# Simon Erlic

Software Engineering Student, Open Source Software Enthusiast, and Maker

#### **Education**

## **Bachelor of Software Engineering**

Sep 2019 - Aug 2025

University of Victoria

· Currently pursuing specializations in performance and scalability, and machine learning

# **Experience**

#### **Schneider Electric**

Jan 2024 - Aug 2024

Software Designer Co-op

- Wrote, debugged, and added features to an ASP.NET web application for monitoring electrical equipment and power solutions in industrial settings
- Improved developer experience by converting CI/CD workflows from Azure DevOps to GitHub Actions
- Wrote a web-based dashboard for the management of the team's CI/CD pipelines using .NET 8.0 and Blazor
- Participated in a company-wide hackathon, in which I wrote a locally run machine learning tool to assist in the identification and resolution of electrical health issues

### **Precision MicroDynamics Inc.**

Sep 2022 - Dec 2022

Junior Software Engineer

- Contributed to company R&D through researching, designing, and developing an OpenCV-based fiducial detection program for the automated measurement of distortion and calculation of calibration files for Ftheta lenses on an industrial galvoscanner CNC platform
- Improved remove procedure calling reliability by rewriting legacy RPC methods to utilize gRPC and Protocol Buffers for communication between machine operator software and the server software
- Modernized third party connectivity options through creating a **JavaScript** library for the communication between the server software and client web-based user interfaces
- Designed and implemented a CI/CD pipeline for server software using Buildbot and Docker

### **Projects**

#### **Prismatic**

- A mobile, open source, daily colour puzzle game developed in Dart
- Written using the Flutter framework along with native iOS and Android code to support multiple platforms
- Released on the Google Play Store and Apple App Store

#### **Brainlet**

- A web-based research tool that assists in the understanding of technical papers
- Utilizes a fine-tuned Llama3-based local large language model (LLM) to generate summaries and explanations of technical papers, and their concepts

# **Competitions**

#### **UVic Engineering Competition**

June 2023, October 2024

- · Organized and hosted the programming competition for the UVic Engineering Competition
- Designed the problem description for competition participants, and aided in the judging process

### **Skills**

Languages: Python, C++, C#, Dart, Swift, JavaScript, TypeScript, HTML, CSS

Frameworks: Flutter, React, NextJS, Unity, Unreal Engine, WPF, Blazor, .NET

Tooling: Git, Bash, Docker, Linux, OpenCV, gRPC, Azure DevOps, GitHub Actions, PyTorch, MLX