# Arman Drismir

#### EXPERIENCE

Navigation Lead Oct 2024 – Present

UBC Agrobot

Vancouver, CA

- Implemented a full-stack communication system using React, WebSockets, and ROS2, achieving sub-0.1s latency for remote robot control
- Developed Arduino code to control six motors, enabling precise speed and direction adjustments with real-time self-feedback for wheel alignment
- Achieved microsecond communication between the motor control, image data, manual driving, and autonomous driving subsystem using a ROS2 workspace with custom nodes

Software Engineer

SkillSync

Vancouver, CA

May 2024 – Jan 2025

- Optimized rate limiting middleware, achieving a 61x performance improvement by migrating to a local Redis cache, achieving an overall 30% reduction in latency for upstream services
- Developed gpt-broker, a scalable microservice with a REST API, centralizing all of our app's OpenAI usage
- Reduced the cost of dataset labeling by 50% and runtime by 70% using OpenAI's Batch API
- Implemented a CI/CD pipeline, resulting in reliable automatic deployments and saving  $\sim$ 6 hours of release related meetings a week
- Upgraded a Linked In job processing tool, reducing its runtime from  $\sim 18$  seconds to  $\sim 4.7$ , and improving its success rate from % 20 to % 100

# Front End Developer

Jan 2024 - Sept 2024

 $UBC\ AgroBot$ 

Vancouver, CA

- Redesigned the organization's website using a performant, reactive, and visually appealing React application
- Designed in Figma to create consistent themes and formatting as well as integrating feedback from the rest of the team

# Projects

Serene O | React, Redux, MongoDB, OAuth2.0, Twitter API

 $Jun\ 2024-Jul\ 2024$ 

- Data Hackfest winner out of 24 teams, built a web app that helps detect dangerous emotional patterns
- Upgraded Twitter authentication from v1.1 to v2 meaning users stay logged in between sessions
- Designed an interface that reacted to the user's timeline, changing color to convey different emotions

**Default Detector O** | Python, SvelteKit, scikit-learn, pandas

May 2024 – Jun 2024

- Model predicts defaults with an accuracy of 82% by running a tuned CatBoost classifier
- Improved models accuracy 7.3% using preprocessing and hyperparameter optimization
- Developed a machine learning classifier with an accompanying API and SvelteKit client

Chess Engine  $\bigcirc \mid C++$ , Algorithm Design, CMake, SFML

Jul 2023 – Sept 2023

- Developed a chess app in C++, using SFML to build the GUI and CMake to support multiple platforms
- Improved the chess engine's runtime 600x by optimizing the move generation algorithm
- Designed a  $\sim$ 1200 Elo rated chess engine using the mini-max engine with alpha-beta pruning

#### EDUCATION

# The University of British Columbia

Vancouver, CA

Bachelor of Arts in Psychology, Minor in Computer Science

Expected Jul 2026

• Courses: Data Structures & Algorithms, Matrix Algebra, System Design, Machine Learning

#### TECHNICAL SKILLS

Languages: Javascript, Typescript, Python, C/C++, SQL (Postgres), HTML/CSS, Erlang

Frameworks: React, FastAPI, ROS2, SvelteKit, Flask, Koa, Express.js

Developer Tools: Figma, Postman, Git, NGINX

Libraries: Redux, react-spring, SFML, pandas, scikit-learn, NLTK