



## CONTACT

- 📍 Wavre, Belgium
- ✉️ ni.samelson@gmail.com
- 📞 +32 475 65 90 18
- 🌐 <https://github.com/nsamelson>
- 🌐 [www.linkedin.com/in/nicolas-samelson](https://www.linkedin.com/in/nicolas-samelson)
- 📅 19/08/1999
- 🚗 Driving license: Category B

## SKILLS

### Programming skills

- Python: Proficient
- C# & Node JS: Experienced
- C++ & Kotlin: Basic knowledge

### Softwares & Tools

Github, Pytorch, VS code, Microsoft Office, MPLAB, Altium Designer, GIMP, Solidworks, Azure Devops, Unity

### Environments

- Windows 10
- Linux (Ubuntu, Raspberry Pi OS)

### Languages

- French: C2 (native)
- English: C1-C2
- Dutch: A2

## SOFT SKILLS

- Eager to learn
- Reliable
- Flexible
- Teamwork

## INTERESTS

- Technologies (robotics, AI, Raspberry Pi, Arduino Uno, computer hardware,...)
- Travelling, hiking, cycling, photography and board games
- Youth movements (2007-2015)

# SAMELSON Nicolas

## COMPUTER ENGINEER

### OBJECTIVE

Industrial Engineer specialised in computer science, with a passion for AI and environmental research, which guided my studies in New Zealand. My research projects focused on classifying nocturnal animals using thermal cameras and CNNs, as well as exploring an approach for embedding environmental models in a VGAE. I am open to job opportunities, with a particular interest in R&D or a PhD position.

### WORK EXPERIENCE

#### Master's Thesis at University of Auckland

Auckland, NZ | March 2024 - September 2024

- Explored hybrid modeling to enhance process-based environmental models using ML in data-limited scenarios.
- Embedded empirical equations into a VGAE to improve model generalisability and transferability for integration with other models.

#### Research assistant at University of Auckland

Auckland, NZ | September 2023 - August 2024

- Contributed to the Biosecurity Technology Research project aimed at detecting the predators in New Zealand.
- Implemented various preprocessing and computer vision techniques, and developed and trained an LRCN model.
- Participated in field tests near Christchurch to validate our approach in real-world conditions.

#### Student job at MBA Micro Belgium Application

Wavre, BE | April 2023 - May 2023 & August 2023 - August 2023

- Developed applications in Python to synchronise data between Google APIs and Microsoft SQL databases.

#### Internship at Belighted

Louvain-La-Neuve, BE | March 2021 - May 2021

- Developed an application using APIs to securely retain personal data in compliance with GDPR guidelines.

### EDUCATIONAL HISTORY

#### ECAM Brussels Engineering School

Brussels, BE | 2017 - 2024

- Master degree in Computer Engineering (distinction)
- Bachelor degree in Electronic Engineering

### ADDITIONAL PROJECTS

#### Kiwijam - Game Hackathon

Auckland, NZ | July 2024

- Developed a game prototype in 48 hours centered around the theme of "Home" using Unity.