

Postdoc position at the Robotics and Mechatronics lab The University of Twente School of Electrical Engineering, Mathematics and Computer Science Netherlands.

Job Title: postdoc position at the robotics and mechatronics lab
Faculty: Electrical Engineering, Mathematics and Computer Science
Employer: The University of Twente

Description

The position is at the Robotics And Mechatronics (RAM) group utwente.nl/ewi/ram at the faculty of Electrical Engineering, Mathematics and Computer Science (EWI). The group is composed of approximately 50 people including professors, postdocs, (post)graduate students, technicians and secretarial support. The RAM group has scientific and engineering expertise in Modelling, Control, Design, Vision, Imaging and Embedded Systems. It is the leading group in Robotics for Inspection and Maintenance in the Netherlands and working on various developments in aerial vehicles, pipes and ballast tank inspection. As indicated previously, we have excellent modern facilities, such as more than 300 m² lab including a new rapid prototyping lab with multiple 3D printers, laser cutter, PCBs production facilities etc. and a lot of robotic hardware and software tools to create advanced robotics (sub)systems. Furthermore we have a number of testing facilities indoor (two flying arenas) and outdoor at the unique Space53 (www.space53.eu) center which is under continuous development. There are plans to extend the facilities at Space53 with real assets for robotics field testing like tanks, pipe racks and wind-mills. It is a unique place which allows to create complete systems all "in house" and test them as well. Thanks to its unique position, the lab has strong collaborations with many industrial partners and pleasant and successful collaborations and projects.

JOB DESCRIPTION

We need an experienced PostDoc to lead the project SPECTOR.

SPECTOR stands for "Sensor Products for Enterprises Creating Technological Opportunities in Remote Sensing" and is a four year long innovation program with 20 Dutch and German small-and-medium sized enterprises. The goal of the project is to exploit the market potential of civil drone technology through sensor innovations for remote sensing and remote monitoring. spectors.eu. The project will end in about 2 years.

One of the product groups of the SPECTORS project is the employment of drones for physical interaction with the environment. The main role of RAM is the technological development of an aerial robot capable of establishing a robust mechanical surface contact for remote inspection. The possibility to get in physical contact with the remote surface via a drone has an incredible market value and would drastically reduce costs and increase safety. One of the potential applications is contact-based inspection and maintenance of wind turbines.

We are looking for a post-doctoral researcher who will work on the visual perception of drones for application in outdoor environments, especially for the inspection and maintenance of wind turbines. The goal is to provide the aerial robots available at RAM with a perception system to localize in outdoor environments (near stationary wind-turbine blades) and to get the required information for planning the physical interaction task, e.g. position and geometric properties. You will be supported by a Ph. D. student with more focus on the modeling and control of the aerial robot.

The candidate should hold a Ph.D. in a related topic as well as a great dedicated team spirit and the interest and curiosity to apply knowledge to solve real-world problems.

You are a motivated engineer in the area of Drones, with the ambition to continue and strengthen an established high-profile and internationally recognised research line. RAM is a great synergetic group and great value is given to inclusion and cooperation within the group: you are a team player, who enjoys working in a group, involving people and contributing to the group's results. You are good at establishing collaborations, both internally and externally. You have a keen eye for both robotics science and engineering and its applications and feel that research and education should be closely intertwined.

YOUR PROFILE

In order to be successful in this position you will need to:

Have a PhD in science or engineering.

Have experience or capabilities to also work for the realisation of demonstrators and demonstration devices. A broad multidisciplinary education track would be greatly valued for the position.

Be a team player trying to involve people in your research and try to being involved in research of others to multiply the effect of collaborations.

Have a clear open and transparent communication attitude.

Be highly motivated to achieve excellence in the interest of science and engineering innovation within the university, the institutes, the RAM group and for yourself.

INFORMATION AND APPLICATION

Applications will ONLY be handled via the form at [THIS LINK](#) where more information about the position can be found.

OUR OFFER

You will work within a very stimulating scientific environment. The university offers a dynamic ecosystem with enthusiastic colleagues. Salary and conditions are in accordance with the collective labour agreement for Dutch universities (CAO- NU).

The position is for at least 1 year. The starting date is as soon as possible. We will evaluate applications on-the-fly, and close the vacancy when a suitable candidate is found.

Starting salary will be €3.123 gross per month, depending on experience.

Excellent benefits including a holiday allowance of 8% of the gross annual salary and a year-end bonus of 8.3% and a solid pension scheme.

We encourage a high degree of responsibility and independence, while collaborating with close colleagues, researchers and other university staff.

THE ORGANIZATION

The University of Twente. We stand for life sciences and technology. High tech and human touch. Education and research that matter. New technology which leads change, innovation and progress in society. The University of Twente is the only campus university of the Netherlands; divided over five faculties we provide more than fifty educational programmes. We have a strong focus on personal development and talented researchers are given scope for carrying out groundbreaking research.

We are an equal opportunity employer and value diversity at our company. We do not discriminate on the basis of race, religion, color, national origin, gender, sexual orientation, age, marital status or disability status. Because of our diversity values we do particularly support women to apply.

The faculty of Electrical Engineering, Mathematics and Computer Science (EEMCS) comprises three disciplines that shape Information and Communication Technology. ICT is more than communication. In almost every product we use mathematics, electronics and computer technology and ICT now contributes to all of societies' activities. The faculty works together intensively with industrial partners and researchers in the Netherlands and abroad and conducts extensive research for external commissioning parties and funders. The research which enjoys a high profile both at home and internationally, has been accommodated in the multidisciplinary research institutes: Mesa+ Institute, TechMed Centra and Digital Society Institute.