

2018-01-19

PhD student in Computer Science at BTH, Blekinge Institute of Technology with placement at the Department of Computer Science and Engineering, Karlskrona

Reference number: BTH 3.1.2-0050-2018

Work description:

We invite applications for a PhD student position in Computer Science focusing on distributed artificial intelligence for large scale distributed systems, complex adaptive systems and internet-based infrastructures.

With the emergence of new technology paradigms, such as Cloud computing, BigData, A.I. (Artificial Intelligence), Machine Learning and IoT (Internet of Things) leads to questions on how to develop and operate automated or autonomous systems that can be applied to logistics systems, such as those found in container terminals.

The thesis will focus on applied research issues with industry partners, such as:

- Smart Logistics in handling of cargo and data
- Automation handling and processes
- Digitalization considers Industry 4.0, big data or the Industrial Internet of Things (IoT), everything will be connected, everything will be automated and run super efficiently
- Thinking in terms of system interoperability between man and machines for more holistic integration.
- Improved smart decision-making using techniques from Computer Science (i.e., machine learning and A.I.).

The research work will improve performance of ports and container terminals, the results of thesis work will contribute to expanding the body of science. In addition, the anticipated research outcome could be:

- Explore how technology can be implemented for improved performance in complex adaptive systems.
- Develop analytical capability of the contribution of automation technologies to the prevailing operation management.
- Examine the application of automation, autonomy and A.I and its potential impact on operational practices.

Eligibility:

Applications are invited from candidates holding a Master's degree in either: Computer Science, Software Engineering, Industrial Engineering.

Meriting qualifications:

- Object oriented programming
- Work with databases (Cloud Computing is a plus)
- Artificial intelligence
- Algorithms and theory of computation
- Programming languages and methodology, including applied logic and automated reasoning.

Salary:

A unified salary staircase applies to PhD students, which means that the salary is adjusted in line with the progress made during the PhD candidacy.

Employment:

100 %

Commencement:

To be defined.

Duration:

Temporary position.

Contacts:

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Application:

Please submit your application, marked with the reference number for the position, by **February 21st, 2018** at the latest, by email to <u>diarium@bth.se</u>. The application shall include a cover letter describing your interest in the employment and the research area, your resume, and copies of diplomas and other documents that verify your qualifications.

Others:

We have chosen media for this recruitment and therefore avoid contact with advertisers or other recruitment services.

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.