Assistant Professor in Computer Science

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

Reference number: BTH – 3.1.1-0101-2017

Work description:
This is a temporary position as assistant professor in computer science for up to four years. The holder of the position is expected to perform research and teaching at bachelor, master, and doctoral level in the area of computer science with emphasis on machine learning, data mining, pattern recognition, and related subjects. The teaching will primarily be at m level but also on basic level. The position also includes supervision of doctoral students as well as master students.

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 high international quality, lead and develop research and teaching activities, as well as applying for external research grants. The purpose of the position is that a person should be given the possibility to develop his/her independence as researcher as well as his/her pedagogical merits in order to qualify for a higher 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 an assistant professor if he or she has:
- obtained a doctoral degree or equivalent scientific competence.

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:
Documented experience and knowledge in one or several areas:
- techniques for deep learning
- applied pattern recognition
- GPU-programming and heterogeneous systems, as well as experiment design and statistical analysis

Employment:
100%

Commencement:
To be agreed.

Duration:
Temporary, up to four years.

Contact information:
Lars Lundberg, head of department, +46-455-38 58 33
Håkan Grahn, professor, +46-455-38 58 04
Mikael Åsman (SACO), +46-455-38 57 20
Stina Valdenäs (OFR), +46-455-38 54 92.

Application instructions:
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 June 15, 2017, at the latest. Applications should be sent to: The Registrar, Blekinge Tekniska Hogskola, 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.