Nelith Ranaweera

\$\lambda\$ 289-981-0671 | ■ nranawee@uoguelph.ca | In linkedin.com/in/nelith-ranaweera | \$\mathbf{Q}\$ github.com/lee-ranaweer | \$\mathbf{Q}\$ nelith.dev

EDUCATION

University of Guelph

2021 - 2026

Honours Bachelor of Computing (Software Engineering)

Guelph, ON

EXPERIENCE

Undergraduate Research Intern

May 2025 – Present

Guelph, ON

University of Guelph - SVI Lab

- Documented, developed, and maintained a Node.js application for assessing human colour differentiation in controlled experiments.
- Built REST APIs to handle experiment configuration, data collection, and result storage in an SQLite database.
- Participated in weekly code reviews to ensure alignment with research goals and maintain code quality.
- Collaborated with researchers to develop software tools supporting data collection, analysis, and visualization in colour vision studies.

Undergraduate Teaching Assistant

September 2024 – December 2024

University of Guelph

Guelph, ON

- Providing academic support and clarifying course material for students through email, forums, and office hours.
- Grading course deliverables, ensuring consistent and fair application of grading rubrics.
- Leading lab sessions to provide hands-on guidance to reinforcing key concepts taught in lectures.

PROJECTS

Fullstack Job Search Application | Docker, Spring Boot, MySQL, Python, Java, React, JavaScript, Google Maps API

- Created a web scraper using Python's BeautifulSoup library to scrape job listings from Indeed, LinkedIn, and the Canadian Job Bank.
- Built a REST API in Java to handle job search queries, saved listings, and front end data requests.
- Integrated a MySQL database for persistent data storage of scraped jobs, supporting queries for retrieving filtered lists of jobs based on user search inputs.
- Utilized Docker to containerize the application, ensuring a consistent environment during deployment across different devices.
- Developed a responsive React front end that lets users search for jobs by location, role, and salary, and display listings on Google Maps.

Pokemon TCG Portfolio App | Flutter, Dart, Firebase, Firestore, Android, iOS, Pokémon TCG API

- Developed a cross-platform mobile app for managing personal Pokémon TCG collections, for Android and iOS.
- Integrated the Pokémon TCG API to fetch real-time market prices, card rarities, and set details.
- Implemented custom features such as deck building, wishlists, advanced filtering, and portfolio value tracking.
- Used Firebase and Firestore for real-time database updates and user authentication across devices.

Molecule Display Interface | C, Python, SQLite, HTML, CSS, JavaScript

- Built a comprehensive library in C to facilitate the creation, representation, and manipulation of molecules.
- Integrated an SQLite database for efficient storage, management, and retrieval of customized molecule data.
- Developed a user-friendly GUI using HTML, CSS, and jQuery to display custom molecules on a web server.

TECHNICAL SKILLS

Languages: C, Python, Java, C#, JavaScript, Dart, SQL, HTML/CSS

Frameworks: React, Flutter, Spring Boot, JUnit

Methodologies: Unit Testing, Object-Oriented Programming, CI/CD Pipelines

Developer Tools: Git, Docker, Firebase