

HAMZAH JARRAR

+1 (647)-894-3787 | hamzahjarrar2018@gmail.com | [linkedin.com/in/hamzahjarrar](https://www.linkedin.com/in/hamzahjarrar) | github.com/hamzahjar

EDUCATION

Bachelor of Computing, Software Engineering (Co-op) | 2025 - Present

University of Guelph, Guelph, ON

- Maintaining an 89% average (4.0 GPA)

Key Academic Projects:

DNA Recording Management System (2025) - Designed and implemented a C-based DNA record management system using structs, pointers, and dynamic memory allocation to parse, validate, and analyze CSV data, supporting record insertion, deletion, and statistical analysis with in-depth error handling and memory safety

TECHNICAL SKILLS

Programming Languages: Python, TypeScript, Java, C, C#, JavaScript, SQL, HTML, CSS3, R

Frameworks & Libraries: React, FastAPI, SQLAlchemy

Databases & Tools: PostgreSQL, Alembic (migrations), Git, GitHub, GitLab, REST API's

Platforms: Chrome Extension Development (Manifest V3), Node.js, Vite

Other: JWT Authentication, Agile Methods, Object-Oriented Programming, Full-Stack Development

PERSONAL PROJECTS

Replay | Jul 2026 - Aug 2026

- Architected a three-part full-stack system: a React 19/TypeScript web app (Vite), a FastAPI backend, and a Manifest V3 Chrome extension with a service worker and content scripts
- Designed PostgreSQL-backed conversation storage using SQLAlchemy models with Alembic schema migrations
- Implemented local account creation and authentication using JWT tokens and argon2 password hashing
- Integrated the OpenAI API to auto-generate conversation titles and descriptions on import
- Built ChatGPT conversation importing, live conversation detection in-browser, search, favourites, and conversation statistics
- Designed an extensible provider architecture to support future AI platforms, with a privacy-first, local-only data model

Portfolio Website | Aug 2026

- Designed and built a responsive single-page portfolio using HTML, CSS, and vanilla JavaScript with no frameworks
- Implemented scroll-triggered reveals, a scrollspy navigation system, and a slide-in mobile drawer menu
- Built a data-driven project rendering system supporting tag-based filtering and expandable detail views

Minesweeper | May 2025 - Jun 2025

- Developed a complete Minesweeper game in Java using Eclipse with a graphical interface
- Implemented flagging, difficulty settings, and new-game support
- Used object-oriented programming to structure game logic and user interaction

Java Programming Projects | Feb 2024 - Present

- Developed Java applications including a turn-based battle game and a mark reporting system with file input/output
- Strengthened object-oriented programming skills by designing classes, managing state, and improving program structure and logic

C# Programming Projects | Feb 2023 - Present

- Developed multiple C# applications using Visual Studio, including a calculator and a personal address book
- Applied object-oriented programming principles while building interactive user interfaces with Windows Forms

C Programming Projects | Feb 2023 - Present

- Developed C applications including a DNA record management system using structs, pointers, and dynamic memory allocation
- Strengthened low-level programming skills by implementing CSV parsing, data validation, and memory-safe error handling

WORK EXPERIENCE

Waiter/Cashier/Busser, Nandos | June 2026 - Present

- Worked effectively in a fast-paced environment, managing multiple tasks simultaneously while maintaining accuracy and attention to detail
- Communicated clearly with customers and team members to resolve issues efficiently and ensure reliable, high-quality service