

PhD student in cyber security for the Internet of Things, Uppsala University, Department of Information Technology, Sweden.

Uppsala University is a comprehensive research-intensive university with a strong international standing. Our mission is to pursue top-quality research and education and to interact constructively with society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has 44.000 students, 7.100 employees and a turnover of SEK 7 billion.

The Department of Information Technology has a leading position in research and education. The Department currently has about 280 employees, including 120 teachers and 110 PhD students. More than 4000 students study one or more courses at the department each year. More info: it.uu.se

Duties/Project description: The research will focus on system-oriented research to strengthen the security of the Internet of Things, e.g., in the context of vehicular networks, the energy grid, the smart home, and other similar smart connected systems. The core of the research will be towards attack detection and mitigation as well as resilient system design. For example, a focus early on will be in the design and implementation of algorithms for attack detection, taking into account the diverse nature of devices in the Internet of Things and how these may interact. The ultimate goal of the research is to have solutions that automatically can adapt to different types of heterogeneous IoT deployments, and protect the network as a whole even when certain nodes are under attack or lost. The research project is joint with Chalmers University of Technology and funded by a grant from the Swedish Civil Contingency Agency. There will be several Ph.D. students working on the project, solving different aspects.

Please see the project homepage resilient-iot.se for more information.

The position is for at most five years, and includes department duties (mainly teaching) at a level of at most 20%, as well as course participation. The candidate will be expected to teach in English or Swedish.

Requirements: The candidate must have a Master of Science in computer science and engineering or equivalent. The ideal candidate for the position has a solid background in cyber security and systems development, including algorithmic aspects.

As for all PhD students, a genuine interest and curiosity in the subject matter and excellent analytical and communication skills, both oral and written, are required.

Additional qualifications: Further experience with interdisciplinary projects or background in distributed systems, cryptography, machine learning, blockchain technology or data science is helpful.

Application: The application should include a description of yourself, your research interests, reasons for applying for this particular PhD position and past experience (max. 3 pages), a CV, copies of relevant university degrees and transcripts, relevant publications, a copy of your MSc thesis (or a summary in case the thesis is ongoing) and other relevant documents (eg, TOEFL test results). Candidates are encouraged to provide up to 3 letters of recommendation and contact information to reference persons. We would also like to know your earliest possible date for starting.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in Uppsala University's rules and guidelines regler.uu.se/?languageId=1.

Uppsala University strives to be an inclusive workplace that promotes equal opportunities and attracts qualified candidates who can contribute to the University's excellence and diversity. We welcome applications from all sections of the community and from people of all backgrounds.

Salary: According to local agreement for PhD students.

Starting date: As soon as possible or as otherwise agreed.

Type of employment: Temporary position according to the Higher Education Ordinance chapter 5 § 7.

Scope of employment: 100 %

For further information about the position please contact: Prof. Christian Rohner, Division of Computer Systems, E-mail: christian.rohner@it.uu.se

Please submit your application by 15 April 2019, UFV-PA 2019/851.

Are you considering moving to Sweden to work at Uppsala University? If so, you will find a lot of information about working and living in Sweden at uu.se/joinus. You are also welcome to contact International Faculty and Staff Services at ifss@uadm.uu.se.

Please do not send offers of recruitment or advertising services. Applications must be submitted as described in this advertisement.

Placement: Department of Information Technology

Type of employment: Full time , Temporary position longer than 6 months

Pay: Fixed salary

Number of positions: 1

Working hours: 100 %

Town: Uppsala

County: Uppsala län

Country: Sweden

Union representative: Seko Universitetsklubben seko@uadm.uu.se

ST/TCO tco@fackorg.uu.se

Saco-rådet saco@uadm.uu.se

Number of reference: UFV-PA 2019/851

Last application date: 2019-04-15