

RÓBERT LEÓ JÓNSSON

+354 772-1418 | robert.leo.jonsson@gmail.com |
linkedin.com/in/robert-leo | github.com/Robertleoj
An AI engineer specializing in computer vision.

Experience

AIVA (Computer Vision and Software Engineer) *Reykjavik, Iceland* September 2023 - present

- Real-time vision tasks with data from calibrated cameras, such as 3D pose estimation.
- Low-level C++ programming for hardware-synchronized image acquisition.
- Integrating these solutions into our product.
- Design and manage the PostgreSQL database.
- Design and implement data pipelines.
- Contribute to key business decisions.

Aha.is (AI and Software Engineer) *Reykjavik, Iceland* April 2021 - August 2023

- Demand prediction using neural network models.
- Data analysis, visualization and reporting.
- Database programming and design in MySQL.

Academic Work

Expediting Self-Play Learning in AlphaZero-Style Game-Playing Agents May 2022

A reinforcement learning paper from my Bachelor's thesis. Published in the 2023 European Conference on Artificial Intelligence (ECAI).

Education

Reykjavik University August 2020 - May 2023

BSc in Discrete Mathematics and Computer Science.

- Graduated top of my class with a grade average of 9.8/10.
- Dean's list for all semesters.

Personal Projects

Liver Cancer Segmentation using Deep Neural Networks December 2022

A one-week project where we applied semantic segmentation with a 2.5D convolutional U-net to locate liver cancer in CT scans.

Video Game in C++ with an AI Opponent March 2022

Fun board game implemented in C++, with an AI opponent implemented with Monte Carlo Tree Search.

Skills

AI and Machine Learning

I'm skilled in deep learning, and specialize in computer vision. My preferred stack is Python with PyTorch and OpenCV along with the rest of the scientific computing suite in Python (NumPy, Pandas, Matplotlib, Einops, etc). I usually use C++ with a binding library to implement performance-critical algorithms. I also have experience with reinforcement learning and natural language processing.

Mathematics

I have a strong background in mathematics, especially in discrete mathematics, linear algebra, multivariable calculus, and probability theory.

Software Engineering

Since my work has been in small companies, I have experience with a wide variety of software

engineering areas such as:

- Database design, programming, and management, mostly in MySQL and PostgreSQL.
- Data engineering.
- Concurrent programming (mostly in C++).
- Low-level programming in C++.
- Docker and Kubernetes.
- Backend programming in Python.

Product Development

Since I've worked in small companies, I've been involved in the entire product development lifecycle, from idea to production. I've been involved in key business decisions and product design.

Teaching

Calculus Teaching Assistant (Reykjavik University)

January - May 2024

In this course that covered single- and multivariable calculus, I held exercise sessions, graded assignments, and helped organize the course. I did this in my free time as a side job while working at AIVA.

Algorithms Teaching Assistant (Reykjavik University)

August - December 2023

Here I held exercise sessions, graded assignments, and helped organize the course.