# Kieran Hulsman

Software Engineering Student

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**Languages:** JavaScript, Python, C/C++, SQL, TypeScript, Java, HTML/CSS, Scala, Bash, Assembly **Technologies:** React, Node, AWS (Lambda/DynamoDB/S3), Flask, Express, Axios, Git, Unix/Linux

#### Education

### University of Waterloo

Sep. 2022 - Present

Waterloo, Ontario

Bachelor of Software Engineering, Honours (BSE)

- cGPA: 91% (3.9/4.0)
- Engineering Dean's Honours: awarded in 2A term for achieving in the top 10% of Software Engineering program
- Relevant coursework: data structures and algorithms (C/C++), compilers (Assembly/Scala)
- Class representative: Engineering Society, Mathematics Society, Software Engineering Society

## Experience

#### Software Developer Intern

Jan. 2024 - Apr. 2024

☑ Ollon – 'Outstanding' co-op rating

Toronto, Ontario

- Worked fullstack on two live projects, developing React components, Express backend routes, and SQL queries
- Personally contributed over 20,000 lines of code across 150 pull requests, reviewed for quality by senior engineers
- Implemented key document upload feature with React (TypeScript) and Node (JavaScript), storing files on SMB
- Developed landing page in React with custom Google Analytics event tracking to gain insights into user behaviour

# **Lead Coding Instructor**

Apr. 2023 - Aug. 2023

✓ Code Ninjas – 'Outstanding' co-op rating

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

Waterloo, Ontario

- Developed familiarity with version control and **Git CLI** commands by working in a code base with **300+ contributors**
- ullet Enhanced the car's error handling capabilities by leveraging  ${f CAN}$  signals to broadcast signals across 6 boards using  ${f C}$

### **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