

Mohamed Ebraheem

Mississauga, ON | 647-767-6066 | ebraheemohamed26@gmail.com | github.com/MohamedEBR | mohamedebr.com

EDUCATION

University of Toronto Mississauga

B.Sc. Computer Science — Major in Mathematics, Information Security Specialist

Mississauga, ON

Expected Apr 2028

EXPERIENCE

Associate Software Engineer

Aug 2025 – Present

UTM MCSS (Mathematics & Computational Sciences Society)

Mississauga, ON

- Building student-facing applications with **secure engineering**, **REST APIs**, and **LLM**-powered features.
- Built an **LLM-powered Discord assistant** for student registration, accessibility (DM flows/role replies), and **mentor scheduling**.
- Implemented prompting, retrieval hooks, and guardrails (rate limiting, validation, structured logs) for reliability and safety.
- Improved the **MCSS website** (usability, responsiveness, performance) and contributed to agile planning and PR reviews.

Web Developer

Jun 2024 – Present

Panacea Karate Academy

Mississauga, ON

- Developed a full-stack membership platform (**React + Material UI; Spring Boot + PostgreSQL**) for members, students, and programs.
- Implemented **JWT auth** and **RBAC** (USER/SUPER_USER) aligned with **OWASP**; centralized errors and input validation.
- Automated monthly billing via **Stripe Checkout** + webhooks with **SendGrid** receipts; enrollments activate only after payment.
- Layered **REST API** (Controller→Service→Repository→Entity/DTO); fixed JSON recursion/JPA immutability; added **audit logging**.
- Dockerized services for consistent environments, cutting setup/deploy time by **50%**.

Web Development Lead

Aug 2025 – Present

UTASR — University of Toronto Autonomous Scale Racing

Toronto, ON

- Led a team of **5–6 developers**; ran sprint planning, backlog grooming, code reviews, and release coordination.
- Partnered with ML/hardware subteams to design a role-based UI for **autonomous car dataflows** from edge → cloud storage → website.
- Implemented **role-based authentication** and dashboards for both **historical** telemetry and **streaming** data views.
- Shipped accessible, responsive **React + Tailwind** components and performance views under tight 2-week sprints.

PROJECTS

DiscoverMyUni (Team of 6)

Django, Docker, Web Scrapers, ML-assisted Parsing

- Built Django backend models/views and templated UI for searchable, filterable UTM club/event data.
- Integrated scrapers for **Discord**, **Instagram**, and club sites; supported ML pipelines to classify and de-duplicate events.
- Applied agile workflows with GitHub issues, branches, and pull requests; packaged with **Docker** for reproducible deployment.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript/TypeScript, SQL, HTML, CSS

Frontend: React (Material UI), Tailwind, Django templates

Backend: Spring Boot, Django, REST APIs

Databases: PostgreSQL, MongoDB, Firebase

DevOps/Tools: Docker, Git/GitHub, Postman, Netlify, Railway/Fly.io

Security: RBAC, JWT, authentication, input validation, OWASP practices

ML/AI Exposure: Python (NumPy, Pandas, scikit-learn), data preprocessing, web scraping for datasets