Guillaume Wantiez

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EDUCATION

Stevens Institute of Technology **Hoboken, NJ, USA**
Master of Engineering in Computer Engineering. *May 2026*
***Honour**: Graduate Master's Scholarship, ECE Graduate Student Council Member.*

Ecole pour l'Informatique et les Techniques Avancées (EPITA) **Paris, France**
Master of Science in Computer Science *May 2026*

KEY SKILLS

Languages: Bare-metal C, C, C++, Python, Assembly i386, Assembly armv8.
Embedded Systems: QNX, QNX Momentics, Linux, i386, VM, Linux drivers (in-tree, out-tree)
BSP Knowledge: Bootloader, Hypervisor, Kernel, ARM architecture, x86, Qemu.
OS Knowledge: Paging, VMM, PMM, Filesystem, IPC, Processes, Multithreading, Trap, Exceptions, drivers, I/O.
Computer Security: Reverse, Forensics, OSINT, Fuzzing, Wireshark, Common Cryptographic algorithms (RSA, AES, SHA256, CRC32), VM obfuscation, Ghidra, Binaryninja, IDA.
Network fundamentals: OSI Model, Traffic Engineering, 5G, 4G, MPLS, TCP/IP, JuniperOS.

PROJECTS

My_hyperforge (Self-taught) *Sept 2024 - Present*
- Learned concepts about hypervisor and started to design and implement a basic one in an ARM environment capable of handling two Linux kernel; Currently working on hvc handling.
- The final objective will be to request applications services from a guest to a secured host kernel in order to enhance security.

My_pikaboot Linux Bootloader (Self-taught) *Nov 2022 – Dec 2022*
- Created a signed RSA Linux bootloader on ARM64 architecture with a secure boot chain (AES, SHA256, CRC32) in order to understand first stages of computer boot sequence.
- Recruited by LRE (EPITA research Laboratory) on this subject.

32-bit x86 Monolithic Kernel Base (Self-taught) *Aug 2022 – Sep 2022*
- Implemented a monolithic kernel base in order to understand operating systems architecture; The code included : parsing of the Device Tree Blob (DTB), physical memory (PMM) and virtual memory (VMM), paging, traps, exceptions, keyboard interrupt handling, and transition to userland.

EXPERIENCE

System and Security Student Lab (LSE) **Paris, France**
Co-founder *Sep 2023 - Present*
- Co-founded with two people, our own system and security lab. LSE mission is to provide a working environment to encourage students to collaborate onto system and security projects ranging from implementing BSP to group learning.
- Working with student on subjects such as Cryptography, Hardware, Pwn, OSdev, SysAdmin and Web exploitation.
- Organized security events which attracted from 30 to 60 students from various Engineering schools. Events such as Talks and CTF ; Created our own CTF team and placed among 2024 top 10 french team on CTFtime.
- Realized audit missions for companies.

EPITA Research Laboratory **Paris, France**
Student Researcher *Jan 2023 - May 2024*
- Reviewed academic research on pervasive systems in order to model a pervasive system resource manager simulator using CloudSim under supervision.
- Corrected the actual model in order to enhance clarity and efficiency.
- Started Implementation of basic java class for real-time context events and shared work through talks

Fuzzinglabs **Brétigny-sur-orges, France**
Vulnerability Researcher Intern *Sept 2023 - May 2024*
- SOTA of Linux kernel security, fuzzing techniques, Syzkaller google framework and associated technologies.
- Fuzzing in-tree and out-tree drivers creating custom fuzzing harness for specific SUT (System Under Test) in order to create a formation for Fuzzinglabs and clients.
- Evaluating common crashes and bug found in linux drivers in order to find security breaches.