 August 2017.

ITS Magazine: Call for Special Issue Proposals

ITS Magazine is seeking special issue proposals on a variety of topics of interest to ITSS.

A focus on field trials, underpinning policies & regulations, capability building and trustworthiness of ITS solutions (in terms of safety, liability, privacy, security, etc) is of particular interest. Details of the Magazine's current scope can be obtained from http://www.ieee-itss.org/its-magazine.

Could you please contact the Magazine's EiC, Ljubo Vlacic, via l.vlacic@griffith.edu.au should you be interested in making a submission.

Two-page submissions should address:

- Guest editors and their expertise
- Aim & Scope of the Special Issue
- Tentative timeline
- Anticipated contributors, if any, and likely topics of their submissions.

It would be appreciated if proposals can be submitted before 30 September 2017.

IEEE

The 28th IEEE

IV2017

June 11-14, Redondo Beach, CA,

Redondo Beach, California , USA
June 11-14, 2017

More information - http://iv2017.org

Call for Papers

The IEEE Intelligent Vehicle Symposium (IV) is one of the major annual conferences of the IEEE Intelligent Transportation Systems Society. IV 2017 will be held in Redondo Beach, California, USA at the Crown Plaza Hotel right across the street from the Redondo Beach Marina and Pier with the blue Pacific Ocean a block away. In this beautiful setting, IV 2017 welcomes articles in the field of Intelligent Vehicles dealing with new developments in theory and applications, vehicle technologies and demonstrations. It also welcomes proposals for workshops and tutorial sessions to be offered the day before the symposium starts namely June 11, 2017. The traditional format of IV which makes it unique involves a single oral paper presentation session with subsequent parallel poster sessions where each poster paper is orally presented in a brief single slide in order to attract attention and motivate informal discussions. All accepted papers will be included in the proceedings. The technical areas include but are not limited to the following:

- Connected and probe Vehicles
- Automated Vehicles with and without pilot/driver
- Partial Vehicle Automation
- Vehicle-to-Vehicle and Vehicle-to-Infrastructure communications
- Driver monitoring
- Driver Human factors and Personalization
- Electric Vehicles
- Hybrid Vehicles
- Vehicle dynamics and control
- Lane change and merging
- Commercial Vehicles
- Vehicle Emissions and environmental impacts
- Sensing, detection, and actuation
- Advanced vehicle safety systems
- Driver and traveler support systems
- Vision and environment perception
- Vehicle localization and autonomous navigation
- Cognition and Control
- Legal Issues

In the tradition of successful IEEE ITS Conferences, only the highest quality papers will be accepted through an on-line peer review process. The final version of the accepted papers will be included in the Conference proceedings only after at least one author officially registers and presents the paper at the Conference.

Important Dates

- Full-paper submission deadline: January 31st, 2017
  NOTE: No extensions will be granted.
- **Workshop/Tutorial deadline: January 6, 2016 No extension will be granted**
- Notification of acceptance: March 31st, 2017
- Final paper submission deadline: April 5, 2017

Special Issue of *IEEE Transactions on Intelligent Vehicles*

High quality papers will be recommended for consideration in the new *IEEE Transactions on Intelligent Vehicles*. Authors will be asked to revise their papers according to the standards of the Transactions, which will be subjected to the Transactions' review process.

Call for Papers

IMPOTANT DATES

Regular paper

Full-paper submission:
~~March 15, 2017~~ → April 21, 2017
(Final extension)

Notification of acceptance:
~~June 1, 2017~~ → June 20, 2017

Camera-ready submission:
~~July 1, 2017~~ → July 20, 2017

Workshop

Proposal submission:
~~April 15, 2017~~ → April 21, 2017

Paper submission:
June 30, 2017

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SCOPE

The Intelligent Transportation Systems Conference is the annual flagship conference of the IEEE Intelligent Transportation Systems Society. This conference welcomes articles in the field of Intelligent Transportation Systems, dealing with new developments in theory, analytical and numerical simulation and modeling, experimentation, demonstration, advanced deployment and case studies, results of laboratory or field operational tests. ITSC 2017 especially invites and encourages prospective authors to share their work, findings, perspectives and developments, to mark 20 years of IEEE Intelligent Transportation Systems Conference.

TOPICS

Original contributions are solicited in all areas pertinent to Intelligent Transportation Systems. Topics include, but are not limited to:

- Autonomous Driving
- Connected Car
- Big Data and Data Driven Innovation
- Probe Information Systems
- Cooperative Techniques and Systems
- Pedestrian Recognition
- Vehicle Localization
- Transportation Networks
- Intelligent Logistics
- Intermodal Freight
- Advanced Public Transportation Management
- Ports, Waterways, Inland Navigation, and Vessel Traffic Management
- Modeling, Simulation, and Detection of Vulnerable Road Users and Animals
- ITS User Services
- Air, Road, and Rail Traffic Management
- Emergency Management
- Emissions, Noise, Environment
- Management of Exceptional Events: Incidents and Evacuation
- Commercial Vehicle Operations
- Sensing, Detectors and Actuators
- Communications in ITS
- Intelligent Vehicles
- Vision, and Environment Perception
- Electric Vehicles
- Electronic Payment Systems
- Modeling, Control and Simulation
- Traffic Theory for ITS
- Human Factors, Travel Behavior
- ITS Field Tests and Implementation
- Driver and Traveler Support Systems
- Pedestrian Navigation

PAPER SUBMISSION

Prospective authors are required to submit their manuscripts electrically through EDAS (https://www.edas.info/). Submitted papers shall not exceed six pages as a pdf file in IEEE two column format. All presented papers will be published by the IEEE and included in IEEEXplore. See more detailed information at the conference website to prepare your paper.

Technical Sponsored by:
IEEE ITS Society, IEEE ITS Society Tokyo chapter,
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***In Cooperation with*:**
IEICE Technical Committee on ITS
IEEJ-IAS ITS Technical Committee, IPSJ SIG-ITS
International Association of Traffic and Safety Sciences
ITS Japan

2017 IEEE International Conference on Vehicular Electronics and Safety

IEEE ICVES 2017

Sponsored by the **IEEE Intelligent Transportation Systems Society**

June 27-29, 2017, Vienna, Austria
www.ieee-icves2017.org

The 2017 IEEE International Conference on Vehicular Electronics and Safety (ICVES'17) is an annual forum sponsored by the IEEE Intelligent Transport Systems (ITS) Society. It brings together researchers and practitioners to discuss research and applications. IVCES'17 solicits papers dealing with any aspects of vehicle electronics and vehicle safety.

Organizing Committee:

General Chair Cristina Olaverri-Monreal, UAS Technikum Wien, Austria
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Senior Advisory Committee Matthew Barth, Mohan Trivedi, Christoph Stiller
Registrations Chair Fernando Garcia, University Carlos III, Madrid, Spain
Publications Chair David Martin Gomez, University Carlos III, Madrid, Spain

Topics The technical areas include but are not limited to the following:

- Intelligent Vehicles
- Dynamic Programming
- Global Positioning Systems
- Trajectory Planning
- Vehicle Dynamics
- Active and Passive Safety Systems
- Telematics
- Vehicular Power Networks
- X-By Wire Technology
- System-On-a-Chip
- Vehicular Sensor
- Vehicle Bus Systems
- On-Vehicle Sensor Networks

- Electro Magnetic Compatibility
- Inter-Vehicular Communication
- Vehicle Testing
- Navigation and Localization Systems
- Vehicular Measurement Technology
- Vehicular Signal Processing
- Micro-electromechanical Systems
- Computer Vision
- Vehicle/Engine Control
- Driver Assistance and Warning Systems
- Adaptive Cruise Control Systems
- Pattern Recognition for Vehicles
- Energy Consumption
- Embedded Operation Systems

Paper Submission Complete manuscripts in PDF format must be electronically submitted for peer-review in IEEE standard format. Detailed submission instructions can be found through the conference website. **Papers accepted for the technical program of the conference will be included in the conference proceedings to be published and indexed by IEEE in its IEEE Xplore Digital Library**.

Important Dates:
Full paper submission date: **February 15, 2017**
Notification of acceptance: **April 15, 2017**
Camera ready paper submission date: **May 1, 2017**

Please visit the conference website at http://www.ieee-icves2017.org and follow us in Twitter: @ieee_icves2017
Further info and questions at ieee.icves2017@gmail.com

VEHITS 2017

3rd International Conference on Vehicle Technology and Intelligent Transport Systems

PORTO, PORTUGAL · 22 - 24 APRIL, 2017

Vehicle Environment Perception

Intelligent Infrastructure and Guidance Systems

Communication Protocols

Systems Modeling and Simulation

Big Data Analytics for Intelligent Transportation

Autonomous Vehicles and Automated Driving

Mobility and the Internet of Vehicles

Security and Safety

Traffic Theory, Modeling, and Simulation

V2V, V2I, V2X

Vehicular Cloud Computing

Big Data and Vehicle Analytics

Driver Behavior Analysis

Green, Sustainable Transportation

Vehicular Networks

CONFERENCE AREAS

- Intelligent Vehicle Technologies
- Intelligent Transport Systems and Infrastructure
- Connected Vehicles
- Sustainable Transport

REGULAR PAPER SUBMISSION: ***NOVEMBER 23, 2016***

MORE INFORMATION AT: WWW.VEHITS.ORG

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6th IEEE International Conference on Advanced Logistics and Transport (IEEE ICALT 2017) Call for Papers

The International Conference on Advanced Logistics and Transport (**IEEE ICALT'2017**) will be held on **24-27 July 2017**, in **Bali ,Indonesia. IEEE ICALT'2017** aims at bringing together researchers and practitioners working in industry and academia and to provide them with a platform to report on the latest developments, achievements, deployments, technology trends, and research findings as well as initiatives relatied to Logistics & Transport and their applications.

Interested authors are requested to submit the electronic version of their paper(s) in PDF format, in English, via the online submission system. The first page must contain the Title, the Author (s), the Affiliations, an Abstract (200-250 words), and the postal address and email of the corresponding author.

IEEE ICALT'2017 includes the following Symposiums:

- Symposium on Logistics & Supply Chain Management (LSCM)
- Symposium on Intelligent Transportation Systems (ITS)
- Symposium on Optimization and Logistics Challenges (OLC)
- Symposium on Logistics Systems and Services (LSS)
- Symposium on Industrial Engineering (IE)

After the Conference, a selected number of Best Papers will be expanded and revised for possible inclusion in the Special Issues of well-known and indexed journals.

Important Conference Information:

- The working language of the Conference is English and all printed material, presentations, and discussions will be in English.
- The material submitted to IEEE ICALT'2017 must be original, previously unpublished, and not considered for publication elsewhere. Authors may submit their work to a Symposium, a Special Session, or a Workshop.
- All papers will be blindly peer-reviewed by three reviewers. Abstracts or incomplete papers will not be reviewed.
- Conference content will be submitted for inclusion into IEEE Xplore as well as other Abstracting and Indexing (A&I) databases (under approval) .
- Interested authors are requested to submit the electronic version of their paper(s) in PDF format, via the online submission system.

Important Dates

- Paper Submission deadline: 01 April 2017
- Paper Acceptance Notification date: 25 April 2017
- Final Paper Submission & Registration deadline: 15 May 2017
- Early Payment: 15 May 2017

4th International Conference on Transportation Information and Safety

(ICTIS 2017)

August 8th ~ 10th , 2017,

Banff, Alberta, Canada

Conference Spotlight Theme: ***Transportation Information and Safety in the Intelligent and Connected Environments***

CALL FOR PAPERS

The 4th International Conference on Transportation Information and Safety (ICTIS 2017), sponsored by **China Communications and Transportation Association (CCTA), American Society of Civil Engineers (ASCE) and Canadian Society for Civil Engineering (CSCE)**, organized by **Wuhan University of Technology**, will be held during August 8-10, 2017, at the Banff Center, in Banff, Alberta, Canada.

We would like to invite you to submit contributing papers to The ICTIS2017. The accepted papers will be published by the Institute of Electrical and Electronics Engineers (IEEE) and will be indexed by Engineering Index (EI) citation. In addition, selected papers based on the fit to the theme will also be recommended for publish on a Special Issue of Transportation Research Part F: Traffic Psychology & Behaviour (http://www.journals.elsevier.com/transportation-research-part-f-traffic-psychology-and-behaviour/call-for-papers/special-issue-on-driving-behavior-in-its), Journal of Risk and Reliability and other SCI or SSCI Journals.

For more details about this conference, please visit the ICTIS 2017 website at http://ictis.whut.edu.cn . Please contact ICTIS2017 secretary by Email: ictis@whut.edu.cn if you have any suggestions or questions.

CONFERENCE TOPICS

With the rapid development of Intelligent and Connected Vehicles, Intelligent Data Mining, Intelligent Traffic Information Awareness and Vehicle to Vehicle or Vehicle to Infrastructure Communication Technology, there is both challenges and opportunities for currently transportation systems in Intelligent and Connected Environments. How to improve the safety of transportation system with information technologies has become a popular research topic in the field of transportation and the theme of this conference. ICTIS 2017 will facilitate in-depth discussions about infrastructure, data collection, processing and applications of these technologies and at the same time, promote exchanges in traffic safety theory, analyzing methods and risk preventive measures in Intelligent and Connected Environments.

Topics include (but not limited to) the following:

- ☐ Connected Vehicle Technology
- ☐ Intelligent Transportation Systems (ITS)
- ☐ Driving Behavior in ITS
- ☐ Transportation Systems Detection Technology
- ☐ Transportation Information Acquisition Methods
- ☐ Transportation Information Processing Theories and Methods
- ☐ Information Publishing Methods and Applications
- ☐ Traveler Information, In-Vehicle Information Systems
- ☐ Traffic Control Theories and Methods
- ☐ Transportation System Optimization Models
- ☐ Geographic Information Systems for Transportation
- ☐ Others related topics
- ☐ Transportation Safety Models and Evaluation Methods
- ☐ Transportation Safety Data Analysis Methods
- ☐ Travel Behaviors and Safety
- ☐ Traffic Engineering Innovations including Road Design and Behavioral Issues
- ☐ Transportation Safety
- ☐ Urban Traffic Safety and Slow Traffic
- ☐ Shipping Safety Theory and Technology
- ☐ Shipping and Ocean Environment Engineering and Safety
- ☐ Railway Safety Theory and Technology
- ☐ Safety Considerations in Railway Operation Management
- ☐ Aviation Safety Theory and Technology
- ☐ Safety Considerations in Aviation Operation Management

PAPER SUBMISSION AND REVIEW

The working language of the conference is English. Authors are invited to submit abstracts and full papers in English. Submitted abstracts should not exceed 300 words. The length of paper is 6-8 pages, and must be written strictly in accordance with the format of IEEE (The template can be downloaded from http://www.ieee.org/publications_standards/publications/conferences/2014_04_msw_a4_format.doc) . Abstracts should include the paper title, name(s) of the author(s), affiliations and contact information. For papers with multiple authors, please provide information for all co-authors, including name, affiliation and contact information (address, phone number, email and fax) of the corresponding author. The authors must ensure the submitted abstracts and papers are original and unpublished. Plagiarisms and intellectual property disputes will not be tolerated in ICTIS 2017. Submitted abstracts and full papers will be reviewed by experts in the relevant fields.

IMPORTANT DATES

Deadline for Submission of Abstracts	September 1, 2016
Notification of Accepted Abstracts	October 15, 2016
Deadline for Submission of Full Papers	January 15 2017
Notification of Accepted Full Papers	March 15, 2017
Deadline for Submission of the Revised Version	April 30, 2017
Conference	August 8- 10, 2017

CONTACT INFORMATION

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中国交通运输协会 China Communication and Transportation Association
ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS
Canadian Society for Civil Engineering
武汉理工大学 Wuhan University of Technology

Call-for-papers of a special session of ICTIS 2017

Emerging Technologies for Maritime Risk Assessment: Opportunities, Challenges and Developments

by D. Zhang[1, 2] and J. Wang[3]

1. Intelligent Transportation Systems Research Center, Wuhan University of Technology, China
2. National Engineering Research Center for Water Transport Safety, China
3. Liverpool LOgistics, Offshore and Marine (LOOM) Research Institute, Liverpool John Moores University, UK

Compared to land transportation, maritime transportation has many advantages such as lower carbon emissions, lower costs and lower likelihood of congestion. Naturally, there is also a series of accidents of a different nature and different consequences that are associated with the maritime transport activity. According to the international union of marine insurance, more than 40% of ship losses happen in bad weather conditions, although fire and explosion and machinery damage are also important contributors. One of the most shocking maritime accidents is the capsize of the Eastern Star in the Yangtze River on the 1st June 2015 due to the stormy weather, leading to 442 fatalities.

It is therefore necessary to develop novel techniques of maritime risk assessment aimed at accident prevention (e-Navigation developments, traffic management practices), and measures for consequence mitigation (improved decision support systems for evacuation and flooding, ship designs and equipment).

Emerging technologies, such as big data, high-performance computing, artificial intelligence, and resilience engineering, have a profound impact to the way of conducting maritime risk assessment. They enable us to understand, estimate and mitigate risks in a much more informed way. Maritime risk modeling is about understanding how maritime systems interact with risk influencing factors. In this regard, emerging technologies appear to offer so much to increase the "fidelity" of such models and their capacity to better estimate maritime risks and their impacts. Therefore, this special issue will focus on the discussions regarding the opportunities, challenges and initiatives of using the above emerging technologies for a "high-fidelity" integrated maritime risk modeling process. Topics of interest include, but are not limited to:

- Opportunities for enhancing the fidelity of maritime risk modules (e.g., collision, grounding and fire/explosions).
- Ship safety in harsh environment (e.g., stormy seas, ice waters and complex traffic fairways).
- Challenges of using a particular emerging technology in maritime risk assessment.
- Initiatives of using emerging technologies for an improved maritime risk modeling process.
- Assessment of improved maritime risk modeling accuracy from emerging technologies.
- Resilience engineering-based risk assessment for ships in operation.

Call-for-papers of a special session of ICTIS 2017

Driving Behavior in Intelligent Transportation Systems

by Chaozhong WU[1,2] and Türker ÖZKAN [3]

1. Intelligent Transportation Systems Research Center, Wuhan University of Technology, Wuhan, China
2. National Engineering Research Center for Water Transport Safety, China
3. Department of Psychology, Middle East Technical University, Ankara, Turkey

With the rapid development of Intelligent Transport Systems (ITS), the emerging technologies such as Advanced Vehicle Driving Assist Systems, Connected Vehicles, Intelligent Vehicles and etc. introduces new opportunities and challenges into our daily traffic systems and raises questions regarding the interactions of driver's cognitive and driving behaviors with these technologies. Meanwhile, the development in these technologies makes innovative vehicle data collection, Vehicle to Vehicle communication, Vehicle to Infrastructure communication possible. As a sequence, more driving information will be provided to the drivers. How the drivers will better understand the safety benefit of these new technologies and will make response to this new information for vehicle operation attracted more and more attention. These are of great opportunities and challenges for the driving behavior and traffic psychology study. Therefore, the 4th International Conference on Transportation and Safety has interest to organize a special session to focus on Driving Behavior in Intelligent Transportation Systems.

The purpose of this Special Session is to provide a collage of high-quality papers presenting interesting aspects of driving behavior in Intelligent Vehicles, Connected Vehicles or other intelligent transport systems. Papers suitable for this session should focus on topics, include but are not limited to:

- Risk Awareness within the Advanced Vehicle Driving Assist Systems or Intelligent Vehicles
- Driver's Cognitive to the Innovated Information within the Intelligent Transport Systems
- Safety Benefit for the advancement of Vehicle Technologies
- Drivers' Attitude and Behavior towards Intelligent Vehicles
- Driving Behavior Study within the Big Data Environments
- Human-Machine Interface in Intelligent Transport Systems
- Driver Adaptation and Regulation in Emerging Technologies and/or ITS

SOLI 2017 Call for Papers

2017 IEEE International Conference on Service Operations and Logistics, and Informatics

September 18-20, 2017, Bari, Italy

Sponsor: IEEE Intelligent Transportation System Society

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IMPORTANT DATES
Special session proposals deadline:
December 15, 2016
Paper submission deadline:
January 15, 2017
Notification of acceptance:
April 30, 2017
Camera-ready copy due:
June 30, 2017

SOLI 2017 is strongly supported by the TC on Automation in logistics of the IEEE RAS
the TC on Discrete Event Systems of the IEEE SMCS

Conference Theme: Optimization and Control Approaches in Transportation and Logistic Systems

The 2017 IEEE International Conference on Service Operations and Logistics, and Informatics will be held on September 18-20, 2017, in Bari, Italy. This conference will provide a remarkable opportunity for the academic and industrial communities in the areas of Service Operations, Logistics, and Informatics, to address new challenges and share solutions, and discuss future research directions. The specific objectives of the modern Logistics and Transportation Challenges are 'smart, green and integrated services' to achieve planning, scheduling and transport systems that are resource-efficient, climate- and environmentally-friendly, safe and seamless for the benefit of citizens, economy and society. Moreover, the increasing complexity of logistic systems, modelled as systems of systems, and the rapid advancements of Information and Communication Technologies require the development of innovative models, control and optimization approaches and lead to the definition of novel problems with respect to the related literature.

Technical topics of the conference include but are not limited to:

- Performance evaluation of new hardware and software technologies to support smart logistics systems.
- Planning, scheduling and coordination problems arising from the implementation of new hardware, software or data architectures.
- Impact of novel automation, information and data architectures on the design of logistics systems and supply chains.
- Innovative interfacing of hardware, software and data resources to support smart logistics.
- Intelligent transportation and distribution systems: theory and application.
- Management information systems in logistics.
- System-level approaches to cooperative logistics.
- Automatic and intelligent control applications in logistics systems at the factory, warehouse, transportation or supply chain levels.
- Normative, legal, security and privacy issues in logistics and their impact on logistics system design and control.
- Intra-factory logistics and material handling for manufacturing and production systems
- Supply chains
- Warehouses, distribution centres, and transport terminals
- Freight transportation systems (seaports, railroads, trucking systems, package express)
- Smart logistics for smart cities
- Logistics for Healthcare Systems (biomaterials, pharmaceuticals)
- Automated and Internet-based Workflow Management Systems

PAPER SUBMISSION

Complete manuscripts must be electronically submitted through the conference website http://dei.poliba.it/soli2017
Submitted manuscripts should be within six (6) pages in IEEE two-column format, including figures, tables, and references. Please use the templates at Manuscript Templates for IEEE Conference Proceedings from the conference website to prepare your paper.

FAST-zero ’17

4th International Symposium on

Future Active Safety Technology

Toward zero traffic accidents

Introduction

FAST-zero’17 will be held in Nara, a historical place and ancient capital of Japan after the successful 3rd symposium in Gothenburg, Sweden. Following the tradition of FAST-zero symposia, we will bring together researchers and engineers from industry and academia to present the current state-of-the art and progress in research and development of active safety technologies.

Last symposium: FAST-zero ’15

Innovation in the field of active safety is the key driving force towards the ultimate goal of realizing zero traffic-accidents. Researchers around the world have been investigating methods for active safety to reduce and possibly eliminate the number of traffic accidents as well as road fatalities. Especially, automated and connected vehicles have the potential to enhance safety through new sensors, dynamic map, artificial intelligence and other technologies that have experienced a great improvement in the last years. The organizers are looking forward to your contribution and to seeing you at FAST-zero’17.

Organized by

FAST-zero’17 Organizing Committee of the Society of the Automotive Engineers of Japan, Inc. (JSAE)

In Association with

- International Federation of Automotive Engineering Societies (FISITA)
- International Association of Traffic and Safety Sciences (IATSS)
- International Federation of Automatic Control, Technical Committee on Automotive Control (IFAC)
- IEEE-Intelligent Transportation Systems Society (ITSS)
- ITS-Japan
- Japan Society of Mechanical Engineers (JSME)
- Nara Prefecture
- Society of Instrument and Control Engineers (SICE)

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S. Schneider (Germany)
J. Sjoberg (Sweden
K. Toyoda (Japan)
T. Wada (Japan)
K. Yi (Korea)

Call for Papers

Authors intending to present a paper at the FAST-zero ’17 symposium are invited to submit an extended abstract in English, with a length of approximately 1000 words. The extended abstract should clearly reflect the contents of the paper, and should not exceed 2 pages of A4 size (including figures).

The extended abstract must be accompanied by the following information:

1. Title of paper
2. Name of author(s)
3. Affiliation(s)
4. Symposium Topics (up to 3 - see list of topics)
5. Abstract (approx. 1000 words, including figures)
6. Corresponding Author
   Name, Affiliation, Complete mailing address,
   E-mail address, Telephone number / Fax number

For authors who wish to publish their research works in international journals, we recommend the authors submit the revised manuscripts to “International Journal of Automotive Engineering (IJAE)” published by JSAE. The peer review process will proceed after the symposium.

Important Dates

Deadline for abstracts:	November 25, 2016
Notification of acceptance:	February 28, 2017
Deadline for full papers:	May 19, 2017
Deadline for author registration:	May 19, 2017

Symposium Topics

FAST-zero’17 topics will cover the wide range of active safety technology topics including but not limited to:

- On-Board Sensing Active Safety System
  - Autonomous Driving Technology & Driver Assistance Systems
  - Vehicle Dynamics Control
  - Vehicular Sensors and Environment Perception
- Communication-Based Active Safety System
  - Connected Vehicles & Cooperative Driver Assistance System
  - ITS and ICT for Safety Applications
- Driver Characteristics and Human Factor
  - Driver Monitoring
  - Driver Behavior Modeling
  - Driver Assessment and Training
  - Cooperation between Driver and Assistance Systems
  - Human Machine Interface
- Active Safety Testing Method and Assessment
  - Safety Impact Assessment of Active Safety Devices
  - Driving Simulator
  - Modeling and Simulation
  - Field Operational Test
- Other Related Topics on Active Safety

Official Language for Papers &Presentations

The official language of the symposium for both paper and presentation is English. Oral presentation will be made in parallel sessions during the symposium. Presentation will be limited to 25 minutes, including a 10-minute question-and-answer session. All contributed papers will be published in the FAST-zero ’17 proceedings.

Paper Submission

Prospective authors are requested to submit an extended abstract in English, describing the problem definition, method and results expected or obtained. This should include figures and tables and is limited to two pages (A4) and approximately 1,000 words. PDF format is preferable. Authors should pre-register on the symposium website in order to submit an extended summary. The submitted summaries will be reviewed by the international scientific committee members. Successful authors will be required to submit a full paper, limited to six pages.

Paper Submission website: http://www.fast-zero17.info/
At least one author for each technical paper must register and pay the symposium registration fee before the electronic submission of full paper. Accepted full papers with registered author(s) will be published in Symposium Proceedings.

Awards and Journal Publication

Best papers will be awarded, nominated by a panel of the FAST-zero international scientific committee.

Outstanding papers selected by the committee will be recommended for publication in IJAE of JSAE.

Registration

All delegates, including those presenting papers, are expected to register for the symposium. Registration includes a USB memory of the symposium proceedings, book of abstracts, attendance at all plenary and technical sessions, refreshments, reception and FAST-zero party.

Symposium registration fee:

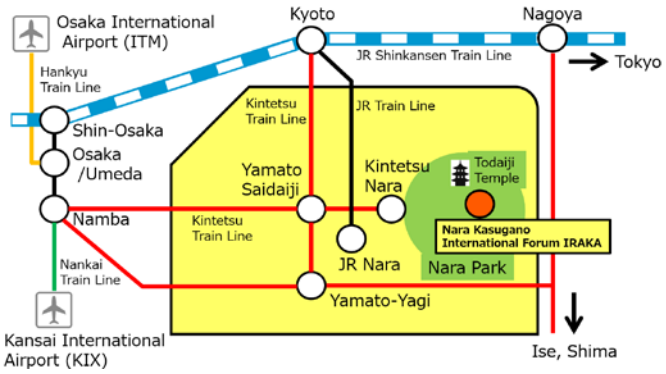
¥60,000 until June 15, 2017.
¥70,000 after June 16, 2017.
¥35,000 students (No early discount)

Discount fees for accompanying persons are considered.

Symposium Venue

The symposium will be held at Nara Kasugano International Forum, in Nara Park. The Forum can be reached by bus about 10 minutes from Kintetsu-Nara or JR-Nara station.

Address: Kasugano-cho, Nara-city, Nara 630-8212, Japan



Correspondence

All inquiries and proposals concerning the symposium should be addressed to FAST-zero’17 Secretariat:

E-mail: fast-zero17@jtbcom.co.jp

First Announcement
and
Call for Papers

FAST-zero ’17

4th International Symposium on

Future Active Safety Technology

Toward zero traffic accidents

September 18 to 22, 2017
Nara, Japan
at Nara Kasugano International Forum

Deadline for Abstracts: November 25, 2016

URL: http://www.fast-zero17.info/
E-mail: fast-zero17@jtbcom.co.jp

Organized by

FAST-zero’17 Organizing Committee,
Society of Automotive Engineers of Japan, Inc. (JSAE)

In Association with

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Call for Papers
IEEE Transactions on Intelligent Vehicles

The *IEEE Transactions on Intelligent Vehicles* (T-IV) publishes peer-reviewed articles that provide innovative research concepts and application results, report significant theoretical findings and application case studies, and raises awareness of pressing research and application challenges in the areas of intelligent vehicles, and in particular in automated vehicles.

The IEEE Transactions on Intelligent Vehicles will commence publication in 2017, with 4 issues annually.

Prospective authors are invited to submit original contributions or survey papers for review for publication in T-IV. Topics of interest include (but are not limited to):

- Advanced Driver Assistance Systems
- Automated Vehicles
- Active and Passive Vehicle Safety
- Vehicle Environment Perception
- Driver State and Intent Recognition
- Eco-driving and Energy-efficient Vehicles
- Cooperative Vehicle Systems
- Collision Avoidance
- Pedestrian Protection
- Proximity Detection Technology
- Assistive Mobility Systems
- Proximity Awareness Technology
- Autonomous / Intelligent Robotic Vehicles
- IV related Image, Radar, Lidar Signal Processing
- Information Fusion
- Vehicle Control
- Human Factors and Human Machine Interaction
- IV technologies in Electric and Hybrid Vehicles
- Novel Interfaces and Displays
- Intelligent Vehicle Software Security

All manuscripts must be submitted through Manuscript Central at

http://mc.manuscriptcentral.com/t-iv

Refer to http://its.ieee.org/2014/10/06/submitting-a-paper/ for general information about electronic submission through Manuscript Central.

Editor-in-Chief: Prof. Ümit Özgüner, The Ohio State University, Department of ECE and Center for Automotive Research (CAR), Columbus, Ohio USA. (ozguner.1@osu.edu)

Conference Calendar

By Haluk Eren, PhD. Firat University, Turkey.

This section lists upcoming ITS-related conferences, workshops, or exhibits. Contributions are welcome; please send announcements to http://goo.gl/forms/xpgl8WLt9F

Haluk Eren

IEEE Intelligent Transportation Systems Society's Sponsored Conferences

2017 IEEE Intelligent Vehicles Symposium (IV'17)

Jun 11-14, 2017
Redondo Beach, CA, USA
http://iv2017.org/

IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA 2017)

August 6-9, 2017
Cleveland, Ohio
https://www.asme.org/events/idetccie

IEEE 20th International Conference on Intelligent Transportation Systems (ITSC 2017)

October 16-19, 2017
Yokohama, Japan
http://www.itsc2017.org/
Submission due by: April 21, 2017

IEEE International Conference on Vehicular Electronics and Safety (ICVES 2017)

June 27-29, 2017
Vienna, Austria
http://www.ieee-icves2017.org/

IEEE International Conference on Service Operations and Logistics, and Informatics (SOLI 2017)

September 18-20, 2017
Bari, Italy
http://dei.poliba.it/soli2017/

IEEE Forum on Integrated and Sustainable Transportation Systems (FISTS 2016)

Beijing, Chine
http://www.ieeefists.org/
Submission due for the next event: To be determined

The 3rd International Conference on Universal Village (UV 2016)

Nagoya, Japan
http://www.universal-village.org/
Submission due for the next event: To be determined

The 6th IEEE International *Conference on Advanced Logistics and Transport (IEEE ICALT'2017)*

July 24-27, 2017
Bali, Indonesia
http://icalt.org/2017/
Submission due by: April 01, 2017

The 2016 IEEE International *Conference on Intelligent Rail Transportation (IEEE ICIRT 2016)*

Birmingham, UK
http://www.ieee-icirt.com/
Submission due for the next event: To be determined

Other Conferences

2017 SAE Battelle CyberAuto Challenge

August 06-11, 2017
Warren, Michigan, USA
http://www.sae.org/events/cyberauto/

The 22nd International Symposium on Transportation and Traffic Theory (ISTTT22)

July 24-26, 2017
Northwestern University, Evanston, Illinois, USA
http://sites.northwestern.edu/isttt/

IEEE 85th Vehicular Technology Conference: VTC2017-Spring

June 4-7, 2017
Sydney, Australia
http://ieeevtc.org/vtc2017spring/

IEEE Multi-Conference on Systems and Control (MSC 2016)

Buenos Aires, Argentina
http://www.msc2016.org/
Submission due for the next event: To be determined

IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2017)

September 24-28, 2017
Vancouver, BC, Canada
http://www.iros2017.org

ITS World Congress 2017

October 29-November 2, 2017
Montreal, Canada
http://itsworldcongress2017.org/

Seminars and Dagstuhl Perspectives Workshops 2017

Schloss Dagstuhl, Germany
https://www.dagstuhl.de/en/program/calendar/?dag_type=12&dag_year=2017

VISIGRAPP 2018: 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications

January 27-29, 2018
Porto, Portugal
http://www.visigrapp.org

The 5th International Conference on Connected Vehicles & Expo (ICCVE 2016)

Seattle, WA, USA
http://www.iccve.org/
Submission due for the next event: To be determined

Intertraffic Amsterdam 2018

March 20-23, 2018
Amsterdam, Netherlands
http://www.intertraffic.com/amsterdam/

WCX17: SAE World Congress Experience

April 04-06, 2017
Detroit, Michigan, USA
http://www.wcx17.org

3rd International Conference on Vehicle Technology and Intelligent Transport Systems (VEHITS 2017)

April 22-24, 2017
Porto, Portugal
http://www.vehits.org

IEEE International Conference on Robotics and Automation (ICRA 2017)

May 29-June 03, 2017
Singapore
http://icra2017.org

19th International Conference on Image Analysis and Processing (ICIAP 2017)

September 11-15, 2017
Catania, Italy
http://www.iciap2017.com/
Submission due by: March 31, 2017

Forthcoming papers on IEEE Transactions on ITS

A Gain-Scheduling Driver Assistance Trajectory Following Algorithm Considering Different Driver Steering Characteristics
JUNMIN WANG, JINXIANG WANG, GUOGUANG ZHANG, RONGRONG WANG, SCOTT SCHNELLE

An Adaptive Background Modeling Method for Foreground Segmentation
YONG XU, ZUOFENG ZHONG, BOB ZHANG, GUANGMING LU, ZHAO YONG

Data-Driven Adaptive Optimal Control of Connected Vehicles
WEINAN GAO, ZHONG-PING JIANG, KAAN OZBAY

Research on the Cooperative Train Control Strategy to Reduce Energy Consumption
HUAILONG GUO, JIANQIANG LIU, YINGXUE YU

Intrusion Detection and Ejection Framework Against Lethal Attacks in UAV-Aided Networks: A Bayesian Game-Theoretic Methodology
HICHEM SEDJELMACI, SIDI-MOHAMMED SENOUCI, NIRWAN ANSARI

The Relationship Between the Traffic Flow and the Look-ahead Cruise Control
BALÁZS NÉMETH, PÉTER GÁSPÁR

Safety in Vehicle Platooning: A Systematic Literature Review
JAKOB AXELSSON

Handoff Performance Improvements in an Integrated Train-Ground Communication System Based on Wireless Network Virtualization
F. RICHARD YU, LI ZHU, TAO TANG, BIN NING

A novel speed-density relationship model based on the energy conservation concept
SHENG JIN, DIANHAI WANG, XIAOLONG MA, DONGFANG MA

Self-Balancing Decentralized Distributed Platform for Urban Traffic Simulation
QUENTIN BRAGARD, ANTHONY VENTRESQUE, LIAM MURPHY

Vehicles of Future: A Survey of Research on Safety Issues
FIKRET SIVRIKAYA, CEM BILA, MANZOOR KHAN, SAHIN ALBAYRAK

Anomaly Detection in Traffic Scenes via Spatial-aware Motion Reconstruction
QI WANG, YUAN YUAN, DONG WANG

Instantaneous Feedback Control for Fuel-Prioritized Vehicle Cruising System on Highways with Varying Slope
SHAOBING XU, SHENGBO LI, BO CHENG, KEQIANG LI

SesToCross: Semantic Expert System to Manage Single-Lane Road Crossing
FRANCISCO FALCONE, ALBERTO CORDOBA, JOSE JAVIER ASTRAIN, JESUS VILLADANGOS, LEYRE AZPILI-CUETA , PEIO LOPEZ-ITURRI, ERIK AGUIRRE

A Survey on Coordination of Connected and Automated Vehicles at Intersections and Merging at Highway On-Ramps
ANDREAS MALIKOPOULOS, JACKELINE RIOS-TORRES

Optimal Control for Congestion Pricing: Theory, Simulation and Evaluation
PUSHKIN KACHROO, SAUMYA GUPTA, SHAURYA AGARWAL, KAAN OZBAY

A ST-CRF Map Matching Method for Low-frequency Floating Car Data
FENG LU, XILIANG LIU , KANG LIU, MINGXIAO LI

A Potential-Field-based Model Predictive Path Planning Controller for Autonomous Road Vehicles
YADOLLAH RASEKHIPOUR, AMIR KHAJEPOUR, SHIH-KEN CHEN, BAKHTIAR LITKOUHI

Railway Traffic Conflict Detection via A State Transition Prediction Approach
TAOMEI ZHU, JOSÉ MANUEL MERA

A Low Complexity Vision-Based System for Real-Time Traffic Monitoring
J. ISAAC ENGEL, JUAN MARTIN, RAQUEL BARCO

Analysis of Recurrent Neural Networks for Probabilistic Modeling of Driver Behavior
JEREMY MORTON, TIM WHEELER, MYKEL KOCHENDERFER

Certainty and Critical Speed for Decision Making in Tests of Pedestrian Automatic Emergency Braking Systems
ALBERTO LÓPEZ, STANLEY CHIEN, LINGXI LI, QIANG YI, YAOBIN CHEN, RINI SHERONY

A Novel Approach for the Test of Active Pedestrian Safety Systems
ANDREAS REITBERGER, SEBASTIAN WITTMANN, ROBERT HARRISON, THOMAS BRANDMEIER

Towards Mitigating Phantom Jam Using Vehicle-to-Vehicle Communication
MYOUNGGYU WON, TAEJOON PARK, SANG SON

Swarm-Inspired Modeling of a Highway System with Stability Analysis
DANIELLE FREDETTE, UMIT OZGUNER

A New Analytical Approach to Evaluate the Critical-Event Probability Due to Wireless Communication Errors in Train Control Systems
KHANH NGUYEN, JULIE BEUGIN, MARION BERBINEAU, MOHAMED KASSAB

A Video-Based System for Vehicle Speed Measurement in Urban Roadways
BOGDAN NASSU, DIOGO LUVIZON, BOGDAN NASSU, RODRIGO MINETTO

A Note on Transit Coordination Using Integer-Ratio Headways
AVISHAI CEDER, TAO LIU

Generation of Aircraft Intent based on a Micro-Strategy Search Tree
GUILLERMO FRONTERA, JUAN BESADA, JAVIER LOPEZ

On the Impact of Cooperative Autonomous Vehicles in Improving Freeway Merging: A Modified Intelligent Driver Model based Approach
XIAOBO QU, MOFAN ZHOU, SHENG JIN

Incorporating Ethical Considerations into Automated Vehicle Control
SARAH THORNTON, SELINA PAN, STEPHEN ERLIEN, J. CHRISTIAN GERDES

Human-Centered Feed-Forward Control of Vehicle Steering System Based on Driver's Path-following Characteristics
WENSHUO WANG, JUNQIANG XI, CHANG LIU, XIAOHAN LI

Evidential Grid-based Tracking and Mapping
GEORG TANZMEISTER, DIRK WOLLHERR

Energy Consumption Evaluation based on Personalized Driver-Vehicle Model
THOMAS WILHELEM, HIROYUKI OKUDA, BLAINE LEVEDAHL, TATSUYA SUZUKI

CrowdDeliver: Planning City-wide Package Delivery Paths Leveraging the Crowd of Taxis
CHAO CHEN, DAQING ZHANG, XIAOJUAN MA, BIN GUO, LEYE WANG, YASHA WANG, EDWIN SHA

Preview Controller Design for Vehicle Stability with V2V Communication
SEONGJIN YIM

Characterizing Passenger Flow for Transportation Hub Based on Mobile Phone Data
GANG ZHONG, XIA WAN, JIAN ZHANG, TINGTING YIN, BIN RAN

An Adaptive Signal Control Scheme to Prevent Intersection Traffic Blockage
GUIZHEN YU, YILONG REN, YUNPENG WANG, GUIZHEN YU, HENRY LIU, LIN XIAO

A Crowd-Cooperative Approach for Intelligent Transportation Systems
GIOVANNI MERLINO, DAVIDE CEROTTI, SALVATORE DISTEFANO, GIOVANNI MERLINO, ANTONIO PULIAFITO

Electric Characteristics Variation of Magnetic Loops used on Traffic Control due to the Passage of Vehicles Over Them
VÍCTOR MILIÁN-SÁNCHEZ, ANTONIO MOCHOLÍ-SALCEDO, HUMBERTO ARROYO-NÚÑEZ, GUMERSINDO VERDÚ-MARTÍN, ALEXANDER ARROYO-NÚÑEZ

Local Co-occurrence Selection via Partial Least Squares for Pedestrian Detection
HANZI WANG, QIMING LI, HANZI WANG, YAN YAN, BO LI, CHANG WEN CHEN

SIRC: A Secure Incentive Scheme for Reliable Cooperative Downloading in High-way VANETs
CHENGZHE LAI, KUAN ZHANG, NAN CHENG, HUI LI, XUEMIN SHEN

Eco-Cooperative Adaptive Cruise Control at Signalized Intersections Considering Queue Effects
HESHAM RAKHA, HAO YANG, HESHAM RAKHA, MANI VENKAT ALA

Lateral Vehicle Trajectory Optimization Using Constrained Linear Time-Varying MPC
BENJAMIN GUTJAH, LUTZ GROELL, MORITZ WERLING

Design and Verification of a Rail-borne Energy Harvester for Powering Wireless Sensor Networks in Railway Industry
MINGYUAN GAO, PING WANG, RONG CHEN, YONG CAO, DUNJIN CAI

Time of Day Pricing in Taxi Markets
SATISH UKKUSURI, XINWU QIAN

Traffic Sign Recognition Using Kernel Extreme Learning Machine with Deep Perceptual Feature
XIN XU, YUJUN ZENG, XIN XU, DAYONG SHEN, YUQIANG FANG, ZHIPENG XIAO

On Perception and Reality in Wireless Air Traffic Communications Security
MARTIN STROHMEIER, MATTHIAS SCHÄFER, RUI PINHEIRO, VINCENT LENDERS, IVAN MARTINOVIC

A Unified Framework for Vehicle Rerouting and Traffic Light Control to Reduce Traffic Congestion
ZHIGUANG CAO, SIWEI JIANG, JIE ZHANG, HONGLIANG GUO

A Self-Organizing Frequency Approach to 802.11p Channel Estimation
RAZVAN-ANDREI STOICA, STEFANO SEVERI, GIUSEPPE FREITAS DE ABREU

Forecasting the Subway Passenger Flow under Event Occurrences with Social Media
QING HE, MING NI, JING GAO

Impact of Driving Behavior on Traffic Delay at a Congested Signalized Intersection
MENGCHU ZHOU, LIANG QI, WENJING LUAN

Forthcoming papers on IEEE Transactions on IV

Padé Approximation of Delays in Cooperative ACC Based on String Stability Requirement
Haitao Xing; Jeroen Ploeg; Henk Nijmeijer

Map-Aided Dead-Reckoning Using Only Measurements of Speed
Johan Wahlstrom; Isaac Skog; Joao G.P. Rodrigues; Peter Handel; Ana Aguiar

Design of a Preview Driver Model based on Optical Flow
Yuki Okafuji; Takanori Fukao; Yasuyoshi Yokokohji; Hiroshi Inou

Sequential data fusion of GNSS Pseudoranges and Dopplers with map-based vision systems
Zui Tao; Philippe Bonnifait

Fast and Accurate Trajectory Tracking Control of an Autonomous Surface Vehicle with unmodelled Dynamics and Disturbances
Ning Wang; Shuailin Lv; Meng Joo Er; Wen-Hua Chen

Hierarchal Neighborhood based Precise Localization for Intelligent Vehicles in Urban Environments
Liang Li; Ming Yang; Lindong Guo; Chunxiang Wang; Bing Wang

Forthcoming papers on IEEE ITS Magazine

Smart Parking Guidance, Monitoring and Reservations: A Review
Kotb, Amir; Shen, Yao-chun; Huang, Yi

Driving Characteristics and Adaptive Cruise Control – A Naturalistic Driving Study
Schakel, Wouter; Gorter, Mark; de Winter, Joost; van Arem, Bart

Assistive intelligent transportation systems: the need for user localization and anonymous disability identification
Fernandez-Llorca, David; Quintero Mínguez, Raúl; Parra Alonso, Ignacio; Fernandez Lopez, Carlos; García Daza, Iván; Alén-Cordero, Cristina; Sotelo, Miguel Ángel

Multiple vehicle formation control based on robust adaptive control algorithm
Zhang, Liwei; Li, Runmei; Han, Lu; Wang, Jian

Luxembourg SUMO Traffic (LuST) Scenario: Traffic Demand Evaluation
Codeca, Lara; Frank, Raphaël; Faye, Sebastien; Engel, Thomas

Automatic Incident Detection in Intelligent Transportation Systems Using Aggregation of Traffic Parameters Collected Through V2I Communications
El-Tawab, Samy; Popescu, Otilia; Sha-Mohammad, Sarwar; Popescu, Dimitrie; Abdel-Wahab, Hussein

Speed tracking based energy-efficient freight train control through multi-algorithms combination
Yang, Jie; Jia, Limin; Lu, Shaofeng; Fu, Yunxiao

Prototype Decision Support System for Black Ice Detection and Road Closure Control
Sun, Shuzhen; Liu, Tieming; Pan, Qinyue; Sanchez-Mariscal, Javier; Wang, Ning; Yu, Hongbo

Investigation of Route-Independent Aggressive and Safe Driving Features Obtained from Accelerometer Signals
Žylius, Gediminas

Intelligent Tires-A Review of Tire Characterization Literature
Lee, Hojong; Taheri, Saied

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Victoria J. Hodge ; Simon O'Keefe ; Michael Weeks ; Anthony Moulds

2. Traffic Flow Prediction With Big Data: A Deep Learning Approach
Yisheng Lv ; Yanjie Duan ; Wenwen Kang ; Zhengxi Li ; Fei-Yue Wang

3. Looking at Vehicles on the Road: A Survey of Vision-Based Vehicle Detection, Tracking, and Behavior Analysis
Sayanan Sivaraman ; Mohan Manubhai Trivedi

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