Professor in Machine Learning for the Life-Sciences

DTU Compute's Section for Cognitive Systems invites applications for a permanent appointment as Professor of Machine Learning for the Life Sciences. The Section for Cognitive Systems is a lively and research-oriented group of scientists and support staff with a shared interest in information processing in man and computer. We have a particular focus on the signals exchanged between intelligent systems - and the opportunities these signals offer for modelling and engineering.

DTU Compute is an internationally unique academic environment spanning the science disciplines mathematics, statistics, and computer science. At the same time, DTU Compute is an engineering department covering informatics and communication technologies (ICT) in their broadest sense.

DTU Compute strives to achieve research excellence in its basic science disciplines, to achieve technological leadership in research and innovation, and to address societal challenges in collaboration with partners at DTU and other academic institutions, nationally and internationally, and—equally important—with industry and organizations. DTU Compute interacts with leading international centres and strategic partners in order to increase participation in major consortia. The aim of the new position is to strengthen the Department's activities in machine learning with a specific focus on the life-sciences.

Responsibilities and tasks
The professorship is a research management position through which DTU aims to consolidate and further develop its activities in the field of machine learning and applications to life-science data. You are expected to take a leading role in this area and, where appropriate, work closely with other faculty in the section, the department, and the university. The tasks include research, teaching as well as innovation.

Society is increasingly data-driven, and machine learning has become the key tool to turn data into knowledge by learning the underlying processes and quantifying predictive relationships in data. Typically, modern data are high-dimensional and noisy, and the underlying signal structure is unknown. Such heterogeneity and complexity are the major challenges in modelling life-sciences data spanning and calls for advanced statistical machine learning methodologies to quantify the underlying processes and their uncertainty.

Furthermore, you are expected to:

- Strengthen research, teaching, and innovation in the area of machine learning for the life-sciences.
- Engage in excellent research communication at all levels.

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:

- An excellent research background in machine learning for the life sciences.
- Experience with course and curriculum development for large-scale machine learning courses, 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.
- Quality and breadth in research communication.
- Experience in cross-disciplinary research.

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 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 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. http://orcid.org/)
- 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.