# **Professor in Intelligent Robotics and Control**

AR-846 Møde nr.: 61 Dagsordenspunkt: 4 Dato: 19/09/17

DTU Electrical Engineering at Technical University of Denmark invites applications for a position as Professor in Intelligent Robotics and Control.

The professor will be attached to the Automation and Control group—one of the eight groups comprising the Department employing 280 persons, including a faculty of 56. The Automation and Control group is in the process of extending the research and teaching facilities in robotics, making the group one of the leading groups in the field of intelligent robotics.

## Responsibilities and tasks

The professor must develop the research field of intelligent robotics and control and address research challenges related the combination of AI methods with control theory.

Emphasis is on information processing and control as well as systems engineering. The application field is robotics and autonomous systems, including mobile robotics, industrial automation, and control systems. The subject area is expected to address several of the following research challenges:

- Strategies for designing autonomous systems using modelling and control techniques combined with AI.
- Design and reliable operation of robotic systems
- Intelligent Automation and Control
- Sensor fusion and non-linear signal filtering techniques

The research must be based on advanced modelling combined with experimental validation in real world and laboratory experiments.

The tasks include research, innovation, and teaching combined with leadership within these areas, and we expect the candidate to further strengthen our internationally recognized research activity as well as expand academic and industrial collaboration. Entrepreneurship and project management are integrated aspects of the position.

The professor must head and upgrade existing educations at all levels within intelligent robotics. The professor must therefore take a leading role in identifying new educational needs and assume responsibility for contact to industry and relevant national and international organizations as part of this activity

The professor is expected to play a central role in fundraising and in the operation of the Automation and Control Group. This includes active contributions to the daily management.

Furthermore, the professor will contribute to DTU's stronghold position within robotics, automation, and control—including extended collaboration within the department and with other relevant departments at DTU.

The successful candidate is expected to take a lead position in teaching at the BSc, MSc, and PhD levels .

### **Qualifications**

A research and teaching track record documenting a productive career within the subject area is required. Emphasis is on applicants having the potential to develop the subject area

and have documented original scientific production at international level. The qualification requirements are:

- The applicant must be able to demonstrate appreciable scientific production at international level, which has contributed to the further development of the subject area in question.
- Documented successful fundraising nationally and internationally.
- Documented and successful education experience at different levels.

#### Assessment

In the assessment of the candidate, consideration will be given to

- the ability to teach
- scientific production at international level, research potential and ability to lead and develop a research team
- the ability to promote and utilize research results
- experience with innovation activities
- an all-round experience basis, including international experience
- the ability to contribute to the development of internal and external cooperation
- track record in attracting funding to the research area
- visions within the research area

### Salary and terms of employment

The appointment will be based on the collective agreement with the Confederation of Professional Associations. The allowance will be agreed with the relevant union.

#### **Further information**

Further information may be obtained from Head of Department Kristian Stubkjær, tel.: +45 4525 3654 or Head of Group Ole Ravn tel.: +45 4525 3560.

You can read more about DTU Electrical Engineering on www.elektro.dtu.dk

#### **Application procedure**

Please submit your online application no later than **XXX 2017** Apply online at www.career.dtu.dk.

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link 'Apply online', fill in the online application form, and attach **all your materials in English in one PDF file**. The file must include:

- Application (cover letter) addressed to the President
- A plan for future research
- CV
- Documentation for teaching experience (e.g. in the form of a teaching portfolio)
- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. http://orcid.org/)
- Diploma (MSc/PhD)

All interested candidates irrespective of age, gender, disability, race, religion or ethnic background are encouraged to apply.