
Justin Meimar

Systems Software Engineer

Edmonton, Alberta Canada meimar@ualberta.ca

University of Alberta - *BSc. Spec. Computer Science*

SEP 2021 - APRIL 2025

GPA: 3.7 / 4.0

Key Classes: Algorithms, Compilers, Software Engineering, Operating Systems, Computer Vision & ML

EXPERIENCE

Head Teaching Assisnt (Compiler Design) - *University of Alberta*

SEP - DEC 2024

- Teaching students about **LLVM**, **MLIR** and other compiler skills for the notorious CMPUT 415 course.

Compiler Summer Research - *Compiler Design Optimization Lab*

MAY - AUG 2024

- Researched modern compiler techniques such as copy patch for JIT compilation.
- Debugged and upgraded solution compilers to LLVM 18, introduced new dialects and lowerings.

Teaching Assistant (Computer Architecture) - *University of Alberta*

JAN - APR 2024

- Helped students learn and write **RISCV** assembly code.

Bits in Glass, Edmonton - *Full Stack Intern*

MAY - AUG 2023

- Developed an internal web tool in python and managed deployment on **Heroku** with **Docker**

PROJECTS

Hack GPT Edmonton - *1st Place*

JULY 2023

- Hackathon - Worked in a team of four to build an interactive information retrieval system for Real Estate listings using **Vector-Embeddings** and **LLM** (large language model) APIs.

Home Server - *System Administration*

JUNE 2023

- Managed a small server with **NGINX** to host services over SSH and HTTPs.

Gazprea Compiler - *1st Place*

FALL 2022

- Worked in a team of four to create a tournament winning compiler; focused on type-checking, type-promotion, and control flow implementation using **LLVM** IR-builder.

SKILLS AND TECHNOLOGIES

Skills: Fluent in UNIX - Strong written and verbal communication - Persistent problem solver

Tools: Git - CMake - Docker - Nginx - ANTLR - vim - ssh - gdb - valgrind

Languages: C/C++ - Python - JavaScript & TypeScript - Bash - awk - Rust - SQL