Léo Weissbart

Curriculum Vitae

Work Experience

 $\label{eq:Jul-Dec} \mbox{2023} \ \ \mbox{\bf Teacher}, \mbox{\it Radboud University}, \mbox{\it Nijmegen} - \mbox{\it The Netherlands}.$

Teacher at the Faculty of Science of Radboud University

May 2021 - **Research Internship**, *RAMBUS*, Rotterdam-The Netherlands.

Feb 2022 Neural network side-channel analysis and countermeasures on FPGA.

Education

 $2018-2023 \quad \textbf{PhD Candidate}, \ TU \ Delft \ and \ Radboud \ University, \ Delft \ and \ Nijmegen-The \ Netherlands, \ Tu \ Delft \ and \ Nijmegen-The \ Netherlands, \ Nijmegen-The \ Nijmegen-The \ Netherlands, \ Nijmegen-The \ Netherlands, \ Nijmegen-The \ N$

Side-Channel Analysis and Deep Learning. Supervisors: Stjepan Picek and Lejla Batina

Feb-Jul 2018 Research Student, OKAYAMA UNIVERSITY, Okayama – Japan.

Worked on the implementation of cryptographic attack on elliptic curves Curve25519 using pattern recognition algorithms.

Jan-Jul 2017 Industrial Project, CHAUVIN ARNOUX, Valence – France.

Designed and developed an embedded measuring system to detect insulation fault in electric network.

Jun-Aug Summer Intern, HCMC UNIVERSITY, Ho Chi Minh City – Vietnam.

2016 Developed a software application to analyze emotion through brain waves information.

2015–2018 Master's Degree in Engineering School, Grenoble INP – Esisar, Valence–France.

Advanced Systems and Networks Engineering School

2012–2015 Classe Préparatoire, Lycée Albert Schweitzer, Mulhouse – France.

Preparatory Classes for Engineering Schools

Computer Skills

Advanced Conception and design of integrated circuits, Embedded system security, Side-channel

evaluation, Deep learning analysis

Experienced C/C++, PYTHON, JAVA, VHDL/VERILOG, LINUX, GIT, LATEX

Published Papers

"Label Correlation in Deep Learning-based Side-channel Analysis" – IEEE TIFS 2023

"On reverse engineering neural network implementation on GPU" – AIHWS 2021

"Screen Gleaning: A Screen Reading TEMPEST Attack on Mobile Devices Exploiting an Electromagnetic Side Channel" – NDSS Symposium 2021

"Systematic Side-Channel Analysis of Curve 25519 with Machine Learning" – Journal of Hardware and Systems Security 2020

"On the Performance of Multilayer Perceptron in Profiling Side-channel Analysis" – AIHWS 2020

"One trace is all it takes: Machine Learning-based Side-channel Attack on EdDSA" – SPACE 2019

Languages

French (Mothertongue), English (Fluent), German (Intermediate)