JOB SPECIFICATION
FOR CALL FOR APPLICATIONS

Date of update: August 2021
Job title: R&D Engineer in cybersecurity
Localisation: EVRY - FRANCE
Entity / Service: Télécom SudParis / Networks and Services (RST) department
Position of supervisor: Head of Networks and Services (RST) department
Two years contract

MISSIONS:

The candidate will be involved in supporting the efforts of research teams engaged in French research and innovation collaborative projects through the development of prototypes and demonstrators, integrating open source solutions, enabling the validation of said projects’ deliverables. These projects cover cybersecurity topics including intrusion detection, incident response, traffic analysis or experimental evaluation for security certification.

Within the context of the FUI SECEF project (https://www.secef.net/), we are analysing the limitations of the IDMEF format (RFC4567) and proposing new guidelines for implementing such an exchange format. The contribution of the team is expected to focus on contributions to the development of the format, as well as prototyping and experimenting.

Within the framework of Horizon 2020 HEIR project (heir2020.eu), we are collaborating with EU partners to develop cybersecurity solutions for healthcare environments. We are focusing on cybersecurity vulnerability analysis, understanding vulnerabilities and how they affect hospital environments, and what kind of solution could be developed to help these environments be more resilient to attacks.

The two projects are related in terms of data analytics and data formats.

ACTIVITIES:

- Software specifications of the expected prototypes and demonstrators
- Development of the prototypes and demonstrators, and possibly of more complete platforms relying on orchestration solutions
- Discussion with the RST department’s research teams involved in the projects
- Discussion with the projects’ partners and participation to progress meetings
- Presentation of the contributions both internally and to the projects’ partners
TRAINING AND SKILLS:

**Level of training and / or experience required:**
Engineering degree or Master-level degree in computer science

**Essential skills, knowledge and experience:**
- Development experience in collaborative projects (tools, continuous development/continuous integration)
- Knowledge in cybersecurity (intrusion detection, incident response, traffic analysis)
- Knowledge in applicative protocols' internals (a few among HTTP(S), IMAP, SMTP, FTP, SMB, SSH, POP3)
- Skills in Python development
- Skills in CLI automation (Bash)
- Skills in spoken and written English (fluent)

**Advantageous skills, knowledge and experience:**
- Knowledge in exchange formats (YAML, JSON)
- Experience in virtual machines orchestration (OpenStack) or containers orchestration (Kubernetes)
- Experience in intrusion detection systems (e.g., suricata, snort)

**Abilities and skills:**
- Working in an international environment
- Team working
- Autonomy
- Rigor
- Writing deliverables and documentation in English

TO APPLY:

Please send :
- a motivation letter
- a resume
- the names and mails of two qualified personalities who can give an informed opinion on the application


Contact person: Hervé Debar, [herve.deba@telecom-sudparis.eu](mailto:herve.deba@telecom-sudparis.eu)

Web Site: [https://www.telecom-sudparis.eu/](https://www.telecom-sudparis.eu/)

Information of the candidate on the processing of personal data: [https://bit.ly/2QeOZhI](https://bit.ly/2QeOZhI)