Professor in Secure Pervasive Computing

DTU Compute's Section for Embedded Systems Engineering (ESE) invites applications for a position as Full Professor in Secure Pervasive Computing. ESE conduct research in a broad range of topics central for the development of high-tech distributed and embedded systems, targeting the *Internet-of-Things (IoT) Era*.

Our focus is on systems where close interactions between hardware and software components as well as between the system and its environment, including humans, are necessary, and where trade-offs between competing requirements have to be addressed. Our main research areas are computing platforms, pervasive/ubiquitous computing and design technologies with focus on system aspects of real-time, real-energy, adaptive, reconfigurable, secure, safe and reliable. Our research is currently applied in Industrial IoT and Health IoT settings with an emphasis on cross-disciplinary activities.

DTU Compute wishes to strengthen its activities in the area of secure pervasive computing in order to face the challenges brought by pervasive computing in a hyperconnected world. Ideally, you will span both distributed computing and cybersecurity, with focus on emerging distributed computing paradigms supporting pervasive computing, such as the Internet of Things, Fog computing and blockchain technologies.

You will be affiliated with the Embedded Systems Engineering (ESE) section of the department and are expected to interact closely with the other faculty members of the section as well as relevant faculty members of the other sections at the department.

Responsibilities and tasks

The position covers research, research-based teaching, and research-based public outreach activities within cybersecurity and distributed computing. You will have the responsibility to strengthen and coordinate the research in the cybersecurity areas at the department, as well as to integrate security research with modern distributed computing paradigms, such as Internet of Things, Fog and Edge computing, blockchain technologies and quantum computing.

Furthermore, you are expected to:

- Strengthen research, teaching, and innovation in the area of secure pervasive computing.
- Be visionary in the development of new research fields and alliances, with focus on cross-disciplinary research.
- Engage in excellent research communication at all levels.
- Explore the innovation potential of you research, if possible, in collaboration with commercial actors.

You are expected to take a leading role in teaching at the BSc, MSc, and PhD levels. For international candidates, DTU can provide Danish language courses for the purpose of being able to teach in Danish within the first 2-3 years.

Qualifications

You must document:

• Significant original scientific output at a high international level in pervasive computing for secure systems

- Experience with course and curriculum development for distributed systems and secure pervasive computing, and supervision of students at BSc, MSc, and PhD level
- Experience with innovation and outreach.

Assessment

In the assessment of the candidates, consideration will be given to:

- Documented experience and quality of teaching and curriculum development
- Research impact and experience, funding track record and research vision
- Societal impact
- Documented innovation activities, including commercialization and collaboration with industry
- International impact and experience
- Leadership and collaboration
- Communication skills

Consideration will also be given to:

- Experience, quality, and breadth in public outreach activities.
- Experience in cross-disciplinary research.
- Quality and breadth in research communication.

We offer

DTU is a leading technical university globally recognized for the excellence of its research, education, innovation and scientific advice. We offer a rewarding and challenging job in an international environment. We strive for academic excellence in an environment characterized by collegial respect and academic freedom tempered by responsibility.

Salary and terms of employment

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

Further information

Further information may be obtained from Head of Department Per B. Brockhoff tel.: +45 4525 6533, perbb@dtu.dk.

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

Application procedure

Please submit your online application no later than **DD MMMMMM 2019 (local time)**. Apply online at <u>www.career.dtu.dk</u>.

Applications must be submitted as **one PDF file** containing all materials to be given consideration. To apply, please open the link 'Apply online', fill out 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
- A vision for future research
- Teaching and research statement, with a focus on the "Assessment" bullet points listed above
- Documentation of previous teaching and research, as related to the "Assessment" bullet points listed above

- List of publications indicating scientific highlights
- H-index, and ORCID (see e.g. <u>http://orcid.org/</u>)
- Diploma (MSc/PhD)

Applications and enclosures received after the deadline will not be considered.

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