

Professor in Software Engineering

Applications are invited for a professorship in Software Engineering at DTU Compute (Department of Applied Mathematics and Computer Science) at the Technical University of Denmark (DTU). The professor will be affiliated with the Software Engineering Section, and will be in charge of strengthening and further developing the research of this section.

The professor is also expected to actively take part in the definition, development and promotion of the future IT profile of DTU Compute, in particular by working together with other sections at DTU Compute.

DTU Compute represents a unique combination of mathematics and computer science. Research at DTU Compute covers basic, strategic and applied research within and between a broad range of topics, organized in eleven sections: Software Engineering, Embedded Systems Engineering, Language-Based Technology, Algorithms, Logic and Graphs, Scientific Computing, Image Analysis and Computer Graphics, Cognitive Systems, Cryptology, Mathematics, Statistics and Data Analysis.

DTU Compute has strong collaborations with other departments at DTU, and has extensive collaboration with national and international universities and industry – both concerning research projects, graduate theses, PhD projects, and research based consultancy. DTU Compute has 92 faculty, 58 scientific staff, 108 PhD students and 55 technical and administrative staff.

Research in the Software Engineering Section covers model-based software development, formal modeling and verification, requirements engineering, software development processes, and empirical methods. This gives a unique setting for combining theoretical and applied research. The research is related to application domains currently covering transport, energy and the environment.

In the recent years, we have seen software dramatically changing our society and how people, businesses, administrations, and governments interact with each other. Major parts of the software are run on smart devices, and parts of the software are run virtually all over the world. This has created completely new challenges as well as new opportunities for software development – with increased requirements on its reliability as well as on its security and privacy. These changes affect wide areas of Software Engineering, covering everything from the theoretical foundation to practical implementation.

A preferred candidate should be able to address these challenges based on the competences of the Software Engineering Section and in close interaction with other sections at DTU Compute. The candidate should demonstrate the ability to combine theoretical knowledge with practical development within one or more of the following (or closely related) areas:

- Formal Methods in Software Engineering
- Practical Software Engineering
- Empirical Software Engineering
- Modelling and Engineering

Responsibilities and tasks

The Software Engineering section has 8 faculty members. The Professor, affiliated with the Software Engineering section, will play an active role in defining, developing and profiling the future IT profile of DTU Compute. The Professor will be responsible for the

development of the section and for initiating and developing the collaboration with other sections as well as with industry.

The responsibilities and tasks include publication/scientific dissemination, knowledge-exchange with society at large, research-based teaching and educational guidance, and supervision of Assistant Professors. The successful candidate is expected to take a lead position in teaching at the bachelor-, master- and PhD levels.

Qualifications

Applicants should demonstrate the ability to combine theoretical knowledge with development of computational solutions in order to address problems arising in Software Engineering. Hands-on experience is an advantage. Applicants must demonstrate leading-edge research in Software Engineering and the ability to obtain research funding and form industrial collaborations. Notable achievements will be expected within research/innovation and research-related leadership, and generally, high achievements are expected in extension to the qualifications stipulated for the position, which are:

- Extensive original scientific output at international level that has been instrumental in advancement of the field in question.
- Documented and successful teaching experience at different levels within the University's study programmes, including, notably at PhD level.
- Documented experience in research leadership, including attending to leadership tasks in national or international projects, research programmes, conferences, etc.

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 the Department's 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 Helle Rootzén, tel.: +45 4525 3370.

You can read more about DTU Compute on www.compute.dtu.dk

Application procedure:

Please submit your online application no later than **1 October 2014**. 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
- List of publications indicating scientific highlights
- Documentation of teaching experience
- A plan for future research

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