Simon Stijnen

Software Engineer & AI

About Me

Software Engineering student at VIVES University of Applied Sciences. I build scalable, maintainable software that performs well under heavy load. I quickly learn and apply new technologies in practice, with a focus on AI and efficient software development.

Contact

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Skills

- LLMs
- RAG
- Python
- Javascript/Typescript
- Docker

References

- Peter Heyse, Head of Product Management, CERM nv
  peter.heyse@cerm.net

Experience

Student AI Engineer Aug. – Sep. 2025
CERM nv *Links:*
Built two AI-driven tools. One for automatically generated reports in Jira and one summarizing email conversations and providing a possible solution to the problem. Both tools use LLMs and RAG.
Deployed in production, speeding up processes by months and saving consultants significant time on client communication.

Student Test Engineer Apr. 2024
Advionics nv
Built a sensor monitoring project using real-time data analysis. Using MLX90640 heat sensors. Then integrated this system into an existing program.
Deployed in production, providing continuous thermal monitoring for detection of irregularities

Software Engineer 2021 – now
Stijnen Solutions
Designed and built a REST API in Python to translate the internal protocol of Homecenter and expose it as structured JSON data.
Implemented an integration with Home Assistant
Developed a Python program to expose Homecenter data to a Prometheus server. Connecting with Grafana for real time monitoring.

Intern Test Engineer Apr. 2022
Advionics nv
Developed an automated camera system, at 17 y/o, for quality control in shipping. Capturing product images before packaging, doing image processing and generates PDF reports as proof of undamaged delivery.
Deployed in production, improving logistics efficiency and traceability.

Education

Professional Bachelor Electronics-ICT 2023 – 2026
Belgium – VIVES University of Applied Sciences
Gained experience with (international) project management and working in Scrum teams. Learned to structure software projects with a focus on maintainability and collaboration, using tools like Git, code reviews, and sprints.

Graduate Programming Sep. – Dec. 2023
Belgium – HOWEST – Evening school
Gained a strong core in Git and object-oriented programming C#.

TSO Internet of Things 2021 – 2023
Belgium – KTA Brugge
Introduced to programming and built a solid foundation in software development through hands-on work with wireless communication, networking, and microcontrollers. Gained practical experience with embedded systems and low-level programming.

Achievements

Most deserving student 2023
Rotary Club – Brugge
Recognized as the most deserving student at secondary school graduation, based on dedication, eagerness to learn, and social involvement. Awarded by Rotary International as a token of appreciation for academic and personal growth.

Languages

- Dutch (Native)
- English (Professional Working)

Soft Skills

- Problem solving
- Ownership
- Teamwork
- Analytical thinking
- Curiosity

Certificates

- Erasmus+ BIP Madrid
- Cisco CCNA 1 & 2

Other

- Driver license B
- Ice hockey

Featured Projects

Pop-a-loon
Feb. – Jul. 2024

Browser extension – 200+ active users

Links:

Developed a full-stack browser extension. Facing the challenges of deploying code in production and managing large database tables with extensive rows. Gained practical experience in handling scalability and performance issues.

ESP32 Bluetooth Device Localization
Sep. 2022 – Jul. 2023

Final work – KTA Brugge

For my final project, I developed a system to localize devices within a space by using the Bluetooth signal strength from ESP32 modules. This system works similarly to satellite positioning and Google Maps, but for indoor environments. The project focused on wireless communication and signal analysis for accurate location tracking.

BEMED
Feb. 2025 – Jun. 2025

Company project– Project Experience VIVES

Links:

Helping government institutions manage their environmental footprint by building a web application that allows them to register and monitor expenses related to single-use plastics.

Paleonet
May. 2025

AI Project – VIVES

Links:

Used a convolutional neural network and deep learning model to classify dinosaur images by species. Reaching 80% accuracy, which was 10% over the target accuracy.

Audionome
Feb. 2025 – Mar. 2025

AI Project – VIVES

Links:

Trained several models (including logistic regression, SGD, and random forest) to automatically recognize and accurately classify music clips based on their genre. The project combines audio processing, machine learning, and a user-friendly interface built with Streamlit.