

Camille Walters

camille.h.walters@gmail.com | camillewalters.ca | github.com/camillewalters | in/camille-walters

EDUCATION

UNIVERSITY OF WATERLOO

BASC, MECHATRONICS ENGINEERING
Class of 2022

SKILLS

SOFTWARE DEVELOPMENT SKILLS

Web Development

- React
- Javascript
- Google Cloud Platform (GCP)
- Azure
- Go
- Hugo
- Terraforms
- CSS
- Ansible

Game Development

- C#
- Unity
- High-Level Shader Language (HLSL)

Other

- Docker
- Python
- C++
- C
- Java

OTHER TECHNICAL SKILLS

- User-centered design and UI/UX research
- Arduino
- ROS
- GPU programming
- Hardware prototyping
- Microprocessors and digital logic

SOFT SKILLS

- Adaptable and a fast learner
- Highly motivated and dependable
- Enjoys receiving and providing feedback
- Collaborative, curious and enjoyable to work with
- Proactive, forward-thinking and quality-oriented

EXPERIENCE

UNITY | SOFTWARE ENGINEER, SIMULATION

July 2022 - January 2024

- Worked on Simulation Pro, a cross-platform tool used for real-time 3D modeling for industry applications, with **ROS** integrations with **Unity** and **C#**.
- Used **Docker** to distribute builds, developed and used CI/CD for the product
- Developed a Unity package that emulates photosensors such as lidars and cameras, optimizing performance using **GPU programming** with HLSL and job systems, utilizing **Vulkan** bindings to support ray tracing on Linux, and non-visible wavelength support
- Connected **hardware components**, such as Velodyne and Ouster lidars, to simulation environment to compare simulated and measured data
- Initiated and established valuable partnerships throughout the company to evangelize the product, leading to product renewals and sales to high-profile clients, resulting in over **\$63,000** revenue
- Performed full stack development on a web application for simulation using **React**, **Azure** and **Terraforms** in a pod-style team structure

SOFTWARE ENGINEERING INTERN

April 2021 - September 2021

- Implemented an **automated testing** framework from the ground up in Unity Test Framework and **YAML** in **C#** for Reflect, a tool that generates interactive 3D models from architectural software

DEMATIC | VIRTUAL FACILITY EMULATION INTERN

January - December 2020

- Modelled warehouse logistics solutions with Unity and **C#**
- Created a tool to easily verify conveyor connectivity for straight, curved and helical conveyors using complex geometrical principles
- Designed and implemented an ergonomic graphical user interface including creating custom components using **XML**, **CSS** and **C#**
- Developed controller communications, including messaging handler, for emulation on a **RESTful API**
- Created integration and unit tests in Unity Test Framework (NUnit) for the REST handler

AUTOMATED PERFORMANCE TESTING CO-OP

April - August 2019

- Wrote, maintained and utilized **Ansible** scripts to remotely install builds on remote servers
- Created environment for automated testing using Jenkins to deploy Azure VMs, install software to be tested, run tests, and collect results

PROJECTS

LET'S SAIL | GCP, REACT, WebGL, UNITY, C#

This is a project to help beginners learn how to sail, including terminology, safety, and key procedures. The website is being created with GCP and React, while the graphical emulation is created with Unity.

EGGSTRAVAGANZA | UNITY, C#

This is a game developed with some of my coworkers at Unity. It is a top-down, multiplayer game. Developing this game helped me learn about networking and how to creating multiplayer games.