

Karanvir Heer

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SKILLS

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

Technologies & Frameworks: React, Node.js, PostgreSQL, Docker, Selenium, JMeter, Git, Postman

EDUCATION

Toronto Metropolitan University

Bachelor of Science in Computer Science with Co-op, 3.8 GPA

Toronto, ON

Sep. 2020 – Apr. 2024

EXPERIENCE

Junior Software Engineer Co-op

Jan. 2023 – Aug. 2023

Ontario Ministry of Children, Community and Social Services

North York, ON

- Automated role-based login flows using Java and Selenium, preventing production misrouting bugs and increasing test coverage across 500,000+ users.
- Reduced test suite runtime by 45+ seconds by integrating Mailinator API for dynamic email verification during onboarding tests.
- Created maintainable, parameterized Selenium flows for different user types and built documentation to support future framework development.
- Load-tested high-traffic messaging APIs using JMeter and verified message delivery and UI behavior across varied user journeys.
- Authored self-serve onboarding videos and guides for JMeter workflows and Selenium test setup, reducing support dependency for new hires.

Identity and Access Management Analyst Co-op

May 2021 – Dec. 2021

Enbridge

North York, ON

- Coordinated 2FA rollouts and password reset compliance across 3 countries to help avoid multi-million dollar fines under TSA cybersecurity mandates.
- Tracked daily compliance of offshore and local teams, submitting summary reports to leadership while hitting personal and team-level quotas.
- Simulated internal social engineering attempts to audit service desk protocols, identifying a verification gap that led to new security training.
- Collaborated across security, IT, and audit teams to escalate high-risk non-compliance cases before the final reporting deadline.

PROJECTS

Statflix | *JavaScript, React, PostgreSQL, Docker, TMDb API*

Website **GitHub**

- Developed a full-stack web app to analyze Netflix viewing history, computing personalized insights like binge streaks, top genres, and total watch time.
- Built a fuzzy title-matching algorithm to normalize noisy CSV inputs and achieve over 95% accuracy in mapping to TMDb metadata.
- Designed a dynamic caching layer using PostgreSQL (dev) and SQLite (prod) to store 32k+ titles, reducing redundant API calls and enabling faster runtime.
- Implemented real-time progress tracking with frontend polling and console-style debug logs to improve UX during long-running parsing tasks.

Student Marketplace | *JavaScript, React, Java, Spring Boot*

Website **GitHub**

- Developed a full-stack campus marketplace platform enabling students to list, browse, and manage second-hand items across multiple categories.
- Designed and implemented user authentication with session-based access control for posting, editing, and managing listings.
- Enabled image uploads and implemented listing management with backend form validation and simple database schema normalization.

INTERESTS

Violin (RCM Level 4), Running, Weightlifting, Gaming, and Reading (Fantasy & Mystery)