Automotive Advanced Control Demonstrators

Open Invited Track on

Automotive Advanced Control Demonstrators

Organizers:
Pierre MELCHIOR
IMS, UMR 5218 CNRS, France
pierre.melchior@ims-bordeaux.fr

Serge BOVERIE
Continental Automotive France SAS
serge.boverie@continental-corporation.com

Xavier MOREAU
IMS, UMR 5218 CNRS, France
xavier.moreau@ims-bordeaux.fr

Michel BASSET
MIPS, France
michel.basset@uha.fr

Abstract:
The integration of Mechanical Engineering with Electronics and Automatic Control, explains the spectacular advances made by motor vehicles in the last decades, concerning emissions, fuel consumption, safety, diagnosis and comfort, and will, of course, be the key to future progress too. Recent developments in the area of intelligent autonomous vehicles aim at performing complex navigation and motion tasks in cooperation with other vehicles, human operated systems, and its environment.

This Open Invited Track is available to gather all scientific contributions to be presented at the World Congress in the dedicated Automotive Advanced Control Demonstrators sessions.

IFAC Technical Committee for evaluation:
TC 7.1 (Automotive Control), TC 7.4 (Transportation Systems),
TC 7.5 (Intelligent Autonomous Vehicles), TC 4.2 (Mechatronic Systems)

Web site: https://www.ifac2017.org/AACD

Detailed description
During the 2017 IFAC World Congress, a focus is made on the application of Automatic Control in Automotive domain, through:

- Demonstration vehicles
- Demonstrations of new onboard functions
- Systems and equipment demonstrations
- Exhibition of ground transportation systems
- Autonomous vehicles including mobile robots
The partners are proposed to register for:
- Static indoor demonstrations or exhibition booth: Actuators, ADAS, ...
- Static outdoor demonstrations with dedicated space
- Outdoor open road demonstration
- Outdoor private road demonstration
- Outdoor test area.

This Open Invited Track aims at combining industrial and academic automotive demonstrators. All scientific fields, methodologies and applicable technologies of automatic control are concerned, including:

- Modeling
- Control
- Supervision
- Diagnosis of automotive systems
- ADAS
- Automotive sensors and actuators
- Power trains
- Vehicle dynamic systems
- Integrated traffic
- Connected vehicles
- ...

This is an outstanding opportunity for worldwide technology showcase on automatic control / mechatronics applications in automotive domain. This is also the opportunity to meet world experts and researchers in the domain. It will provide your company with an easy, affordable opportunity to present your products, services, and to directly promote your activities to your target market.

Associated scientific demonstrator papers will have the same status as any other IFAC 2017 contribution. A specific international scientific committee will be in charge of evaluation of these contributions. They can be submitted as “contributed paper”, “contributed survey paper”, or “contributed extended abstract”. Papers that fall in the demonstrator category will be presented in dedicated sessions.

If you intend to bring your demonstrator device to the world congress, please provide an additional document describing the needed space and needed infrastructure. Our staff will contact you in order to satisfy your specific needs.
You can also contact us: demonstrators@ifac2017.org

**Important dates**
Paper submission deadline: 31 October 2016
How to submit: www.ifac2017.org/submit
More information: www.ifac2017.org/demonstrators
Contact us for more information: demonstrators@ifac2017.org