

*Marie Skłodowska-Curie Actions*

***ITEAM - The Interdisciplinary Training Network in Multi-Actuated Ground Vehicles offers 15 PhD/ESR research positions in Ground Vehicle / Automotive Engineering***

### **Research Fields**

Automotive Engineering; Mechanical Engineering; Control Engineering

### **Eligibility criteria**

Eligibility: The applicants should, at the time of selection, be in the first four years of their research careers (measured from the date when they obtained the degree which would entitle them to embark on a doctorate). The applicants should not be in possession of a doctoral degree, but should have the necessary qualifications to embark on a PhD program. All the ESRs will be required to be enrolled in the PhD programs. The applicants (regardless of their nationalities) must not have resided or carried out their main activities (work, studies, etc.) in the country of the recruiting organization for more than 12 months in the last 3 years.

The ESR positions are:

- ESR1 "Integrated design and simulation for active safety functions" at Virtual Vehicle FGmbH (Austria)
- ESR2 "Multi-actuated ground vehicle development of virtual steering control and steering feel model reference" at Volvo Car Group (Sweden)
- ESR3 "Validated multi-actuated ground vehicle virtual simulation environment for development and verification of chassis control software" at Volvo Car Group (Sweden)
- ESR4 "Robust wheel slip control in multi-actuated ground vehicle via sliding modes generation" at University Pavia (Italy)
- ESR5 "Fail-safe power electronics of integrated multi-actuated ground vehicle dynamics control" at Infineon AG (Germany)
- ESR6 "Optimization of autonomous driving functions targeting the overall energy efficiency improvement of multi-actuated ground vehicles" at Virtual Vehicle FGmbH (Austria)
- ESR7 "Robust estimation of dynamics behaviour and driving diagnosis applied to an intelligent multi-actuated ground vehicle with electric powertrain" at Université de Technologie de Compiègne (France)
- ESR8 "Driver assistance measures for low-emission multi-actuated ground vehicles" at Skoda Auto (Czech Republic)
- ESR9 "Low-emission multi-actuated ground vehicle dynamics control" at Technische Universität Ilmenau (Germany)
- ESR10 "On-boarded perception and sensor-based navigation applied to an intelligent multi-actuated ground vehicle with electric powertrain" at Université de Technologie de Compiègne (France)
- ESR11 "Path planning methods for (semi-)autonomous multi-actuated ground vehicle with electric powertrains" at Flanders Make (Belgium)
- ESR12 "Traffic simulation for the optimization of autonomous driving" at AVL List GmbH (Austria)
- ESR13 "ADAS functions for small electric vehicles" at Coventry University (UK)
- ESR 14 "Model-based distributed sensor fusion for multi-actuated ground vehicle state and parameter estimation" at Katholieke Universiteit Leuven (Belgium)
- ESR15 "Identification of off-road driving environment for multi-actuated ground vehicle dynamics control" at Technische Universität Ilmenau (Germany)

## **Applications Process**

### *Stage I (General Application)*

The applicant has to send to <iteam@tu-ilmenau.de> a single pdf file containing:

- 1) CV with list of publications (if available) and at least two contacts for reference
- 2) Motivation letter, incl. research interests and career plans
- 3) ESR position(s) applied.

For recruiting to positions ESR2 and ESR3 only, contact directly <asa.eriksson@volvocars.com> for further instructions.

The applicants will receive an acknowledgement of the receipt of the submitted documents.

### *Stage II (Local enrolment)*

The applications, which meet the eligibility criteria on Stage I, will follow the local recruitment procedures of the selected ITEAM recruiting organization to conduct the local enrolment.

## **Deadlines**

Applications will be reviewed in a streaming manner with the first selection starting October 15th, 2015.

## **Requirements**

Required Language ENGLISH  
Language Level Good

Expected background: Applied Dynamics, Control Engineering, Simulation (Matlab/Simulink), Design of Experiment

Candidates with specific expertise on Vehicle Dynamics, Automotive Control Systems, Autonomous Vehicles, Driver Assistance Systems, Electric Vehicles, Computational Intelligence, Hardware-in-the-loop simulation are particularly encouraged to apply. For ESR8 position the background in Driver in the Loop (HMI – Human Machine Interface) is especially required.

## **Fellowship's Details**

Career Stage: Early stage researcher or 0-4 yrs (Post graduate)

Employment contract with full social security: yes

Covers salary: yes; Covers travel and subsistence: yes

Duration of fellowship: 36 months

## **Contact Details**

<iteam@tu-ilmenau.de>

Valentin Ivanov, Network Coordinator

Automotive Engineering Group

Technische Universität Ilmenau, Germany

Tel.: +49 3677 69 3869