DORIAN BACHELOT

🚗 Driver's license

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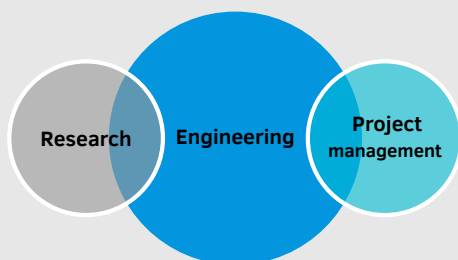🌐 dorianb.net

✉ pro@dorianb.net

⬤ dorianbdev

Skills ——

Overview

Research — Engineering — Project management

Details

- **Software**

Visual studio, Android studio, Wamp, Vim, UE4, Unity, Jetbrains solutions, GDB, IDA, Radare2, Ghidra, Alcasar, OpenVAS/GVM, Elastic stack, Splunk, Wazuh, Suricata, Nmap, Metasploit.

- **Programming languages**

C++, C, Java, Python, CMake, LaTeX, PHP, Javascript, SQL, R, Bash, Rust.

- **Other**

Deep learning, OpenGL, Reverse engineering, Git, MariaDB/MySQL, Windows, Linux, Android, Docker, CI/CD pipeline, Django, NodeJS, nftables, syslog.

Languages

English : Full professional proficiency

TOEIC: 905 | DET: 120

Spanish : Limited working proficiency

A2

Hobbies ——

❯ Programming   ❯ Rugby

❯ Electronic   ❯ Research

I am a hard-working and ambitious Digital Science student in France with a great passion for cybersecurity research. I am currently doing my end-of-studies engineering internship in a Cybersecurity/AI R&D laboratory. I love learning new skills and sharing my knowledge with others.

🎓 Education

Engineering Degree
ESIEA, Laval, France

📅 *2017 - present*

Currently in my 5th year, specializing in cybersecurity.

Baccalaureate
Réaumur, Laval, France

📅 *2013 - 2017*

Baccalaureate in scientific series with engineering sciences specialty and I.S.N. (Computer science and digital) option. With honors.

💼 Experience

End-of-study engineering internship
Silicom, Rennes, France

📅 *March, 2022 - August, 2022*

Work on different projects in Silicom's Cybersecurity/AI R&D lab.

Technical internship: OpenSOC
ESIEA, Laval, France

📅 *April, 2021 - July, 2021*

Project to provide a complete platform for fully automated cyber surveillance of small and medium-sized enterprises.

❯❯ Design of a software (containerization via Docker) and hardware architecture, including system and network probes as well as a SIEM.

❯❯ Development of a fully automated alert processing system.

❯❯ Deployment of the solution in a multi-site company in real conditions (appropriation of the information system, appropriation of the specific constraints, development of specific modules).

Scientific and technical projects
ESIEA, Laval, France

📅 *2017 - 2022*

❯❯ Development of a network analysis framework for Android applications, which allowed to find a theoretical flaw in the Waze application on the identification of trips and users. Publication and a conference envisaged (in progress).

❯❯ Conception of a 3D positioning tool for IoTs inside a building, using Wifi and Bluetooth and developed from frame parsing in C to a visual result implemented with Qt in C++.

❯❯ Creation of a neural network (Keras / Python) for film identification from a textual description via a Web interface (Backend Django / Frontend VueJS).

❯❯ Conception of a multiplatform and dependency-free C++ library ("from scratch") for the creation of convolutional neural networks.

📑 Research

Research projects
Laval, France

📅 *2019 - 2022*

Research works in collaboration with a French researcher and an international laboratory on the hardware reverse-engineering theme.

❯❯ Writing of three additional articles on silicon chip hardware reverse engineering.

❯❯ Forking of Degate, a silicon chip reverse engineering software in C++, ported it for a multiplatform use (Windows, Mac and Linux) and made numerous conceptual improvements to the core of the software. It helped to discover several cryptographic vulnerabilities in chips used in the industry.

❯❯ Working with sector actors for chip analysis and community animation.

Research projects - Laboratory (C + V)°
ESIEA, Laval, France

📅 *October 2018 - June 2019*

Worked on hardware reverse engineering and cryptography at the Laboratory of Cryptology and Operational Virology (C + V)°. This research work focused on silicon chip hardware reverse engineering and cryptanalysis.

❯❯ Writing of two articles on silicon chip hardware reverse engineering.

❯❯ Analysis of a cryptographic security flaw in a silicon chip.