



securityandtrust.lu

Junior Research Associate / Doctoral Candidate (PhD student) Security and Privacy in Network Communication

The Interdisciplinary Centre for Security, Reliability and Trust (SnT) is carrying out international research in secure, reliable and trustworthy ICT systems and services, often in collaboration with national and international industry and government partners. SnT is active in several international projects funded by the EU H2020 and the European Space Agency. The Centre is currently seeking a highly-skilled researcher to join its team.

TO APPLY

Please send:

- Cover letter
- Detailed CV
- Copies of official transcripts

To:

secanlab.jobs@uni.lu

Please apply by:
24th Feb 2018

The Role

We seek a highly skilled doctoral student to work in the domain of computer science with strong focus on security and privacy in distributed systems and network communication. Traditional secure communication systems still leak information about the routing of messages in the network (who is talking to whom, time and volume of data transmitted, chat initiation and replies, on-line presence) that may be used by adversaries to gain intelligence. Making use of this information, called traffic analysis, has been known and practiced for many years by military and intelligence agencies. Now it is also a common tool for hackers, trying to probe networks, to discover their topology and vulnerabilities, as well as fraudsters that attempt to extract personal data to trick individuals or perform identity theft. Based on our work in this domain published in NDSS 2016 and WPES 2017, our goal will be to analyze the susceptibility of existing privacy-preserving routing protocols with respect to traffic analysis and to design and analyze appropriate countermeasures taking into account quality-of-service, scalability, and legal requirements.

Your profile:

- M.Sc. (or equivalent) in Computer Science, Applied Mathematics/Physics or related disciplines
- Knowledge of at least one programming language (C++, Java, etc.) and one scripting language (Perl, Python, etc)
- Basic Linux/Unix skills
- Knowledge of data mining, machine learning, statistics and result visualization concepts is of advantage
- Excellent command of English; knowledge of German and/or French is of advantage
- Excellent communication skills

We offer:

- Competitive salary
- A scientifically innovative, dynamic, well-equipped, and international working environment
- 32 days annual leave, monthly lunch vouchers, personal insurance, subsidized public transport
- Administrative support for projects and office matters

Deadline: 24th February 2018. However, early applications are encouraged and will be regularly processed before the deadline.