Postdoc Vacancy Announcement

The Cognitive Robotics Department at the Delft University of Technology, the Netherlands, announces a vacancy for a postdoc position on:

Machine learning for mobile robots

Project description

The goal of this project is to develop novel motion planning techniques for mobile robots, which build upon state of the art machine learning, yet provide structural guarantees. Theory will be developped and then tested with one of the available robotic platforms in the lab, that include Micro Air Vehicles, mobile manipulators and a self-driving car. We are particularly interested in the following:

- Multi-robot learning
- Machine learning for mobile manipulation
- Machine learning for motion planning of mobile robots in dynamic environments

The exact research topic will be one of the above and can be adapted to the applicant's background and interests.

The researcher will be jointly supervised by TU Delft assistant professors **Dr. Jens Kober** and **Dr. Javier Alonso-Mora** and will be embedded in the **Learning & Autonomous Control** group of the Cognitive Robotics department, which focuses on machine learning and control methods for robotics. Our current research covers autonomous navigation, motion planning and control, intelligent transportation, multi-robot systems and reinforcement learning.

For a glimpse of our research visit www.alonsomora.com and www.jenskober.de

What do we ask?

We are looking for a candidate with a PhD degree in systems and control, robotics, applied mathematics, artificial intelligence, machine learning, or a related subject. The candidate must have strong analytical skills and must be able to work at the intersection of several research domains. Experience with real robot applications is a plus. The applicant should have demonstrated ability to conduct high-quality research according to international standards, as demonstrated by publications in international, high-quality journals. A very good command of the English language is required, as well as excellent communication skills.

What do we offer?

We offer the opportunity to do scientifically challenging research in a multi-disciplinary research group. The appointment will be for a period of 1 year (could be extended to 2 years). As an employee of the university you will receive a competitive salary (between approx. EUR 2500 and EUR 4000 gross per month based on a full-time appointment and depending on the candidate's qualifications). Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities. Assistance with accommodation can be arranged.

How to apply?

For more information about this position, please contact Dr. Javier Alonso-Mora, phone: +31 15-2785489, email: j.alonsomora@tudelft.nl, or Dr. Jens Kober, phone: +31 15-2785150, email: j.kober@tudelft.nl. To apply, please submit your application by email to Dr. Alonso-Mora before February 30th, 2018. Include a cover letter along with a detailed curriculum vitae, a separate motivation letter stating why the proposed research topic interests you, electronic copies of your top three publications, a summary of your PhD thesis, names and addresses of three reference persons, and any other information that might be relevant to your application.

When applying for this position, please refer to vacancy number 3ME18-XX.

About 3mE and TU Delft

The 3mE Faculty trains committed engineering students, PhD candidates and post-doctoral researchers in groundbreaking scientific research in the fields of mechanical, maritime and materials engineering. 3mE is the epitome of a dynamic, innovative faculty, with a European scope that contributes demonstrable economic and social benefits. TU Delft consistently ranks among the top universities in the engineering field.