Industrial PhD student with focus in machine learning and Big Data analytics

SICS Swedish ICT Västerås is a research institute aiming at strengthening the innovation system in the Mälardalen region by offering applied research to both private and public organisations. Our research projects often involve a team of researchers and focus on delivering tangible results that create immediate and long term value, based on the latest research results. We are constantly growing and are looking for researchers that enjoy the challenge in working in close collaboration with industry.

Position
SICS Swedish ICT Västerås AB has an open industrial PhD position within the FUDIPO project, which is a new Horizon 2020 research and innovation action, funded under the Industry 2020 in the Circular Economy sub-call. FUDIPO aims to target plant-wide monitoring and control of data-intensive processes by leveraging and combining Big Data analytics tools that can be utilized by EU process industries and power plants in order to enhance the production efficiency and thus saving resources, energy, and the environment.

As SICS, we are interested to address some of the challenges within FUDIPO by making use of novel data-driven anomaly detection methods that learn from previous situations in order to estimate a statistical model of normal behaviour. New situations are considered anomalous, or at least worth to pay extra attention, if the probability of observing the data given the model is too low. This is different compared to model-based approaches that utilize and construct mathematical models or expert systems to describe the behaviour of the component, system or the physical phenomena of interest.

Qualifications
- Master’s Degree (240 credits) in Computer Science, Engineering Physics, Computational or Applied Mathematics, or in a related field, from a recognized academic institution,
- Documented programming skills
- Experience with data mining or machine learning,
- Good knowledge in spoken and written English,
- The ability to work in collaborative research projects and also work independently,
- Curious, goal-oriented, flexible, ambitious, and communicative personality,
- Documented skill in presenting and documenting your work in English and preferably also in Swedish, i.e. to describe the problem, the solution and the approach in an understandable manner,
- Interest in developing methods and bringing them into different application areas. The personal characteristics will be emphasized in the selection of the right candidate.

Environment
The doctoral programme will be hosted by Mälardalen University, campus Västerås. The project will be performed in close cooperation with our partners, which include mainly process industries, research institutes, universities and SMEs from both Sweden and the EU.

Place of employment SICS Västerås but close collaboration with our office in Kista
Temporary fulltime employment for 2 years.
Read more https://www.sics.se/groups/sics-swedish-ict-vasteras
Part of RISE

Application
Applications should include a short CV (max 2 pages), one-page cover letter, complete transcript of records, and any letters of recommendation. The application should include relevant previous work, such as extended course projects, bachelor’s or master’s thesis, scientific papers, or even outline of a thesis under submission. Incomplete applications will not be considered.

For queries regarding the positions, please contact: Blerim Emruli, Senior Researcher,blerim(at)sics.se or Markus Bohlin, Associate Professor, bola(at)sics.se

Welcome with your application!
To apply, please attach your CV and personal letter, but no later than 1 September. Please, send your application to: marie.edlund(at)sics.se
Marie Edlund, HR, +46 70 475 60 53,