





# Kieran Hulsman

Software Engineering Student

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**Languages:** JavaScript, Python, C/C++/C#, MySQL, TypeScript, Java, HTML/CSS, Scala, Bash, Assembly

**Technologies:** Node, React, AWS (Lambda/DynamoDB/S3), Flask, Express, Tailwind CSS, Git, Unix/Linux

## Education

### University of Waterloo

Sep. 2022 – Present

Bachelor of Software Engineering, Honours (BSE)

Waterloo, Ontario

- **cGPA: 90% (3.9/4.0)**
- **Dean's Honours:** awarded in terms 1A & 1B for academic distinction
- Relevant coursework: data structures and algorithms (**C/C++**), compilers (**Assembly/Scala**)
- Class representative: Engineering Society, Software Engineering Society, Mathematics Society

## Experience

### Software Developer

Sep. 2023 – Present

 [WAT.ai](https://w.atl.ai)

Waterloo, Ontario

- Developing a **machine learning** model with a graduate researcher to forecast office building energy demands
- Gaining exposure to **machine learning** concepts by actively participating in weekly **50-person** team meetings

### Data Analyst Intern

Jun. 2023 – Aug. 2023


 [believeco:partners](https://believeco.com/partners)

Toronto, Ontario (remote)

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

### Lead Coding Instructor

Apr. 2023 – Aug. 2023

 [Code Ninjas](https://code-ninjas.ca)

Aurora, Ontario

- Served as lead instructor, supporting the management of **15 staff members** in their day-to-day operations
- Led **100+** educational coding sessions for children aged 5-14, teaching object-oriented programming, JavaScript and Lua
- Played a pivotal role in driving company growth from **0 to 100+ clients** by conducting over **600 sales calls**
- Ensured the smooth IT operations of the business by setting-up and maintaining the fleet of over **30 devices**

### Software Developer

Sep. 2022 – Apr. 2023

 [Formula Electric Design Team](https://formulaelectric.com/design-team)


Waterloo, Ontario

- Developed familiarity with version control and **Git CLI** commands by working in a code base with **300+ contributors**
- Enhanced the car's error handling capabilities by leveraging **CAN** signals to broadcast signals across 6 boards using **C**
- Reduced the risk of unexpected behaviour by utilizing **MISRA-C** lint tools to increase code reliability

## Projects

 **Flashify - 1st Overall, Golden Hack 2023** | *React, Flask, MySQL, JavaScript, Python, AWS S3, Tailwind CSS*

- Created a web application that leverages AI to transform user-uploaded handwritten notes into interactive flashcards
- Developed API endpoints to query a **SQL** database from **Flask** backend, enabling the site's **CRUD** functionality
- Designed flashcard components in **React** with **Tailwind CSS**, incorporating animated card-flipping features
- Utilized **OpenAI's API** to generate question-answer pairs from OCR-parsed user-uploaded images stored in **AWS S3**
- Implemented an authenticated login system to relationally store flashcard decks with users' accounts in a **SQL** database

 **PlanMyWeekend - AI Itinerary Planner** | *Node, React, Express, JavaScript, TypeScript, Tailwind CSS, OpenAI API*

- Deployed an application that leverages **OpenAI's API** to plan engaging weekend itineraries tailored to users' cities
- Developed a **Node** backend using **Express** to facilitate API requests from my **React** frontend written in **TypeScript**
- Utilized a web-scraping API to gather real-time information on upcoming events and activities in the user-inputted city

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

- Developed a traffic counter with an accuracy rate of **90%**, making it easier to find quiet places to study
- Implemented an **AWS Lambda** function in **Python** to process data from a **Raspberry Pi** and update DynamoDB
- Integrated **DynamoDB** with a **Node** backend to track the number of students in a lounge with CRUD functionality
- Leveraged MQTT protocol to send entry/exit **ultrasonic sensor** data from Raspberry Pi to AWS Lambda function