

## Research Associate

Ecole/Institution/Société:

**University of Luxembourg, Luxembourg / Esch-sur-Alzette**

Discipline:

**Robotic Engineering**

Type d'emploi::

**Full-time**

Date de publication:

**2022-04-16**

Personne à contacter:

**If you wish to apply for this position, please specify that you saw it on AKATECH.tech**

### **Research Associate in Resilient Real-Time and Embedded Systems**

SnT is a leading international research and innovation centre in secure, reliable and trustworthy ICT systems and services. We play an instrumental role in Luxembourg by fueling innovation through research partnerships with industry, boosting R&D investments leading to economic growth, and attracting highly qualified talent.

We're looking for people driven by excellence, excited about innovation, and looking to make a difference. If this sounds like you, you've come to the right place!

CritiX (Critical and Extreme Security and Dependability) is a research group, and a laboratory for state-of-the-art research in a problem area that may be described as extreme computing, including the protection of critical systems and data against severe and persistent threats. We advocate resilience as a paradigm shift enabling a comprehensive approach to extreme security and dependability challenges, from first principles. For further information you may check: <http://www.eni.lu/snt/research/critix>

#### **Your Role**

Successful candidates have a unique opportunity of participating in the shaping of a challenging and innovative research themes, as well as contributing to the ambitious research agenda of the CritiX lab, supported by the Luxembourg National Research Fund, FNR (<http://www.fnr.lu/funding-instruments/pearl>), the European Commission and several other projects, namely with Intel Labs, Huawei, and others about to start ([https://www.eni.lu/snt/research/critix/research\\_projects](https://www.eni.lu/snt/research/critix/research_projects)). They will be given excellent conditions for the development of their research skills, in terms of working conditions, mentoring and laboratory facilities.

#### **The main research topics this opening is calling for include addressing new challenges in:**

- fault and intrusion resilient control
- interplay between fault and intrusion tolerance mechanisms and real-time scheduling
- fault and intrusion tolerant real-time operating systems
- Openings are in the project context of ByzRT and ongoing and upcoming industrial partnerships.
- The candidate will work closely with Prof. Marcus Völp and the team members of the CritiX Research Group.

([http://www.en.uni.lu/snt/people/marcus\\_voelp](http://www.en.uni.lu/snt/people/marcus_voelp) )

English is the working language of this international laboratory.

## **Your Profile**

- We welcome candidates with a PhD in Computer Science and/or Engineering, Informatics, Control or related areas in Applied Mathematics and Engineering
- Strong background in the theory and practice of Security and/or Fault Tolerance, of Real-Time and Embedded Systems and Operating systems will be considered as an advantage
- We consider as an advantage, proven experience in several of: fault and intrusion tolerance ([a.k.a.](#) BFT), trusted computing and architectural hybridisation (TEE), or real-time systems
- Fluent written and verbal communication skills in English are mandatory
- We require commitment, team working and a critical mind

## **Here's what awaits you at SnT**

The university and its research institute SnT offers a two year employment that may be extended up to five years. The University offers highly competitive salaries, according to status, and is an equal opportunity employer. You will work in an exciting international environment with researchers from over 50 nationalities and will have the opportunity to participate in the development of the research lab agenda.

Luxembourg City, in the centre of Europe, is an extremely well-connected town and an opportunity to get to know several European cities with little effort. It is also a nice, cosy capital, with historical areas full of life, and has recently been considered one of the best cities to work in.

Exciting infrastructures and unique labs. At SnT's two campuses, our researchers can take a walk on the moon at the LunaLab, build a nanosatellite, or help make autonomous vehicles even better

The right place for IMPACT. SnT researchers engage in demand-driven projects. Through our Partnership Programme, we work on projects with more than 45 industry partners

Be part of a multicultural family. At SnT we have more than 60 nationalities. Throughout the year, we organise team-building events, networking activities and more

## **Find out more about us!**

- Contract Type: Fixed Term Contract 24 Year
- Work Hours: Full Time 40.0 Hours per Week
- Location: Belval
- Internal Title: Postdoctoral researcher/Research associate
- Job Reference: UOL04440

## **How to apply**

- Applications, written in English, should be submitted online and should include:
- Curriculum Vitae, including photo, your contact address, training record, work experience, publications, test results if available ([e.g. TOEFL](#))
- Letter of intent (up to 500 words) including the personal motivations for applying to the Univ. of Luxembourg and a statement indicating the research topic(s) of interest and your motivation for the selection
- Copies of up to three papers substantiating your background and/or experience in the topics selected.
- An abstract of your PhD thesis (max 1 page)

- Transcript of all courses and results from the university-level courses taken. Copies allowed. Legal originals immediately required in case of selection
- Contact information for 3 referees.
- All qualified individuals are encouraged to apply.

Early application is highly encouraged, as the applications will be processed upon reception. Please apply ONLINE formally through the HR system. Applications by Email will not be considered.

The University of Luxembourg embraces inclusion and diversity as key values. We are fully committed to removing any discriminatory barrier related to gender, and not only, in recruitment and career progression of our staff.

## **About the University of Luxembourg**

University of Luxembourg is an international research university with a distinctly multilingual and interdisciplinary character. The University was founded in 2003 and counts more than 6,700 students and more than 2,000 employees from around the world. The University's faculties and interdisciplinary centres focus on research in the areas of Computer Science and ICT Security, Materials Science, European and International Law, Finance and Financial Innovation, Education, Contemporary and Digital History. In addition, the University focuses on cross-disciplinary research in the areas of Data Modelling and Simulation as well as Health and System Biomedicine. Times Higher Education ranks the University of Luxembourg #3 worldwide for its "international outlook," #20 in the Young University Ranking 2021 and among the top 250 universities worldwide.

## **Further information**

Email informal enquiries / expressions of interest:

Associate Prof. Dr.-Ing. Marcus Völp:

**Email:** [critix-jobs@uni.lu](mailto:critix-jobs@uni.lu) , Subject: CRITIX - RESEARCH ASSOCIATE CANDIDATE

## **Job details**

**Title:** Research Associate in Resilient Real-Time and Embedded Systems

**Employer:** University of Luxembourg

**Location:** 6, rue Richard Coudenhove-Kalergi , Luxembourg

**Job type:** Researcher

**Field:** Applied Mathematics, Computational Mathematics,

Personne à contacter:

**If you wish to apply for this position, please specify that you saw it on AKATECH.tech**