Adam Selim

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EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Software Engineering, Intended Specialization in Artificial Intelligence

Sep 2024 - Apr 2029

Experience

Internet Systems Developer, Co-op

Sep 2023 – Jan 2024

iSTORM New Media

Kingston, ON / Online

- Boosted blog post production efficiency by 40% using AI research and applied AI strategies
- Automated streamlined copywriting by developing recursive scripts and creating JasperAI and GPT-4 templates
- Earned 3 Google Ads certifications for digital marketing

Robot Software Developer

Sep 2023 – Jun 2024

FRC 1360 Orbit Robotics

Oakville, ON

- Improved 2023 robot's scoring mechanism accuracy by 50% by developing a multi-stage PID tuning system,
- Automated alignment with scoring goals using Limelight 3 computer vision to recognize key field locations
- Programmed the robot's core functionality using Java with WPILib, ensuring robust and efficient performance

Co-President (Former Director of Sponsorships & Logistics)

Dec 2022 – Jun 2024

EurekaHACKS

Oakville, ON

- Co-founded Halton's largest annual high school hackathon with over 200 participants
- Raised funding, recruited staff and judges, planned events and executed day-of-event logistics
- Automated registration process by building Zapier flows and **authentication** bot using Discord.py and **Google Sheets API** via **Python**
- Developed and maintained sponsorship portal using HTML/CSS and Javascript

Programming & Electrical Lead

Sep 2022 – Jun 2024

Waterloo EV Challenge School Team

Oakville, ON

- Directed team of 5 software developers to program our EV build's Raspberry Pi controller using Python
- Structured team's plans, goals and timelines for development over the 6 month challenge periods
- Conducted code reviews to debug issues and optimize performance of throttle control, motor feedback loops, and other functionalities
- Designed and wired the electrical system, integrating motor controllers and sensors

Projects

$\textbf{EasyASL-Winner} \ @\textbf{Hack the Valley 9} \ | \ \underline{\textbf{Github}} \ | \ \textit{TypeScript, Next.js, Tailwind, OpenAI}$

Oct 2024

- Led team to develop a web app to enhance ASL learning and certification for the hard-of-hearing community
- Implemented the first ASL translator that includes complex motion recognition for comprehensive sign language translation
- Built backend **APIs in Node.js** using **TypeScript** and OpenAI models with training data for ASL gesture image processing and grammar correction
- Implemented a certification feature that uses webcam input to assess professional ASL proficiency in real time

FlashNotes - 3rd Place @Hack the Ridge | Github | TypeScript, Next.js, Tailwind, OpenAI

Dec 2023

- Developed a web app that generates and presents interactive flashcard decks from photos of study notes
- Designed and implemented an API in TypeScript that integrates with OpenAI models to summarize information and generate standardized flashcards in JSON format for front-end usage

TECHNICAL SKILLS

Languages: Python, Java, C/C++, JavaScript, TypeScript, HTML/CSS

Frameworks: React, Node.js, Next.js, TailwindCSS

Developer Tools: Git, VS Code, Visual Studio, Jupyter, IntelliJ, Eclipse **Libraries**: OpenCV, OpenAI, tkinter, Google Maps API, Google Sheets API