VINCENT WERNER

Embedded Software Developer

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EXPERIENCE

Embedded Software Developer

STMicroelectronics

Since October 2021 Grenoble, FR

C Python Qt

- Designing firmware and test environments for validating STM32WBA microcontrollers.
- Designing firmware and graphical interfaces for production testing of development boards.
- Designing firmware for EEMBC benchmarks (CoreMark, ULPMark, SecureMark).

PhD Student

CEA - Leti

Oct 2018 - Oct 2021 Grenoble, FR

C++ C Python

- PhD student at CESTI of CEA-Leti, a leading laboratory for the evaluation of secure components.
- Optimizing identification and exploitation of fault injection vulnerabilities on microcontrollers.
- Designing a fault injection simulator based on software emulation
- Performing laser and power glitch fault injections

Full Stack Developer

Sopra Steria

Sept 2016 - Aug 2017 Rennes, FR

Java JavaScript Oracle

- Designing and developing web applications that play a pivotal role in the digital transformation of the French Army.
- Designing software tools to centralize the management of logistics flows for the Ministry of Armed Forces.

Internship

Airbus

Feb 2016 - Jul 2016 Toulouse, FR

C Python

- Designing graphical interfaces for a sophisticated video acquisition and processing system, including multiple infrared cameras, to assist the flight engineer.

EDUCATION

Phd in Computer Science

Université Grenoble Alpes

Oct 2018 - Oct 2021 Grenoble, FR

Postgraduate Program in Cybersecurity

CentraleSupélec - IMT Atlantique

Sept 2017 - June 2018 Rennes, FR

MEng in Electronics and Computer Science

INSA

Sept 2011 - June 2016 Rennes, FR

PROJECTS

CELTIC
A fault injection simulation tool built around a modular emulator for RISC architectures (ARM, RISC-V, etc.). The tool is optimized for accelerated simulation (multithreading, JIT) while maintaining ease of use through Python wrappers.

Low Cost Glitch Platform
A cost effective glitch platform based on artificial intelligence to assist vulnerability analysis under black-box conditions.

COMPETENCES

Languages & Frameworks

C C++ Python Qt

Microcontrollers

STM32 NXP Kinetis Raspberry Pi Arduino MSP430

LANGUAGES

French
Mother tongue

English
Read, spoken, written