

Researcher – Network Intelligence, DNA Lab at SICS

The DNA Lab (Decisions Networks Analytics Laboratory) is focused on applying algorithmic methods from a wide selection of fields in computer science on real world, large-scale applications. Our areas of expertise include planning and scheduling, resource allocation, networking and network management, data analysis and data mining, Big Data analytics, machine learning, process modeling and monitoring, fault diagnosis and general decision support. We have long-term experience from both research and real world industrial projects.

Network Intelligence is an enabler for the next generation communication networks and technologies. SICS Swedish ICT AB currently offers a **research position for a postgraduate M. Sc. engineer or Ph. D.** interested in creating technically sustainable solutions based on the combination of modeling and systems development within the following Network Intelligence topics:

- Learning and reasoning in automated processes for service deployment and autonomous network operations.
- Observability models for abstracted and unified representation of heterogeneous infrastructures supporting network programmability.
- Intelligent flow forwarding fulfilling end-to-end performance requirements based on short-term and long-term learning.

The position offers great opportunities to work in close collaboration with industrial and academic partners throughout Europe with possibilities to drive research within short term and long term projects. The following qualifications are required:

- M. Sc. or a Ph. D. in computer science or similar;
- substantial programming skills in at least one or several languages such as C/C++, Python, Java, Scala or similar;
- substantial interest in developing, implementing and evaluating developed models for data analytics and machine learning;
- substantial knowledge or background in several of the following topics/fields:
 - distributed systems, networked systems, IP networks, SDN/VNF, network applications;
 - machine learning, data analysis, optimization, probabilistic modelling, statistics, etc.;
 - big data streaming and analytics processing tools and platforms (e.g. Flink, Spark, Storm, Hadoop);
- communication skills and professional proficiency in English in both speech and writing;
- ability to drive high-quality research individually and in teams while ensuring good scientific conduct.

As part of the team you will regularly report your work to the project manager and communicate research results in terms of reports, scientific papers and seminars.

Primary location is Kista-Stockholm. Full time or temporary employment of up to one year. Employment start as soon as possible.

Contact and Application

To apply, please attach your CV and personal letter. We have on-going interviews. For queries regarding the recruitment process, please contact:

[Marie Edlund](mailto:marie.edlund@sics.se), HR, e-mail: [marie.edlund\(at\)sics\(dot\)se](mailto:marie.edlund@sics.se) +46 70 475 60 53

SICS Swedish ICT AB, the Swedish Institute of Computer Science, is a non-profit research organization. SICS' mission is to contribute to the competitive strength of Swedish industry by conducting advanced and focused research in strategic areas of computer science, and actively promoting the use of new research ideas and results in industry and society at large. SICS works in close collaboration with industry and is an active participant in collaborative national, European and other international R&D programs. SICS has a proven record of disseminating and promoting industrial deployment of its research findings, including establishing spin-off companies and licensing of its software and patents. In 2013 SICS had a turn-over of 122,5 MSEK and a research staff of 113, of which 64 PhDs. SICS is a part of Swedish ICT Research, which in turn is part of RISE, Research Institutes in Sweden.