JOHANNES HOLMGREN

Computer Science and Engineering Student at Chalmers University of Technology

✉ johannes.h.holmgren@gmail.com   📞 +46 72 363 63 68   📍 Gothenburg, Sweden   🔗 https://holmgren.dev

⌂ github.com/JohannesHolmgren   in linkedin.com/in/johannes-holmgren

EDUCATION

MSc - Complex Adaptive Systems
Chalmers University of Technology

📅 Aug 2023 – ongoing   📍 Gothenburg, Sweden

- Exchange studies: National University of Singapore, spring semester 2024.

BSc - Computer Science and Engineering
Chalmers University of Technology

📅 Aug 2020 – Jun 2023   📍 Gothenburg, Sweden

- GPA: 4.6/5.0
- During my bachelor I was part of the Committee of Sports and the Committee of Career and Business Relations, managing everything from weekly sport sessions to large company events where I actively represented the division.

WORK EXPERIENCE

Teaching Assistant
Chalmers University of Technology

📅 Aug 2022 – Nov 2023   📍 Gothenburg, Sweden

- I supervised over 300 students in a course covering **assembly programming**, boolean algebra and fundamental **computer architecture**.
- As a supervisor in a project course, I guided three groups in project management, while simultaneously assisting with programming in **C** and version control using **git** and **Github**.

Engineer Intern
Volvo Group

📅 Jun 2023 – Aug 2023   📍 Gothenburg, Sweden

- I assisted with the work towards a more modern way to manage **technical requirements**.
- My main task was to dive deeper into a specific requirement management tool, as well as the team's requirements and see how they can merge these.
- During my work I represented the team in internal Volvo meetings where the tool has been discussed.

Substitute Teacher
Partille kommun

📅 Jan 2020 – Jun 2020   📍 Partille, Sweden

- I had full responsibility for planning and carrying out lectures for 60+ seventh-graders in both science and mathematics, improving my skill of speaking to an audience.

Tekniksprånget Internship
Volvo Cars

📅 Aug 2019 – Dec 2019   📍 Borås, Sweden

- During the fall of 2019 I was part of an **agile** team involved in the testing of **ADAS** in cars, as well as modelling a prototype for automation of the testing using **Python**.

LANGUAGES

Swedish	Native
English	Fluent

TECHNICAL SKILLS

Python   Javascript   Java   C
C++   Git, GitHub   HTML   CSS
Linux   Pandas   Numpy   Matplotlib
Matlab   Algorithms   Data structures

PROJECTS

Neural Network
Python, Numpy

- To gain deeper insight in how neural networks operate, I built a small neural network package from scratch using **Python** and **Numpy**.
- The network trains using backpropagation, and supports an arbitrary number of layers with different activation functions.

Maze Visualizer
Python

- This program was developed to visualize and make it easier to understand the difference between how different algorithms proceed to solve a maze.
- A course in algorithms and data structures was the basis of the program, which uses various well-known algorithms for both the creation and solving of the maze. Optimization was a core part of the development in order to make the program perform well on larger mazes.

Personal Website
HTML, CSS, JS

- Feel free to check out my personal website: a digital version of my resume!
- You can find it at https://holmgren.dev