## Simon Erlic

Software Engineering Student, Open Source Software Enthusiast, and Self-Described Maker

## **Education**

### **Bachelor of Software Engineering**

Sep 2019 - Dec 2025

University of Victoria

· Current pursuing a specializations in Performance and Scalability, and Machine Learning

# **Experience**

## **Junior Software Engineer**

Sep 2021 - Dec 2021

Precision MicroDynamics Inc.

- Researched, designed, and developed an OpenCV-based fiducial detection program for the automated measurement of distortion and calculation of calibration files for F-theta lenses on an industrial galvoscanner CNC platform.
- Rewrote legacy RPC methods to utlize gRPC and Protocol Buffers for communication between machine operator software and the server software.
- Created 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**

July 2023 — Present

- A Mobile daily puzzle game developed in Dart
- The player is shown a colour and is tasked with finding its red, green, and blue constituent colours
- Uses the Flutter framework along with native code to support multiple platforms

## **Ducky Debugger**

April 2023

- A web-based dashboard that allows users to debug their code snippets using insight from an animated rubber duck
- Uses the OpenAI Chat LLM API to parse and respond to the user's code
- Uses the socratic method of asking questions to help the user debug their code

## **Minutemen VR**

June 2022

- A virtual reality game developed in Unity where the player takes the role of a Minuteman silo operator from the 1960s
- The player is tasked with maintaining the various systems in the silo in a timely manner, with more tasks being assigned as the game progresses.

# **Competitions**

### **UVic Engineering Competition**

June 2023

- · 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++, C#, Dart, Swift, JavaScript, TypeScript, HTML, CSS

Frameworks: Flutter, React, NextJS, Unity, Unreal Engine, WPF

Tools: Git, Bash, Docker, Linux, VSCode, OpenCV, gRPC