

## 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, temporary employment of up to one year.

Employment start as soon as possible.

### Welcome with your application!

To apply, please attach your CV and personal letter, we have on-going interviews.

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

*SICS Swedish ICT is a leading research institute for applied information and communication technology in Sweden. It is a non-profit-distributing organization which means we are not here to make money but to create value for our customers and partners. The mission of SICS is to contribute to the competitive strength of industry residing in Sweden by conducting advanced research in strategic areas of computer science, and to actively promote the use of new research ideas and results in industry and in society at large. To succeed in this effort, SICS collaborates closely with the international research community and with both large and small companies, in Sweden and internationally. Virtually everything we do we do in collaboration with industry and/or governmental bodies. The main office is situated in Kista outside Stockholm and Linköping, Luleå, Lund, Norrköping Uppsala and Västerås. SICS has three subsidiaries: SICS East in Linköping, SICS North in Luleå and SICS Västerås. SICS employs approx. 150 researchers, including 96 PhDs, and hosts another 30 researchers from KTH, consultants and students working on their Master Thesis. Turn over in 2015 was 174 MSEK.*

*SICS Swedish ICT AB is a part of RISE (Research Institutes of Sweden. Read more at [www.sics.se](http://www.sics.se)*