REZA REZVAN

COMPUTER SCIENCE & ENGINEERING MAJOR

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ABOUT ME

Technical Skills: C/C++, Python, Java, Rust, Haskell, JavaScript, HTML/CSS, Linux, Git, Docker.
Languages: Fluent in English, Swedish and Farsi; Conversational Proficiency in French.
Interests: Machine learning, Computational learning theory, Data science, and, Neural networks.

EDUCATION

Chalmers University of Technology (September 2021- June 2026)

- Currently enrolled in the Computer Science & Engineering program at Chalmers University of Technology

WORK EXPERIENCE

Huawei

Software Engineer Gothenburg (June 2023 - August 2023)

- Responsible for writing a **static code analysis tool**, that could be used to **better understand Python code before production**.
- The tool was written in **C** and using **LLVM** and **Clang**.

Huawei

Software Engineer Intern, 5G Wireless & Communications Research Team Gothenburg (June 2022 - November 2022)

- Organized the annual Huawei hackathon, a real-world problem for over **1 000** participants to solve. It replicates **real-world 5G, 6G problems**. Read **scientific-papers** and in-depth research about 5G and 6G real-world problems. Wrote several possible solutions in **C**/**C++**, all while continuously giving and receiving feedback from the entire software team.
- Processed submission data from the hackathon - **visualized the data and statistics**, that Huawei uses for future development and hackathons, using **Python and SQL**.

COMPETITIONS AND PERSONAL PROJECTS

C-like Compiler | ***Haskell*** | ***Computer architecture***

- Consists of a **parser, type checker, and all other necessary components for a compiler**, all written in **Haskell**. Compiles small C-like programs to MIPS assembly.
- Writing this compiler required me to deepen my **computer architecture skills and low-level programming knowledge**.

LAMS Library | ***C*** | ***Rust*** | ***Linear Algebra*** | ***Probability & Statistics***

- Wrote an entire **L**inear **A**lgebra and **M**ultivariate **S**tatistics library; Has all necessary operations and functions for vectors, matrices, tensors, and distributions.
- Required me to deepen my knowledge about the math used for A.I and neural networks.

Neural Network from scratch | ***C*** | ***Python*** | ***Neural Networks***

- Written Neural Networks from scratch, both in C & Python, using my own **LAMS** library and **NumPy**.
- Tested and trained on simple data sets like MNIST as well as more complex and larger data sets such as time series from **Kaggle**.

Stock & Crypto Analysis | ***Python*** | ***C++***

- Different **A.I models in Python to predict** different stock prices based on parameters and price-suggestion models.
- Using the Flask framework for Python, I made a website that shows the predicted price for a stock in the future, using the **Black-Scholes model** and different A.I models.
- A analysis terminal program, called **st0nks**, which uses the **Black-Scholes stochastic modeling** for the evaluation and prediction. Using Python and the pandas library for data gathering and processing.