SHUBH SEHGAL

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EDUCATION

B.Eng. Electrical Engineering | McMaster University *September 2018 – April 2023*

- Currently in year 4 of a 5-year Electrical Engineering (co-op) major
- Pursuing a minor in Computer Science
- Relevant Courses
    - COMPENG 2SI4 – Data Structures and Algorithms (Java)
    - COMPENG 2SH4 – Principles of Programming (Java, C, and Object-oriented programming)
    - ENGINEER 1D04 – Engineering Computation (Python)

SKILLS

Programming: Python, Java, C/C++, JavaScript, HTML, CSS, SQL, MATLAB

Tools/Frameworks: Amazon Web Services (AWS), Vue.js, Git, GitHub, Postman, Jira, Selenium, Linux, RESTful APIs

WORK EXPERIENCE

Software Engineer Intern | Evertz Microsystems *May 2021 – Present*

Python, AWS

- Contributed to the development of Evertz.io, a cloud-based **SaaS** product that utilizes **AWS**
- Responsible for creating **REST API** methods with **Python** for client billing and account services
- Wrote unit tests for API methods using **Pytest** and performed end-to-end testing with **Postman**
- Modified **AWS CloudFormation** templates to create resources such as **IAM** policies, roles, and lambda functions
- Increased efficiency of deploying microservices by automating the process for creating **DynamoDB** Global Tables

EXTRA-CURRICULAR ACTIVITIES

Technical Executive | DeltaHacks *June 2020 – Present*

JavaScript (Vue.js), HTML, CSS

- Created components for the hackathon's website per the design team's mock-ups with **Vue.js, HTML, and CSS**
- Optimized the applicant review process for judges by adding an application filter feature in the marking portal, thus increasing marking efficiency by 30%
- Pushed and merged local changes to the code using **Git** and **GitHub**
- Effectively managed time to meet deadlines for deliverables on a tight schedule

PROJECTS

Fatigue Detector | DeltaHacks Hackathon

Python, OpenCV

- Worked in a team of four to create a **Python** application to prevent impaired driving due to fatigue
- Used the **OpenCV** library to monitor a driver's face with webcam input and send warnings when actions correlated to tiredness were detected

Autonomous Arduino Car | Personal

C/C++, Arduino

- Designed, built, and programmed an autonomous vehicle with the ability to detect and avoid obstacles
- Utilized an Arduino microprocessor to control the device and an ultrasonic sensor for environmental awareness
- Programmed the planar autonomous motion and object detection functions in the Arduino language **(C/C++)**

Investment Tracker | Personal

Python, Selenium

- Developed an application that automates Google Chrome to display stock market conditions to an investor
- Automatically navigates to the webpage corresponding to the user's market watchlist, and fills in login credentials using **Python** and **Selenium**