Assistant Professor in Anthropomorphic Human-Robot Interaction

Specifications - (explanation)

Location Delft
Function types Hoogleraren, UHD’s, UD’s & lectoren, Onderzoek, Ontwikkeling, Innovatie
Scientific fields Techniek
Hours 38.0 hours per week
Salary € 3637 - € 5656
Education Gepromoveerd
Job number 3mE19-47
Translations en
About employer Technische Universiteit Delft (TU Delft)
Short link www.academictransfer.com/54986

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Job description
The department of Cognitive Robotics invites applications for an Assistant Professor position (tenure track) investigating anthropomorphic human-robot interaction.

Robots and humans will increasingly intermingle in open and complex domains, such as traffic, domestic, agricultural, and work environments. We need to engineer robots that can be intuitively understood, corrected, taught, or safely taken over by humans. Future robots, such as autonomous cars and household robots, may have to behave in a human-like manner or have human-like features, in order to create a safe and acceptable interaction.

The candidate is expected to study whether human-robot communication is enhanced if robots are anthropomorphized. The scientific questions concern whether robots should look, move, and behave like humans, how such behavior can be quantitatively modelled and embedded into the machine, and how to establish a dialogue between the robot and the human taking into account human’s cognitive and physiological state.

We expect you to:

- Develop, conduct and supervise high-quality academic research
- Inspire students through teaching and supervision
- Collaborate with specialists in academia and industry in multidisciplinary projects
- Transfer theory to innovative technology
- Secure external funding for research projects
- Be an inspiring contribution to our staff.

Requirements
Candidates are expected to be, or be on their way to becoming, authorities in their field of research, and to complement and enrich the existing research programs in the department.

Applicants should have the following qualifications:

- PhD degree in computer science or engineering, aerospace or mechanical engineering, artificial intelligence, robotics, or a related field, with a specialization in human-machine interaction.
- Embrace open science principles and modern communication tools.
- Strong analytical skills and ability/interest to work at the intersection of several research domains.
- Experience or familiarity with human-subject research.
- At least one year of research experience after the PhD, and experience outside the Netherlands.
- Excellent track record in scientific research, as evident from papers in international and peer-reviewed journals.

Conditions of employment
At the start of the tenure-track you will be appointed as Assistant Professor for the duration of six years. The section leader, department leaders and you will agree upon expected performance and (soft) skills. You will receive formal feedback on performance and skills during annual assessment meetings and the mid-term evaluation. If the performance and skills are evaluated positively at the end of the tenure track, you will be appointed in a permanent Assistant Professor position.

TU Delft offers a customisable compensation package, a discount for health insurance and sport memberships, and a monthly work costs contribution. Flexible work schedules can be arranged. An International Children’s Centre offers childcare and an international primary school. Dual Career Services offers support to accompanying partners. Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities.

TU Delft sets specific standards for the English competency of the teaching staff. TU Delft offers training to improve English competency. Inspiring, excellent education is one of our central aims. If you have less than five years of experience and do not yet have your teaching certificate, we allow you up to three years to obtain this.

Contract type: Tijdelijk, Tenure Track

Employer
Delft University of Technology

Delft University of Technology (TU Delft) is a multifaceted institution offering education and carrying out research in the technical sciences at an internationally recognised level. Education, research and design are strongly oriented towards applicability. TU Delft develops technologies for future generations, focusing on sustainability, safety and economic vitality. At TU Delft you will work in an environment where technical sciences and society converge. TU Delft comprises eight faculties, unique laboratories, research institutes and schools.
Department
Faculty Mechanical, Maritime and Materials Engineering

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.

You will be part of the Cognitive Human-Robot Interaction Lab within the Cognitive Robotics department. The main focus of the Cognitive Robotics department is the development of intelligent robots and vehicles that will advance mobility, productivity, and quality of life. Our mission is to bring robotic solutions to human-inhabited environments, focusing on research in the areas of machine perception, motion planning and control, machine learning, automatic control, and physical interaction of intelligent machines with humans. We combine fundamental research with work on physical demonstrators in areas such as self-driving vehicles, collaborative industrial robots, mobile manipulators, and haptic interfaces. Strong collaborations exist with the cross-faculty institutes TU Delft Robotics Institute and TU Delft Transport Institute, our national robotic ecosystem (RoboValley, Holland Robotics), and international industry and academia. http://www.cor.tudelft.nl/

Additional information
For more information about this position, please contact Dr.ir. Joost C.F. de Winter (j.c.f.dewinter@tudelft.nl). For more information about the conditions of employment, please contact Irina Bruckner, HR advisor (application-3mE@tudelft.nl).

To apply, please submit:

- a detailed CV
- a motivation letter
- a research and teaching statement
- names and contact data of at least three references.

All these items should be combined in one PDF document. Applications should be submitted by email at the earliest convenience to application-3mE@tudelft.nl. When applying for this position, please refer to vacancy number 3mE19-47. For the overall balance in the department, we especially welcome applications from female scientists.

The review of applications will start on 15 June 2019 and continue until the position is filled. The starting date is negotiable.