

Research topics Software and systems security group

Position (M/F) Research Engineer

Reference offer DS/AF/secsys/Inge/022023

Research Department <u>Digital Security</u>

Publication date 16/02/2023

Start date ASAP

Duration Fixed Term Contract, 18 months maximum

Description

The research engineer will assist with the research in the software and system security group (S3), around software testing and embedded systems security in particular. The candidate will help develop research prototypes, maintain projects, and assist users. The candidate will be fully part of the research teams and participate in the research. Candidates should have strong systems skills and have an experience of interest in one or more of the following topics:

- open source software development and maintenance
- developing and maintaining program analysis tools
- embedded systems security research

The candidate should have solid experience in at least Python and C/C++. Experience with program analysis, systems programming, low level programming, firmware or LLVM a plus.

The projects the candidate will work on will be around the following topics:

- 5G netowrk security
- Dynamic taint tracking
- Side channels
- Firmware rehosting
- Fuzzing and dynamic symbolic execution
- Wireless security
- Vulnerability research and exploitation

Requirements

- Education Level / Degree : Masters degree / Engineer Degree or equivalent
- Field / specialty: Computer science or Electrical engineering
- Technologies: Linux, embedded systems programming,
- Languages / systems: Python, C/C++
- Other skills / specialties: LLVM,
- Other important elements: Good communications and good problem solving skills

Application

The position is available immediately, and until filled, applications will be processed as they arrive, so early applications are encouraged. Interested individuals should submit the following documents (in English):

- Curriculum Vitae, including the transcript of certificates and grades, and previous publications, if any
- Example software projects you have been working on (e.g., Github link, link to download a code archive)
- Contact information for 2 referees at your current or previous affiliations

Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference: DS/AF/secsys/Inge/022023



About EURECOM

EURECOM is a major Engineering School and a Research Center in digital sciences founded in 1991 as a consortium in the international technology park of Sophia Antipolis. The IMT is a founding member of the GIE. Teaching and research activities are organized around 3 promising fields: digital security, communication systems and Data Science.

EURECOM has a staff of 150 (researchers and support teams) and welcomes 400 international students on the Campus Sophia Tech, the largest information science and technology campus of the region. EURECOM enjoys a privileged geographical environment on the French Riviera (Côte d'Azur), between sea and mountains, at the heart of a dynamic and multidisciplinary ecosystem that promotes high-level scientific and technological innovation.

Social advantages

- Attractive salary
- Employee profit sharing policy
- Company health cover (mutuelle) with high levels of guarantees for the whole family (employer participation of 60%)
- Restaurant vouchers (60% employer contribution)

EURECOM has a dynamic policy in terms of inclusion and quality of life at work, committed to diversity and gives the same consideration to all applications, without discrimination.

EURECOM has a "Mission Handicap" policy. All our positions are open to people with disabilities. A designated disability referent welcomes and provide support to employees and students suffering from a disability. He puts in place the necessary arrangements and makes positive commitments in favour of a personalized integration.

EURECOM, as part of its Annual Gender Equality Plan, practices inclusive recruitment without any kind of gender discrimination. The conditions of employment are identical for women and men. In order to promote the diversity in its teams, EURECOM encourages male applications for administrative positions, traditionally occupied by women, and female applications for teaching/research positions, traditionally occupied by men.

EURECOM carries out positive actions within the framework of its CSR policy. A CSR referent steers EURECOM's policy in terms of CSR and energy transition (electric charging stations, solar panels, selective sorting, etc.).