Cameron King

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EDUCATION

Memorial University of Newfoundland

Bachelor of Computer Engineering; GPA: 3.66

St. John's, Canada 2019 – 2024

EXPERIENCE

C-Core
Software Development Intern

St. John's, Canada

September 2023 - December 2023

- Developed C software for the Killick1 satellite, primarily in the form of creating telemetry requests to be sent to the ground station, and the processing of agenda items.
- Performed hardware testing on satellite, identifying and resolving hardware issues (FRAM failure, FPGA power difficulties, etc.) which may have led to an unsuccessful mission had they gone unnoticed.
- Successfully tested and integrated satellite software at the Canadian Space Agency, leading to a successful launch.

PragmaClin

St. John's, Canada

Back-end Development Intern

January 2023 - April 2023

- Developed a notification system for PragmaClin's PRIMS web app in C#, allowing for Parkinson's patients to be notified of upcoming appointments and surveys that track the progression of their condition.
- Created API calls, allowing for front-end developers to use patient information stored in a SQL Database.
- Helped identify and resolve multiple software bugs prior to an upcoming validation study.

HFU (Furtwangen University)

Furtwangen, Baden-Württemberg, Germany

Research Student

May 2022 - August 2022

- Performed literature search, reviewing findings of previous research on the topic of wake-up electronics.
- Performed systematic analysis of data produced by signals from a waveform generator that passed through various components which may be used within a wake-up circuit, reviewing outputs using an oscilloscope.
- Utilized MATLAB to modify .CSV data and convert them into .WAV files for simulating wake-up in LTSPICE.

PanGeo Subsea

St. John's, Canada

Co-op Engineering Student

June 2020 - August 2020, January 2021 - April 2021

- o Created a new digital documentation system for the organization of PanGeo Subsea Documentation.
- Performed testing on optical transceivers to ensure proper functionality in advance of an upcoming project.
- Created and managed electrical drawings of cables and PCBs using SolidWorks PCB.

PROJECTS & EXTRACURRICULARS

Senior Capstone Project – Automated Greenhouse Monitoring System

May 2023 - April 2024

- o Developed an off-grid, solar-powered greenhouse monitoring system for use at Labrador's Pye Centre.
- Helped configure various sensors and a Raspberry Pi Model 3B to monitor temperature, humidity, and soil moisture within a greenhouse and determine when to automatically water plants or ventilate the greenhouse.
- Led development of a web app built with React and Django where monitored greenhouse data could be remotely accessed by those at the Pye Farm.

Pacman++ Game

September 2022 - January 2023

- Built a custom engine using C++ and SFML to create a modern take on the classic game "Pacman" as part of the course "COMP 4300: Introduction to Game Programming".
- Implemented traditional gameplay mechanics such as collisions and enemy AI, while also adding additional features such as weapons, additional enemy types, a custom level editor, and a progressive difficulty system.

MUN Engineering Society A, Vice President of Finance

September 2020 - September 2023

• Managed finances for MUN Engineering Society A, planning student events and creating budget plans.

SKILLS

Languages: C#, C++, C, Python, Java, JavaScript, MATLAB

Tools & Frameworks: React, Azure, Django, SQL (MS SQL), SQLite, Linux, LLDB, Git, SVN, Godot