
Universidad Carlos III de Madrid (www.uc3m.es) invites to fill the following **PhD position**:

Ref. AI_CAR-PhD: Machine-learning control of the aerodynamics of road vehicles.

Description and objectives:

The goal of the PhD is to develop and test a closed-loop active flow control concept for heavy vehicles based on artificial intelligence, with the aim of reduction of drag and, consequently, of emissions and environmental impact of ground transportation. The activity will require defining compact and efficient sensing and actuation strategies, as well as testing and validating in wind tunnel experiments the developed tools.

The successful candidate will join the Experimental Aerodynamics and Propulsion Laboratory (<https://aero.uc3m.es/EAPlab.html>), within the Aero Research Group (<http://aero.uc3m.es/research.html>) of UC3M. He/she will work under the supervision of Dr. Stefano Discetti and Dr. Andrea Ianiro.

Requirements and desirable profile:

- Young MSc holder (or MSc student with 60 ECTS passed at contract's signature) with background in the following disciplines: Aerospace Engineering, Mechanical Engineering, Fluid Dynamics. Excellent candidates in other disciplines are also invited to apply.
- Outstanding academic record; critical and creative thinking.
- International experience; team-working and communications skills.
- Good proficiency in English (oral and written).
- Ability to deal independently and proactively with scientific and engineering challenges.

What we offer:

- Annual gross salary in the 20000-22000€ range.
- Become part of a young, dynamic, highly qualified, collaborative team.
- Flexible working environment and schedule.
- Opportunity to travel to international conferences to present research activities.
- Opportunity to carry out research internships abroad.
- Health coverage under the National Health System.

How to apply:

Interested candidates must send their applications to cbackenk@pa.uc3m.es indicating in the e-mail subject **UC3M-PhD-AI_CAR**, including in a single pdf file:

- CV (max. 4 pages), including relevant professional experience and knowledge.
- Copy of diploma and grades from previous university studies.
- A motivation letter of experience, interests, and research goals (max. 1 page).
- The contact information for two references (will be contacted during the hiring process).

The research group aims to increase the share of women in academic positions, therefore applications from women are particularly encouraged.

Submission of applications is due by **October 31st, 2022** (though early applications are strongly encouraged, and later applications will be considered until the vacancy is filled). The contract will begin in December 2022, though earlier/later start date can be agreed.