Kieran Hulsman

Software Engineering Student

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Languages: C/C++, Python, Java, JavaScript, HTML/CSS, Bash, Scala, Assembly, VHDL
Technologies: Git, AWS, Unix/Linux, Excel, OpenPyXL, LaTeX, MISRA-C, GTest, Valgrind

Education

University of Waterloo **Sep. 2022 – Apr. 2026**
Bachelor of Software Engineering, Honours (BSE) *Waterloo, Ontario*

- **cGPA: 89.6% (3.9/4.0)**
- **Dean's Honours List**: awarded in terms 1A & 1B
- President's Scholarship of Distinction: awarded to students upon admissions for academic excellence in high school

Experience

Data Analyst Intern **Jun. 2023 – Aug. 2023**
believeco:partners *Toronto, Ontario (part-time, remote)*

- Employed the **openPyXL** Python library to automate data validation and amalgamation of client lists in **Excel**
- Wrote scripts to comb through **Excel** sheets, and updated **2000+** clients in Function Point and QuickBooks Online

Lead Coding Instructor **Apr. 2023 – Aug. 2023**
Code Ninjas *Aurora, Ontario (full-time, on-site)*

- Served as a lead instructor, supporting the management of **15 staff members** in their day-to-day operations
- Played a pivotal role in driving company growth from **0 to 100+ clients** by conducting over **600 sales calls**
- Responsible for the setup and maintenance of **30 devices**, ensuring the smooth IT operations of the business
- Led **100+** educational coding sessions for children aged 5-14, teaching object-oriented programming, JavaScript and Lua
- Established and implemented the franchise's adminsitrative systems as the business' first full-time employee

Projects

ForAllTimes - Lounge Traffic Monitor | *Python, JavaScript, AWS, HTML/CSS, Git, Raspberry Pi*

- Developed a traffic counter with an accuracy rate of **90%**, enhancing student's ability to find quiet study spots
- Registered a Raspberry Pi as an **AWS IoT** device to send entry/exit data from our **ultrasonic sensors** to DynamoDB
- Integrated **DynamoDB** with Node.js backend to track the number of students in the lounge with CRUD functionality
- Implemented an **AWS Lambda** function in **Python** to process data from the **Raspberry Pi** and update the database
- Collaborated with the team using **Git** version control, contributing **39 commits** to our project's repository

Hangman Game | *Java*

- Developed a terminal-based hangman game using **Java**, incorporating colourful output and sound effects
- Implemented **object-oriented programming** techniques to effectively organize code and improve maintainability
- Enhanced user experience by optimizing graphics performance through the implementation of **multi-threading**
- Developed a shift cipher **encryption algorithm** using file **input/output** (I/O) to conceal phrases from the user

BeTreel - 1st Place, The Golden Hack | *JavaScript, HTML/CSS, Git*

- Developed a social media webpage resembling BeReal, providing daily user notifications for an engaging experience
- Encouraged users to share eco-friendly activities, fostering social accountability for a sustainable impact

Extracurriculars

Firmware Developer | *C, Git* **Sep. 2022 – Apr. 2023**
Formula Electric Design Team *University of Waterloo*

- Reduced the risk of unexpected behaviour by utilizing **MISRA-C** lint tools, ensuring code reliability
- Collaborated with other students on a code base of over **300 contributors**, developing familiarity with version control
- Enhanced the car's error handling by leveraging **CAN** signals to communicate error messages across 6 different boards

Software Engineering Class Representative **Jan. 2023 – Apr. 2023**
Engineering Society *University of Waterloo*

- Advocated for my **150-person cohort** within the Engineering faculty, actively participating in policy discussions
- Served on the Sponsorship Allocation Committee, distributing over **$8000** in funding to student design teams