Akshay Vakil

437-241-2221 | akshayvakil593@gmail.com | LinkedIn | Portfolio

EDUCATION

Toronto Metropolitan University (Formerly Ryerson University)

Toronto, ON

Bachelor of Science with Honors in Computer Science

April 2026

• Relevant coursework: Data Structures, Algorithms, Database Systems, Web Development, Intro to UNIX, C and C++, Operating Systems, Intro to Software Engineering, Discrete Mathematics

Relevant Experience

Front End Engineer

November 2023 – February 2024

Carib Farm

Waterloo, ON

- Built responsive web app with React, React Router, and HTML/Tailwind CSS, increasing user engagement by 25%
- Optimized performance via lazy loading, React.memo, and client-side rendering techniques, cutting load times by 40% across all pages
- Created **Storybook** component library and UI documentation, boosting team velocity by 40%
- Implemented React Query and custom hooks for data fetching, reducing code duplication by 30%
- Enhanced SEO with meta tags and integrated Google Analytics, driving 30% traffic growth
- Collaborated with UI/UX team to implement responsive designs using Figma specifications

PROJECTS

Space Simulator X

December 2023 – August 2024

Lua, Data Structures and Algorithms — ROBLOX Video Game

Game Link

- Developed and published a game with 5,000+ monthly users, 10,000+ visits, and generated \$1,000+ USD.
- Built a scalable codebase using **OOP principles** and managed player data with **Data Stores** for **10,000+ users**.
- Developed a **secure trading system** using **encapsulation** and **attributes** to track user inventory states, preventing data loss.
- Increased session times by 3-5 minutes, placing the game in the 90th percentile for engagement

RateMyClasses December 2024

MongoDB, Express, React, Node, Postman, Docker — Fullstack Application

Application Link

- Developed a full-stack web app for course reviews at **Toronto Metropolitan University** using **MongoDB** to store users and courses.
- Created 2 data models and implemented **GET**, **POST**, **DELETE** backend functionality.
- Created and developed a **REST API**, with over **10+** routes, parsing **JSON** data to handle various user requests such as creating, reading, updating, and deleting course reviews.
- Utilized **Docker** to ensure consistent development and integration across platforms.
- Developed a responsive UI with **framer-motion** and **GSAP** for smooth animations and dynamic review displays.

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, HTML/CSS, Lua, Java, C

Frameworks/DB: MongoDB, Oracle, PostgreSQL, ReactJS, Next.js, Bash, Express, REST, Node.js

Developer Tools: Git, GitHub, Docker, AWS, VS Code, Azure, Netlify, DevOps, Jira