Kieran Hulsman

Software Engineering Student

kieran.hulsman@uwaterloo.ca kieranhulsman.com





LANGUAGES: C/C++, Python, Java, JavaScript, HTML/CSS, VHDL

TECHNOLOGIES: Git, Unix, AWS, GTest, MISRA-C

PROJECTS

For All Times

Oct 2022 - Jan 2023

- Created a study space traffic counter in the Software Engineering lounge to make finding a quiet study spot easier
- Used git by pushing 39 commits to our project's repository to integrate code with the rest of the team
- Registered our Raspberry Pi as an AWS IoT device to send entry/exit data from ultrasonic sensors to the cloud
- Implemented an AWS <u>Lambda</u> function to process data from the Raspberry Pi and update a database with <u>Python</u>
- Used <u>DynamoDB</u> to keep track of the number of people in the lounge, which our front-end displayed on the website

Hangman Game

Mar 2021 - Apr 2021

- Created a terminal-based hangman game using <u>Java</u>, which incorporated colour and sound
- Implemented <u>object-oriented programming</u> techniques to organize code and increase maintainability
- Improved UX by decreasing graphics lag using multi-threading to run processes concurrently
- Built a shift cypher encryption algorithm to hide phrases from user with file I/O

BeTreel - 1st Place, The Golden Hack

Sep 2022

- Developed a webpage for a social media platform which mimicked BeReal by notifying users once per day
- Prompted users to post themselves completing eco-friendly activities by leveraging social accountability

EXTRACURRICULARS

Formula Electric Design Team

Sep 2022 - Present

University of Waterloo

- Decreased the risk of unexpected behaviour by using MISRA-C lint tools
- Collaborated with other students on a large pre-existing code-base, developing familiarity with version control
- Improved the car's error handling capabilities using CAN signals to sent error messages to different boards on the car

Software Engineering Representative, Engineering Society

Jan 2023 - Present

University of Waterloo

- Represented my cohort in Engineering faculty by advocating for and voting on policies
- Reviewed design team sponsorship requests on the Sponsorship Allocation Committee

VOLUNTEERING

Political Canvassing, Liberal Party

Aug 2021 - Jun 2022

125 volunteer hours

- Developed logistical skills by leading canvassing teams for federal and provincial elections
- Improved communication skills by speaking to constituents their top concerns

Volunteer, YMCA

Nov 2018 - May 2019

145 volunteer hours

• Honed teamwork skills by running weekly basketball and volleyball games with staff and other volunteers

EDUCATION

University of Waterloo

(Sept 2022 - April 2027)

Software Engineering, Honours (BSE)

• GPA: 89.5% (3.8/4.0)

Lawrence Park C.I., Toronto

(Sept 2018 - June 2022)

Honours Certificate of Bilingual Studies, French Immersion

• Grade 12: 99.2%