

Omar Elasar

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EDUCATION

Bachelor of Science in Computer Science, Software Engineering Stream (Co-op) *Expected 2026*
Carleton University *Ottawa, ON*

- **CGPA:** 11.57/12.0 (A), *Third Year Standing*
- **Courses:** Systems Programming, Software Engineering, Web Applications, Relational Databases, Data Structures & Algorithms, Object-Oriented Programming, Programming Paradigms, Discrete Structures
- **Achievements:** Minor in Statistics, Deans' Honour List 2024, Golden Key International Honour Society

SKILLS

Languages: Java, C/C++, Python, SQL, JavaScript, HTML/CSS, Haskell, Go, Bash, Genero, R
Developer Tools: Git, GitHub/GitLab, Node.js, Linux (Ubuntu), PostgreSQL, SQLite, JSON, Vim, Confluence
Concepts: REST APIs, OOP, Machine Learning, Concurrency, IPC, TCP/UDP, Docker, Jira
Competencies: Verbal and Written Communication Skills, Detail Oriented, Problem-Solver, Initiative, Leadership

EXPERIENCE

Full Stack Software Developer (Co-op) Jan 2025 – Present
Versaterm Public Safety Inc. *Ottawa, ON*

- Enhanced system functionality by developing and optimizing features for the US Record Management System (RMS) project using **Genero**, **SQL**, **PostgreSQL**, and **GitLab** for version control.
- Collaborated with cross-functional teams via **Jira**, **Confluence**, and **Git** to track progress, resolve issues, and document technical solutions after troubleshooting and **debugging** system issues.

Mission Scientist Jan 2025 – Present
Canadian Space Agency *Remote*

- Optimized and enhanced legacy **Python code** for cleaning SWOT satellite data by **automating** data validation and transformation, achieving an **80% increase** in data processing efficiency.

Test Automation Engineer Sep 2024 – Present
Qurani *Remote*

- Conducted rigorous **testing** and **debugging** of an educational **Android app** by performing tests across multiple devices and versions, reporting **15+ bugs** to developers, resulting in improved functionality and reliability.
- Designed and implemented **test cases** by developing **manual** and **automated testing** procedures using **Python frameworks**, increasing test coverage and enhancing the application's overall reliability.

Computer Science Teaching Assistant Sep 2024 – Dec 2024
Carleton University *Ottawa, ON*

- Guided **50+** students in mastering **software engineering** by offering personalized office hours, detailed feedback, and interactive labs, resulting in a **50%** increase in coding proficiency.
- Assisted students in **troubleshooting** and optimizing **Python** codebases through targeted guidance and problem-solving strategies, prompting a **70%** reduction in error rates.

PROJECTS

MyPal | *Java, JavaScript, SQL, REST API, Twilio, Git, HTML/CSS* Jan 2025 – Ongoing

- Founded and developed a **full stack application** to address a consumer need for a text-based reminder software while providing a user-friendly web app using **JavaScript** and **HTML/CSS** for the **front-end**.
- Built a **back-end** using **Python**, integrated **Twilio** service for mobile notifications, and incorporated time, geolocation, and mapping **APIs** to enhance location-based accuracy and improve **user experience**.
- Designed and implemented an **SQL database** to store user information, ensuring enhanced data management.

CarMatch AI | *Python, JavaScript, SQL, Scikit-Learn, Machine Learning* Nov 2024 – Dec 2024

- Developed a **web application** to match users with suitable cars based on their preferences using **artificial intelligence (AI) algorithms** employing **machine learning (ML)** techniques to **analyze** user data.
- Implemented a **user-friendly interface** using **JavaScript** for seamless interaction and dynamic content display.

Hack-the-Tunnels 2024 | *TypeScript, React, Prisma, Express, Git, Linux, HTML/SCSS* Oct 2024

- Integrated **front-end** services built with **React** and **TypeScript** with **back-end** services using **Express** and **Prisma**, resulting in a fully functional application for user login and schedule management.
- Implemented **RESTful API** routes for email and SMS services while using **Git** for collaborative development.

stockEZ | *Java, JavaFX, SQLite, CSS* May 2024 – Aug 2024

- Designed and delivered a **full stack inventory desktop application** by utilizing **Java object-oriented** principles for **back-end** development and **JavaFX** with **CSS** for **front-end**, delivering a robust system and responsive **UI**.
- Conducted **unit testing** and **debugging** to enhance software reliability, decreasing technical problems by **99%**.