

SIMON ARYS

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EXPERIENCE

Student Web Developer — freelance at Wecodx

Fall 2021 - Present

- Development of web applications at a digital agency.

EDUCATION

Computer Science — UCLouvain

- **Master's degree — Summa cum laude** — 2022-2024
 - Major in **Security and Networking**
 - Major in **Artificial Intelligence**
 - **Thesis:** Energy-Aware Scheduling for ISA-Heterogeneous Clusters
- Bachelor's degree — Magna cum laude — 2019-2022
 - Minor "Additional module in computer science"

SOFTWARE SKILLS

- Proficient in: Python, Typescript, ReactNative, SvelteKit, Node.js, Java, React, C, SQL
- Worked in: Javascript, PHP, Symfony
- Tools: Linux, Docker, Burp Suite, Ghidra, Wireshark, AndroidStudio, Xcode, Git
- Platforms: Google Firebase
- Basis: Go, Rust, Angular, Kotlin

HACKATHONS

Cyber Security Challenge Belgium — NVISO 2023 & 2024

- Made it to the last day of the finals in 2023 and reached 10th place out of 290 in 2024. We solved CTF challenges as well as challenges from industry experts at the Royal Military Academy.

Cyber Security CTF — Cyberweek 2023, Cyberwal by Digital Wallonia

- 15 hours-long Capture the Flag, ranked 8th place out of 25 teams.

Mobile App Hacking — All You Can Cheat 2023, Guardsquare

- Workshop about dynamic and static analysis on Android Studio and modification of compiled APKs using Ghidra.

Algorithmic Contest — KARWa 2023, Louvain-Li-Nux

- Reached 5th place to solve problems with the right time complexity without internet access.

Advent Of Cyber — TryHackMe 2022

- One red, blue or purple cyber security challenge every day until Christmas.

Open Week — UCLouvain 2022

- One week of open-source development. My team and I modified OpenSSH to insert the Multipath TCP protocol.

Game Jam — Louvain-Li-Nux 2021

- 24 hours to build an open-source video game in Python in a team of 4 people.

PERSONAL PROJECTS

- 2023 — iOS and Android app built with **ReactNative** and **Firebase** that uses phone sensors and third-party APIs to automate the filling of a document required to pass the driving license in Belgium.
- 2023 — Participation to React Native and SvelteKit **open-source** projects through **pull requests**.
- 2021 — Android app to manage cooking recipes written in Kotlin and using Android's Room Database.

UNIVERSITY PROJECTS — UCLouvain

- React e-commerce application using **Docker Swarm** for elastic scaling of micro-services, hosted on **Microsoft Azure**.
- **Machine learning** prediction of binary classes from real industry data composed of many raw datasets.
- Modelling and solving instances of a logistics and transportation problem using **Constraint Programming**.
- Multi-threading **optimizations in C**, using AVX vector instructions, loop unrolling and aligned memory allocation.
- Truncated reliable transport **protocol over UDP** that deals with loss, corruption, duplication, delay and latency.
- Highly maintainable and evolvable Java context-aware application, exploiting **design patterns** and O-O techniques.
- And a lot more projects.

LANGUAGES

French — C2

English — C1

German — A1

CERTIFICATIONS

- CompTIA **Network+** and **Security+** — Course completion on **Udemy**
- JavaScript Algorithms and Data Structures — freeCodeCamp
- Kotlin for Java Developers — JetBrains
- Introduction to Git and GitHub — Google