
Studies

- 2015 - 2019 **Master of science**, *Computer science majoring in computer systems*, EPITA.
- 2018 - 2018 **Exchange student**, *Computer security and system*, Stockholm University.
- 2013 - 2015 **Bachelor of science**, *Computer Programming*, EPITECH.
- 2013 **High School diploma in Economics**, Lycee Francois Rabelais.

Experiences

Professional

- Sept. 17 - Dec. 17 **R&D Automotive Security Intern at Quarkslab/Whitemotion**, *France/Japan*, <https://quarkslab.com/>.
Reverse engineered firmwares found in ECU's. CAN bus analysis. Started adding support for ARMv7 to Triton, a dynamic binary instrumentation framework. (<https://github.com/jonathansalwan/triton>).
- Dec. 16 - Mar. 18 **Student Researcher at LSE**, <http://lse.epita.fr/>.
Worked on Binary analysis and Virtualization (implementation/enhancement of VM introspection on KVM)
- May 16 - Aug. 16 **Intern at LSE**, http://lse.epita.fr.
Worked on program synthesis and peephole superdeobfuscation to implement a new deobfuscation technique for x86_64 binaries.

Presentations

- Jul. 17 **Structure pretty printer using DWARF**, *LSE Summer Week*, <https://goo.gl/KvSpbA>,
Presentation of an intelligent DWARF pretty-printer.
- Dec. 16 **Malware Deobfuscation by Program Synthesis**, *LSE Lightning Talk*.
Presentation on automatic deobfuscation of x86_64 malware.

Projects

- Jun. 2018 - Today **Abstraction interpretation on LLVM bitcode for automatic vuln research**, https://github.com/Oxdouze/abstract_vuln_finder/.
Research project on automatic vulnerability study using abstract interpretation on lifted LLVM bitcode.
- Jan. 2017 **Educational purpose kernel**, <https://k.lse.epita.fr/>.
Implementation of a small version of a monolithic kernel.
- Dec. 2016 **My Ldso**.
Own implementation of a dynamic linker
- Mar. 16 - May. 16 **Windows Keylogger**, <https://github.com/OxDouze/Keylogger>.
Userland Windows Keylogger.

Skills

Computer technologies

- Security Binary Analysis, Symbolic execution, Abstract interpretation, Reverse Engineering, Automotive Security
- Programming C, C++, Assembly, Python, Bash, R, Matlab

Languages

French (Mother tongue), Armenian (Mother tongue), English (TOIEC: 970, TOEFL: 101)

Hobbies

- 7 years **Tennis**.
- 5 years **Acting - Piano**.
- 3 years **Capture The Flag**.
- 1 year **Harmonica**.