Professor in Intelligent Robotics and Automation

AR-765 Møde nr.: 57 Dagsordenspunkt: 4 Dato: 20/09/16

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

The professor will be attached to the Automation and Control group — one of the eight groups comprising the Department which employs 275 persons, including a faculty of 55. The Automation and Control group is in the process of extending its 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 automation and address research challenges related to the combination of AI methods with control theory.

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

- Artificial intelligence techniques in control and supervision
- Strategies for optimal combination of signal and symbol representations in intelligent systems
- · Machine learning and rule-based systems in real applications
- Intelligent automation and control
- Operator decision systems

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

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

The professor shall head and upgrade existing study programmes at all levels within Intelligent Robotics. The professor must therefore take a leading role in identifying new educational needs and take 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 as well as the operation of the Automation and Control Group, and also contribute to the daily management.

Furthermore, the professor is expected to contribute to DTU's stronghold position within robotics, automation, and control, including extended collaboration within the department as well as 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 ability 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 teaching experience at different levels.

Moreover, the preferred candidate is expected to display entrepreneurship and innovation and to have strong project management skills in order to initiate and run activities with external partners as well as colleagues from relevant DTU departments.

Assessment

In the assessment of the candidates' 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 2016**. 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
- CV
- Diploma (MSc/PhD an official translation into English)
- List of publications indicating scientific highlights
- H-index, and Researcher-ID (see e.g. www.researcherid.com)
- Documentation for teaching experience (e.g. in the form of a teaching portfolio)
- A plan for future research

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