









William PENSEC





PhD Student,
Hardware Security,
physical attacks, RISC-V

-  October 26, 1996
-  10 rue de Lanveur, Flat C11, 56100 Lorient, France
-  +33 06.51.36.06.63
-  www.pensec.fr/
-  william@pensec.fr
-  Driving licence - Vehicle
-  French






Social Network

-  LinkedIn
-  WilliamPsc
-  Lab-STICC
-  Google Scholar

Languages

-  French ●●●●●
-  English ●●●●●
-  Italian ●●●●●
-  Spanish ●●●●●

Computer Science

-  Software development ●●●●●
C, C++, Java, JavaScript, Android, Python, Bash, php, AADL, Ada, Visual Basic
-  Hardware development ●●●●●
VHDL, System Verilog, FPGA, Suite Vivado HLS, Assembleur, RISC-V, LiteX
-  Data ●●●●●
MySQL, JSON, XML
-  Operating systems ●●●●●
Linux, Windows
-  Micro-controllers ●●●●●
Arduino, Raspberry Pi, FPGA Basic 3, Chip Whisperer

About me

I am currently working on a PhD Thesis in Computer Science at Lab-STICC in University of South Brittany (Lorient). I work in the field of hardware security on RISC-V and fault injection attacks in embedded systems (IoT).

Working Experience

- 2021 (5 months) Final year internship (M2) Lab-STICC
Cooperation of drones in a heterogeneous system (C++, Linux, Java, TCP/IP, Raspberry Pi, embedded CNN)
- 2020 (2 months) Research Internship (M1) Lab-STICC
Simulation of drones with sensors (GPS and accelerometer) in an open environment (C++, CARES)
- 2019 (2 months) Internship in Computer Science (L3) UBO OpenFactory
Modeling the position of the Brest tramway in real time (Arduino, Raspberry Pi, Python, JSON, php, HTML, Linux)

Education

- 2021 – PhD Thesis in Computer Science University of South Brittany - Lorient
(Lab-STICC)
Protection of a processor with DIFT against physical attacks
- 2019 – 2021 Master in Software for Embedded Systems University of Western Brittany - Brest
- 2015 – 2019 Bachelor of Science in Computer Science: Fundamentals and Applications University of Western Brittany - Brest
- 2014 – 2015 First Year Common to Health Studies (PACES) University of Western Brittany - Brest
- 2014 Baccalaureate S-SVT, speciality ISN High School of Cornouaille - Quimper

Projects

- 2022 Supervision of a M2 student in project University of South Brittany
Implementation of a RISC-V processor on an FPGA target
- 2022 Supervision of a M1 intern University of South Brittany
Physical attack on FPGA target
- 2020 – 2021 Research project (M2) University of Western Brittany
Creation of a 3D drone simulator from OMNeT++ and INET (C++, XML)
- 2020 Robotics project (M1) University of Western Brittany
Creation of an environment for tracking a remote robot (NodeJS, TCP/IP, OpenStreetMap)

Papers

- 2022 Smart Anomaly Detection and Monitoring of Industry 4.0 by Drones
William PENSEC, David ESPES, Catherine DEZAN
ICUAS

Interests

- Sport Swimming (club and leisure), cycling, water sports (scuba diving, kayaking)
- Hobbies Travel (France, Italy, Spain), video games, movies, series, music, reading