Javier J. Sanchez-Medina



IEEE Intelligent Transportation Systems Society's Column

IEEE ITSS's Vice-President for Technical Activities Letter

ear readers,
For this third issue of this column on the Technical Activities of the IEEE Intelligent Transportation System Society (ITSS) we have a few news to share with our community. First of all, we are preparing two new calls: One to give the award to the best ITSS Technical Committee of 2018. Another to the ITSS member at large who organizes the most innovative technical activity into any of the ITSS conferences program.

Another very exciting news I have to convey is that we are preparing a web platform for sharing our community knowledge on Data Science applied to ITS. We call this project "One Stop ITS Data Archive". By the title you can imagine what it will be about. Most of contents of that service will be freely open to the general public, but a part of it will be just visible to the IEEE ITSS members. We will definitely need editors to participate in this project, to create contents, share code snippets, participate in its fora, etc.

I know this may be interesting for many Data Scientists in the area of ITS. If you want to be part of this, please, contact me at your earliest convenience. We plan to open this to the world before the end of 2018.

Digital Object Identifier 10.1109/MITS.2018.2842418 Date of publication: 25 July 2018 We have some little changes in our Technical Activities structure. The current Technical Committee structure right now is as follows:

- Artificial Transportation Systems and Simulation
- Big Data and A. Intelligence for Mobility
- **■** Communication Networks
- Cooperative Driving
- Ethics and Social Implications of ITS
- Human Factors in ITS
- Intelligence and Security Information for Transportation Systems
- **■** ITS Education
- Logistics
- Mechatronic and Embedded Sys. in ITS
- Naturalistic Driving Data Analytics
- Railroad Systems and Applications
- Self Driving Automobiles
- Smart Cities and Smart Mobility
- Social Transportation Systems
- Self Driving Automobiles
- Sustainable Transportation
- Traffic and Travel Management
- Transportation 5.0
- Vehicle Safety Technologies and Applications

This Technical Activities structure is open and flexible. If you feel interested in participating with the amount of time you have available at any or some of them, do not

hesitate contacting us. Please go to the technical activities website and contact each technical committee's chair you are interested in helping out: http://ta.itss-ieee.org/

Call for Volunteers

In the IEEE Intelligent Transportation Systems Society (ITSS) we organize some very interesting conferences every year. One of the biggest is the The IEEE International Conference on Intelligent Transportation Systems, the 21st edition of which will be held in Hawaii, on Maui island next year. In this conference we are trying a slightly different approach regarding the technical program development. We are involving the ITSS Technical Committees much more than before in the reviewing and program organization tasks. For example, they have a much more preeminent role in the reviewing process through the incorporation of their TC members as associate editors, and intermediate layer where they will handle a few papers each asking for review and making acceptance/rejection recommendations. We want to have a fine grain technical quality control by that.

If that is interesting to you, please, get in touch with any of the ITSS Technical Committees (http://ta.itss-ieee.org/) and let the chair know your availability to join in.

Another call we need to launch is about the creation of new Technical

Committees. If you work in Intelligent Transportation Systems and you see there is technical gap we have in the space covered by our technical committees structure, and you are and ITSS member and you would like to lead that new Technical Committee, you are kindly invited to submit your proposal for the creation of that new TC. Each proposal should include:

- 1) Title of the Technical Committee
- Description of the scope and topics that are pretended to be covered with this new TC

- Work plan for, at least, a year ahead, with a minimum of two activities per year.
- 4) A list of at least 8 potential committee members
- 5) Your commitment to attending our yearly ITSS Technical Activities Board (TAB) meeting, which are typically organized around the ITSS ITSC conference series. You could send a representative from your committee list.
- 6) A brief Bio highlighting your accomplishments regarding the Technical Committee topics.

Please, send all of that in a single document to: javier.sanchez.medina@ ieee.org

You could also suggest a new technical committee to be created without running to chair it. All constructive suggestions are welcome! Thank you!

Thanks for your attention, hoping for us to meet at some of our conferences and events, stay safe!

> Javier J. Sánchez-Medina IEEE ITSS Vice-president for Technical Activities



Luis Moreira-Matias

ITSS Technical Activities Spotlight

Getting to Know the Big Data and Al for Mobility Technical Committee

he recent technological advances on telecommunications create a new reality on mobility sensing. Digital devices are now ubiquitous and able to broadcast rich information about human mobility in real-time. Such fact exponentially increased the availability of large-scale mobility data (i.e. Big Data) which has been popularized in the media as the new currency, fueling the future vision of our smart cities that will transform our lives. The reality is that we just began to recognize significant research challenges across a spectrum of topics. Consequently, there is an increasing interest among different research communities (ranging from civil engineering to computer science) and industrial stakeholders on build Artificial Intelli-

Digital Object Identifier 10.1109/MITS.2018.2842419 Date of publication: 25 July 2018 gence applications leveraging on such data sources.

Data-driven ITS are a natural consequence of this recent technological context, where commercial solutions already started to follow such trend. Examples enclose intelligent routing applications for private vehicles, ridesharing services, advanced traffic incident and congestion prediction systems or even dynamic pricing tools (e.g. Mobility as a Service).

The IEEE ITSS TC on "Big Data and AI for Mobility" intend to promote activities within the IEEE ITSS that bring together cross-domain experts with interests in Artificial Intelligence topics for Knowledge Discovery, Predictive Analytics, and Intelligent Sequential Decision Making Processes (i.e. contextual Reinforcement Learning) as well as Game Theory equilibrium-seeking applications to

Mobility and Transport in general. The ultimate goal is to promote collaborations and cross-disciplinary research that can trigger joint and yet sustainable roadmaps, from automotive and IT industrial stakeholders to governmental and ethic-related organizations. Our activities will range from regular workshops, hands-on tutorials, machine learning/data mining hackathons as well as industry-academy keynotes and debates where topics around present and the future Big Data and AI applications to mobility-related problems will be the main focus. If you have interest on serving and/or attending these activities, please e-mail us here: luis .moreira.matias@gmail.com.

> Luis Moreira-Matias (Ph.D.) "Big Data and AI for Mobility" TC Chair

> > ITS