2017-05-05

Professor in Computer Science, with specialization in machine learning

The position is placed at the Department of Computer Science and Engineering in Karlskrona

Reference number: BTH – 3.1.1-0098-2017

Work description:
This is a permanent position as professor in computer science. The holder of the position is expected to perform research and teaching at all educational levels (bachelor, master, and doctoral) in the area of computer science, with a specific focus on machine learning, data mining, and related subjects. Further, the position includes supervision of doctoral students as well as bachelor's thesis and master's thesis projects.

The holder of the position will participate in a large research project, *"Scalable resource-efficient systems for big data analytics"*, where close research collaboration with industry is key for the project execution. The duties include performing and publishing research of highest international quality, lead and develop research and teaching activities, as well as applying for external research grants. The holder of the position will have a leading role the development and execution of BTH's new five-year Master of Science in Engineering in AI and machine learning. Good conditions for developing your own research activities will be offered.

International applicants should initially be able to teach in English. Applicants without a good knowledge of Swedish are expected to acquire such knowledge and to teach in Swedish within three years of appointment to the position.

About the research profile:
Data will be generated at an ever-increasing rate for the foreseeable future. Added value and cost savings can be obtained by analyzing big data streams. The analysis of large data sets requires scalable and high-performance computer systems. In order to stay competitive and to reduce consumption of energy and other resources, the next generation systems for scalable big data analytics need to be more resource-efficient. The research profile, *Scalable resource-efficient systems for big data analytics*, combines existing expertise in machine learning, data mining, and computer engineering to create new knowledge in the area of scalable resource-efficient systems for big data analytics. The value of the new knowledge will be demonstrated and evaluated in two application areas (decision support systems and image processing).

The needs and interests of our 9 industrial partners are grouped into industrial challenges. Based on these challenges and in cooperation with our partners we have defined a number of sub-projects grouped into four research themes:

- Research theme A: Big data analytics for decision support
- Research theme B: Big data analytics for image processing
- Research theme C: Core technologies (machine learning)
- Research theme D: Foundations and enabling technologies

Eligibility:
A person is qualified for employment as a professor in other than artistic areas if he or she has exhibited:
- scientific skills,
- pedagogic skills

For further information, see Instructions to applicants at appointment of teachers, promotion to a senior position and appointment to docent.
For more information, please refer to www.bth.se/eng/about-bth/vacancies-at-bth or our HR department, +46-455-38 50 68

Meriting qualifications
- Extensive experience of academic trust of commissions, such as member of grading committies, acting as opponents, and expert evaluator for projects and employments/promotions.
- Experience of applied research in collaboration with industry and society.
- Experience of popular science and outward work.
- Good communication and collaboration skills.
- Good knowledge in English.

Employment:
100%

Commencement:
To be agreed.

Duration:
Permanent / tenured.

Contact information:

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Application:
The application documents shall comprise five parts:

1. Cover sheet
2. Account of scientific and educational work
3. CV with annexes
4. List of publications
5. Documents and publications, maximum of 10

For more information, please refer to www.bth.se/eng/about-bth/vacancies-at-bth or our HR department, +46-455-38 50 68.

Please submit your application, marked with the reference number for the position, by August 15, 2017 at the latest. Applications should be sent to: The Registrar, Blekinge Tekniska Högskola, SE-371 79 Karlskrona, Sweden or by email to diarium@bth.se.

Department of Computer Science and Engineering

The Department of Computer Science and Engineering (DIDD) was established on January 1, 2014. DIDD belongs to the Faculty of Computing and currently includes 36 staff members out of which 17 are senior researchers and 12 are PhD students. The department offers education and conducts research in computer science and computer engineering as well as related areas. The University profile is applied IT and innovation for sustainable development. The research and education at DIDD are completely aligned to this profile, and are conducted in close collaboration with partners from both the private and the public sector. For more information,

BTH, Blekinge Institute of Technology

Blekinge Institute of Technology, BTH, is one of the most distinctly profiled universities in Sweden, where applied IT and innovation for sustainable growth are in focus. In our education and research, engineering and IT are integrated with other disciplines such as urban planning, industrial economics, design and health sciences to contribute to solving the challenges facing society. Everything we do at BTH has three distinct perspectives: innovation, sustainability and in real life, which means cooperation and exchange with both business and industry as well as society. A characteristic of BTH is the close cooperation with industry and society, which permeates both education and research at the regional, national and international level. We conduct education and research at a high international level. BTH has two faculties – the Faculty of Computing and the Faculty of Engineering.