Thomas Leroy

Looking for a Security Engineer position. https://thole.fr

Work experience

SUSE, Remote from Rennes, France — *Security engineer*

Since 2021-10

- Member of the international product security team of SUSE.
- Root cause analysis and tracking of vulnerabilities that may affect packages and kernels shipped by SUSE enterprise and open-source products. Occasionally patch writing for upstream projects.
- Security reviews of new RPM packages with code auditing, fuzzing and static analysis that resulted in 2 CVEs assigned.
- Member of the COCONUT-SVSM project (https://github.com/coconut-svsm/svsm)
    - Bare-metal security-driven Rust programming, kernel programming and virtualization around AMD SEV-SNP.
    - Developed the initial #VC handler of the SVSM kernel with almost no prior experience with Rust and AMD SEV-SNP.
    - Other contributions: a fuzzing harness for the project's naive x86 instruction decoder, code hardening, unsound Rust issues fixing, and code review (all contributions are public).
- Implemented the first tool to track embedded dependencies in openSUSE and SUSE Go-based packages, allowing all security engineers of the team to track vulnerable Go modules embedded in all packages.
- Internal tool development mainly in Rust and Python.
- Training attended: Advanced Fuzzing and Crash Analysis by Richard Johnson at OffensiveCon 2023, Hypervisor Vulnerability Research by Zero Day Engineering, and Hypervisor Development for Security Researchers by Satoshi Tanda (June 2024).
- Conferences attended: OffensiveCon 2023, Linux Security Summit Europe 2023, Hexacon 2023, SSTIC 2022 & 2023.

THALES, Rennes, France — *Software engineer*

2019-09 to 2021-09

- Software development in a Go micro-service architecture. Aeronautical protocol codecs development and debugging. Deployment with Kubernetes.
- Built a continuous fuzzing service with Go-Fuzz and Jenkins to find bugs in the team's Go codecs. Found a dozen bugs. Built a black-box network fuzzer to find bugs in a codec binary.
- Occasionally: reverse engineering of C++ x86 binaries to identify vulnerabilities.
- Supervised a working-student and an intern on subjects like network protocol fuzzing or container security.

Interests

- Active member of The Flat Network Society CTF team (joined in Summer 2023).
    - Solving up to medium difficulty pwn and reverse engineering challenges.
    - 3rd position in World ranking and 1st French team on CTFTime in June 2024.
- Passion for security research with a focus on vulnerability research, binary exploitation, and reverse engineering. Deep interest for the Linux kernel internals, vulnerabilities and exploitation.

Education

Télécom SudParis, Evry, France — *MSc Exchange student*

2018-2019

System and network security - with Honors.

Télécom Saint-Etienne, Saint-Étienne, France — *Master of Science*

2016-2018

Computer science, Networking, Cryptography (with Honors) - College association: Coach of the college soccer team.

Lycée Clemenceau, Nantes, France — *French preparatory class*

2014-2016

Mathematics and Physics studies to train for the competitive national exam leading to French "Grandes Écoles".