



SCIENTIFIC SEMINAR

Monday 15th October - 15:30 – 16:30

Facoltà di Ingegneria – Sala del Consiglio

Via Eudossiana, 18 – 00158 Roma

Driverless vehicles: state of the art and generation of a safe speed profile

Dr. Michel Parent

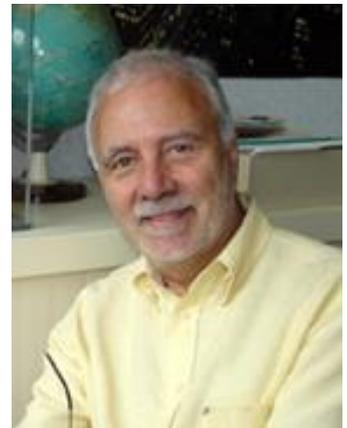
AutoKab LLC - michel.parent@autokab.com

The road vehicle automation is technologically available, and almost demonstrated in certain applications: the Citymobil2 project demonstrated the last mile taxi/shuttle (at low speed), some systems of automated bus/PRT in segregated lane work already (see Heathrow airport and Masdar City transportation system), other feature will hit the market of transport in next future as described in ERTRAC project's roadmap (i.e. automated parking garage pilot, highway chauffeurs and last mile taxi in dedicated lane).

All these functionalities need same technologies and sensors, in PhD study the candidate applied the information collected by Laser Imaging Detection and Ranging (LIDAR) sensors to collect distances from vehicle trajectory to unmovable obstacles of environment in order to determine the maximum allowable vehicle speed in safety conditions for vehicle and other road users.

How do these technologies work? How he can generate a safe and comfortably speed profile for automated vehicles inside of corridors?

Michel parent is currently the president of AutoKAB, a new company specialized in the automation of vehicle fleets. This company is a spin-off from the vehicle automation research team from INRIA that he created in 1991. This team focuses on research and development of information and communication technologies for road transport and on fully automated vehicles (the cybercars) He is considered as the “father” of the cybercar concept (in 1991!) and he was the coordinator of the European Project CyberCars between 2001 and 2004 and several follow-up project. Before his positions at RITS, Michel Parent has spent half of his time in research and academia at such places as Stanford University and MIT in the USA and INRIA in France, and the other half in the robotics industry. He was the president of the French Robotics Association between 1974 and 1979. He is the author of several books on robotics, vision and intelligent vehicles, and numerous publications and patents. Michel Parent has an engineering degree from the French Aeronautics School (ENSAE), a master degree in Operation Research and a Ph.D. in Computer Science, both from Case Western Reserve University, USA



People interested in attending are kindly required to send an E-mail to:

Ing. Fabio CIGNINI - Dottorando in Infrastrutture e Trasporti presso l' Università di Roma La Sapienza - E-mail: fabio.cignini@uniroma1.it