

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** – 2022-now
 - Major in **Security and Networking**
 - Major in **Artificial Intelligence**
 - **Thesis:** Heterogeneous Rack-Scale **Cloud Computing**
- 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, etc.
- Worked in: Javascript, PHP, Symfony
- Tools: Linux, Docker, Burp Suite, Ghidra, Wireshark, AndroidStudio, Xcode, Git, LaTeX
- Platforms: Google Cloud, Firebase
- Basis: Go, Rust, Angular, Kotlin

PROJECTS & HACKATHONS

Cyber Security CTF – Cyberweek 2023, Cyberwal by Digital Wallonia

- 15 hours-long Capture the Flag, ranked 8th place on 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.

Cyber Security Challenge Belgium – NVISO 2023

- Made it to the last day of the finals at the Royal Military Academy. We solved CTF challenges as well as challenges from industry experts.

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 2023

- 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.
- **Network attacks** implemented in Python for a Mininet of workstations, servers, routers, switches and firewalls.
- 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