# Laeek Ahmed Shaikh

#### Computer Science Student, Aspiring Software Developer and Data Engineer

+1 (365) 833-4021 • linkedin.com/in/laeek-ahmed • laeek385@gmail.com • portfolio • github.com/LaeekAhmed

# **Education**

# B.A.Sc. Honors, Computer Science (Co-op) - McMaster University

- GPA: 3.8/4.0
- Awards: Term Honours Dean's Honour List, The McMaster University Award of Excellence.
- Participated in 3 hackathons, securing category awards in 2.
- Relevant Courses: Data Structures Algorithms, Object Oriented Programming, Databases, Software development

# Technical Skills

Languages Python, C/C++, SQL, Bash, Java, TypeScipt/JavaScript, GraphQL, HTML/CSS Libraries/Frameworks Express with Node.js, React.js, Next.js, Tkinter, SQLite, Matplotlib, Tailwind

Tools GCP, Git/GitHub, Docker, WSL, Linux, Terraform, MongoDB, SQLite, Postgres, Jupyter, Insomnia

Big Data Airflow, Spark, BigQuery, Dbt, Dataproc, Kafka, Hadoop, Hive, Looker studio

# Work Experience

### **Teaching Assistant - McMaster University**

Hamilton, Ontario

Expected Graduation: May 2025

- Conducted weekly tutorials on C, bash, LaTeX, and git, enhancing students' understanding of the material.
- Supervised 60+ students from 2 different classes simultaneously in coordination with professors and fellow TAs.
- Demonstrated strong debugging abilities to resolve various challenges and simplify the learning process.

### Web Developer - Tech Team McMaster MSA

Dec 2022 - April 2023

June 2023 - Present

#### Hamilton, Ontario

- Contributed to the development of an interactive application leveraging **React.js** and **Express.js** with **TypeScript** for the club's monthly game tournaments.
- Delivered user-centric features such as rankings and player challenges, facilitating online interactions between **50**+ club members.
- Improved reliability by validating and optimizing RESTful and GraphQL APIs using testing tools like Insomnia.

# **Projects**

### NoteSpot - Note sharing Application /

- Built a **full stack** Web-App/Online Library based on the **MVC** pattern, enabling users to share, download, & upload Notes/Books as large as 20 MB.
- Set up AWS S3 and MongoDB Atlas as the database to efficiently store and manage files and their metadata.
- Implemented secure authentication through Auth0, enabling user management and preventing unauthorized access.
- Designed a robust RESTful API using Express.js facilitating seamless execution of various CRUD operations.

#### TTC delay data analysis /

- Developed an efficient ETL workflow to extract and evaluate 130K + delay records from TTC buses, subway trains, and streetcars.
- Executed jobs on Apache Spark clusters setup using Dataproc to perform comprehensive data transformations.
- Crafted impactful Looker Studio dashboards for insightful visualization, enabling data-driven decision-making.
- Leveraged **Terraform** and **Airflow** to deploy and dismantle infrastructure, yielding a significant **25**% reduction in computing costs.

#### Flypedia - flight status tracker /

- Set up Next.js apps router to build a flight status tracking website utilizing React's latest features
- Integrated real-time flight details from the Airlabs API to provide comprehensive information on 3000+ flights
- Implemented efficient caching techniques, significantly reducing API calls, resulting in 50% cost savings and faster response times for users

#### **Data-Base Management System** /

- Designed a DBMS for a hospital using Python and SQLite to automate and simplify record management.
- Improved the user experience by creating a **GUI** for the system using Python's **Tkinter** library.