SAQIB ALI

647-561-7949　　s248ali@uwaterloo.ca　　saqib-ali　　SaqibA1i　　saqibali.ca

TECHNICAL SKILLS

Languages: C++, JavaScript, Java, HTML, CSS / SASS, Python, TypeScript, SQL
Technologies: React, Springboot, Express, Node.js, MongoDB
Tools: Elastic Stack, Docker, Git, Bash, Postman, Kubernetes, Kong (API gateway), Keycloak (Identity Provider), Jenkins

WORK EXPERIENCE

CGI Inc. Backend Developer　**Markham, Ontario**　　　　　　　　　　　**May 2021 – Aug 2021**
- Pioneered the creation of a backend server using **Express.js** to scrape and process metrics from the **Keycloack Identity Provider**, integral to the operation of company-wide services.
- Engineered an internal service using **Python** scripts to automate the warehousing of **Elastic Stack** logs, resulting in the reduction of backup time by *80%.*
- Utilized **Java** with **Spring** interceptors to implement Role Based Access Control (RBAC) to a web application, ensuring authorized users have access to specific services.
- Spearheaded a full technical redesign of making updates to the API gateway by utilizing the **Deck** tool integrated into a **Jenkins CICD** pipeline, increasing team efficiency by reducing **50%** of the time spent making updates.

Open Text Fullstack Developer　Waterloo, Ontario　　　　　　　　　　　**Sep 2020 – Dec 2020**
- Rebuilt a website to showcase UXD team icons using **React** and **JavaScript**, drastically reducing site load times by **97%.**
- Led the development of an icon management system utilizing **React.js**, **Java**/**Spring** which allowed **CRUD** operations for the efficient management of image files.
- Implemented build automation using **Team City** for the further manipulation of icons as part of **CICD** enabling programmatic access through npm packages and adding version control.

WeWork Software Engineering Intern　**Toronto, Ontario**　　　　　　　　　**Jan 2020 – Apr 2020**
- Architected a **REST API** using **MongoDB** and **Express** to upload user media, with user interaction through **VueJS.**
- Spearheaded the development of scripts using **Node.js** to test the functionality of user creation and deletion.

PROJECTS

Sorting Algorithms Visualizer **sort-app.netlify.app/** *React, Typescript, Sass*
- Developed a web interface to visualize the progress of famous sorting algorithms like: Merge Sort, Quick Sort, Insertion Sort etc. to help students better understand their underlying logic.
- Harnessed **TypeScript** to employ static typing and assist with debugging.

Graph Traversal Algorithms Visualizer **graph-algorithm.netlify.app/** *React, TypeScript, Sass*
- Engineered an interactive 2D graphical interface using **React** for visualizing different graph traversal algorithms.
- Implemented Breadth First Search and Depth First Search

Grades Tracker Web App **qalculater.netlify.app/** *MongoDB, Express, React, Nodejs, PassportJS*
- Engineered a full stack web app that allows users to effortlessly keep track of their grades, streamlining the process of entering grades and saving students over *65%* of their time when compared to doing so manually.
- Architected a **REST API** using **Express** and **Node.js** which served backend functionality to the **React** frontend.
- Implemented user authentication using **PassportJS,** allowing for secure access to user information stored in **MongoDB.**

PlayStation 5 UI for Windows OS **youtube.com/** *Python, Kodi*
- Developed a PlayStation 5 UI for **Linux** and **Windows OS** to launch games using **Kodi**.
- Harnessed **Python** scripts to implement core system functionality such as launching, managing games, and allowing for **CRUD** like functionalities.

EDUCATION

BAsc, Computer Engineering, **University of Waterloo, Waterloo ON**　　　　**Sep 2019 – Apr 2024**
- **Relevant Courses**: Algorithms & Data Structures, Systems Program & Concurrency