

Hasan

📍 Canada ✉️ hasan.swe.dev@gmail.com 🌐 in/hasan-in 📄 github.com/MohHasan1

EDUCATION

Bachelor of Software Engineering
Seneca Polytechnic • Toronto, Canada

Expected Graduation: 2026
3.6/4.0

SKILLS

Languages: JavaScript, TypeScript, python, C, C++, Java, C#, HTML, CSS

Tools: React, Wordpress, Sanity (CMS), Next, Angular, React Native, Tailwind, Redux, Zustand, Node, Express, Django, Spring boot, SQL, NoSQL, Git, Github, GitHub Actions (CI/CD), Figma, Docker, Cypress, Selenium, Linux (Ubuntu), AWS, Azure, Firebase, Lanchain, lang-graph, scikit-learn

WORK EXPERIENCE

Software Engineer Intern - Lazem Holding Group

May 2024 - August 2024

React, Angular, TypeScript, Redux, Tailwind, Spring boot, mySQL

- Led the independent development of a cost-efficient Document Management Tool with secure client-side editing, encryption, and distinctive barcode generation, **achieving 70% cost savings** by eliminating third-party subscriptions
- Collaborated in the design and implementation of an Asset Management System to improve asset tracking, delivering the project one week ahead of schedule and **reducing manual tracking by over 90%**, optimizing asset management operations.
- Collaborated with cross-functional teams to gather requirements and implement a SQL database and code for a Training Management App, **streamlining management and tracking of 300+ training projects** for administrators and instructors.

PROJECTS

Algo-Maze (AI Maze Visualizer from scratch)

React, React Router, Zustand, Shadcn/ui, Framer motion, Tailwind, TypeScript • algo-mazes.netlify.app/

- Developed an interactive educational website that visualizes AI maze generation and solving algorithms, boosting AI and search algorithm comprehension for 60+ students.
- Leveraged React's built-in functionality (without direct DOM manipulation) and Zustand for component-level state management to build a modular, scalable platform that enables real-time maze pathfinding visualization and seamless integration of additional search algorithms.

AcademicML Predictor (A Machine Learning Model for Academic Performance)

- Prototyped regression models with **Scikit-learn**, **NumPy**, and **Pandas** to analyze student performance and engineered pipelines for data ingestion, transformation, training, and hyperparameter tuning.
- Deployed the model as a REST API on **AWS Elastic Beanstalk**, improving accessibility and operational efficiency.

Byte-Link (Socializing App)

React, React Router v5, TanStack Query, TypeScript, Tailwind, Zod, Appwrite • byte-link.netlify.app/

- Designed and successfully launched a platform for university students to connect and share posts, independently implementing all features and attracting over 25 engaged users shortly after launch
- Implemented pagination, infinite scrolling, and background data fetching with TanStack Query; integrated Appwrite for CRUD, database, and authentication; and continuously iterated on features.

AuraAI (Local AI Assistant with Vision and Audio Integration)

- Developed a local AI assistant mimicking Microsoft Copilot by integrating real-time screenshot capture (0.1s intervals) and audio command processing with Python (OpenCV, Langchain, PyAudio) for context-aware responses.
- Engineered a multi-threaded pipeline with synchronized screenshot capture and asynchronous audio callbacks, ensuring robust performance and error management.
- Implemented a GPT-4 powered inference chain via Langchain for concise TTS output, streamlining user interactions.

HasanOS (Operating system based portfolio + Conditional Multi-Agent and RAG Persona Chatbot)

- Built an OS-themed portfolio with a persona chatbot, optimized for Windows-like PC and iPhone-like mobile interfaces..- <https://hasan-swe.dev>

CERTIFICATIONS

AWS Certified AI Practitioner - AIF-C01

- https://www.credly.com/badges/ac94ac52-7d82-4b43-abdc-79a5f4e17936/public_url

Azure AI Fundamentals - Azure AI - 900

- <https://learn.microsoft.com/api/credentials/share/en-us/Hasan-2239/9DCB81DDF3C8F597?sharingId=54541BB1F154128B>

LEADERSHIP

Freelancing (Developed a full-stack LMS platform)

- Developed a full-stack LMS for a client using **Firebase**, **Next.js**, **Sanity(cms)**, and **other tools**, designed to **serve users across 40+ states in the USA**.

Workshop (Presented at York University's gaming hackathon)

- Led a team in organizing a workshop on **OpenCV** and **MediaPipe**, developing interactive applications with **Pygame** and presenting to 50+ students.- <https://open-cv-workshop.vercel.app/>