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PhD Position at SnT/CryptoLux team, University of Luxembourg

The Interdisciplinary Centre for Security, Reliability and Trust (SnT) invites applications from PhD candidates in the general area of signal processing for wireless communications. SnT is carrying out interdisciplinary research in secure, reliable and trustworthy ICT systems and services, often in collaboration with industrial, governmental or international partners.

The Centre is rapidly expanding its research activities and is seeking highly motivated PhD candidates who wish to pursue research in close cooperation with our partners. For further information you may check: www.securityandtrust.lu and <https://www.cryptolux.org/>.

Position Description:

The successful candidates will join a strong and motivated research team lead by Prof. Alex Biryukov in order to carry out research towards a PhD on one of the following topic:

- **Financial Cryptography** (security of distributed ledgers, smart contracts, mobile payments)
- **Privacy Enhancing Technology** (Tor-like networks, privacy for cryptocurrencies, code obfuscation)
- **Symmetric Cryptography** (cryptanalysis and design of cryptographic primitives, lightweight crypto protocols)

The position holder will be required to perform the following tasks:

- Carrying out research in the predefined areas
- Disseminating results through scientific publications and presentations at conferences
- Participating in proposal drafting
- Teaching assistance on research-related topics

Qualification: The candidate should possess an MSc degree or equivalent in Computer Science or Applied Mathematics with GPA >80%; for the first topic some background in finance/economics is a plus. Diplomas from Olympiads, competitions, CTFs are an advantage.

Experience: The ideal candidate should have some knowledge and experience in a number of the following topics:

- Cryptography
- Network Security

Very good skills in:

- programming (scripting and high level languages)
- algorithmic complexity reasoning
- discrete math, linear algebra, analysis, probability and statistics

Language Skills: Fluent written and verbal communication skills in English are required. Knowledge of French, German or Luxembourgish is a plus.

Offer:

The University offers a Ph.D. study program of 3 years, extendable to the fourth year on a full time basis (40hrs/week). The University offers highly competitive salaries and is an equal opportunity employer. You will work in an exciting international, multilingual environment in the heart of Europe.

Application:

Application should include:

- Full CV with photo
- Transcript of all modules and results from university-level courses taken (BSc and MSc)
- Research statement and topics of particular interest to the candidate (up to 1 page).

All qualified individuals are encouraged to apply. Applications will be considered upon receipt so application before the deadline is encouraged.

Deadline for applications: June 1st, 2016

For further information, please contact us at: Prof. Alex Biryukov (e-mail: name dot family name (at) uni.lu)