Kieran Hulsman

Software Engineering Student

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

Education

University of Waterloo

Bachelor of Software Engineering, Honours (BSE)

- cGPA: 92% (3.9/4.0)
- Engineering Dean's Honours: awarded for achieving a GPA in the top 10% of the Software Engineering program
- Relevant coursework: Data Structures & Algorithms, Databases, Compilers, Object-Oriented Programming (OOP)

Experience

Z Bank of America – Merrill Lynch

Software Developer Co-op

- Worked on the Prime Brokerage Risk Team to calculate risk metrics of financial instruments in Python
- Designed a priority queue to correct the processing order of critical margin batches as part of a key production release
- Engineered a scalable streaming architecture migration with pub-sub messaging queues to enhance platform resiliency
- Acquired foundational knowledge of financial markets to align technical solutions with business needs

🖸 Ollon

Software Developer Co-op – 'Outstanding' co-op rating

- Worked fullstack on two live projects, developing **React** components, **Express** backend routes, and **SQL** queries
- Personally contributed **20,000 lines** of production-level code across **150 pull requests** on two live projects
- 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

🖸 Code Ninjas

Lead Coding Instructor – 'Outstanding' co-op rating

- 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**

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

☑ Snacks-n-Daqs - Social Travel Planning | MySQL, Python, Node, React, TypeScript

- Facilitated group travel planning by connecting users based on shared destinations, dates, and demographics
- Developed **complex SQL queries** to generate analytics on popular destinations, trip durations, and user demographics
- Automated data generation using **Python** scripts to populate production datasets with realistic user data
- Enabled trip creation and account management through intuitive \mathbf{CRUD} operations powered by \mathbf{Node} API routes

🗹 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
- Engineered a Node backend using Express to facilitate API requests from a 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

Hobbies

Road Cycling, Rock Climbing, and Hot Yoga keep me energized, focused, and ready to tackle new challenges

Toronto, Ontario

Apr. 2023 – Aug. 2023

Engineering program

Waterloo, Ontario

Sep. 2022 – Apr. 2027

Sep. 2024 – Present

Toronto, Ontario

Jan. 2024 – Apr. 2024

Aurora, Ontario