Mohamad Addasi

Education

Concordia University

Bachelor of Engineering in Software Engineering CO-OP

Montreal, QC

Expected Graduation: Apr 2027

• Courses: Object-Oriented Programming 1, Object-Oriented Programming 2, Operating Systems, Algorithms and Data Structures, Supervised Machine Learning: Regression and Classification, Web Programming

Work Experience

Pratt & Whitney Canada

Sep 2024 - Present

Data Science Intern

Longueuil, QC

- Performed data analysis on 280,000,000+ entries in Python, enhancing client insights, saving 15 hours monthly in decision-making
- Created a **Python** script with a UI to expedite Excel data entry, **reducing** the time per entry by **75**%, saving clients up to **39 workdays annually**
- Enhanced large dataset by filtering duplicates by 100% using Pyspark, which reduced data processing by 30%

HackConcordia Apr 2024 – Present

Backend Software Engineer

Montreal, QC

- Optimized MongoDB database for 3000+ users, ensuring secure and efficient information storage
- Streamlined event check-in using TypeScript generating secure QR codes, saving 4.5 hours across 800 participants
- Developed an admin panel with NextJS and TypeScript, enabling efficient assignment and review of applications, reducing admin workload by 10+ hours weekly

Projects

${\bf Registration\ Website}\ |\ {\it Website}$

NextJS | TypeScript | MongoDB | Azure

- Constructed a login system for ConUHacks 9 registration website, integrating callback functions for different providers, enhancing login efficiency and speeds by 150%
- Devised **JWT token management** to reflect user status in the application process dynamically, optimizing session handling and improving status display times by 50%
- Implemented Redis-based rate limiting to enhance security and reduce API abuse, achieving a 25% decrease in infrastructure costs

Mailing List | Website

NextJS | TypeScript | MongoDB

- Enhanced ConUHacks 9 mailing list system by **restructuring** database collections and **segregating** verified and unverified emails, resulting in a **65% increase** in document retrieval speed
- Optimized database interactions using MongoDB to enhance efficiency in managing over 500 subscriber records; achieved a reduction in query response time by 50%

Fluent Fingers | Source Code

Tensorflow | Scikit-Learn | Python

- Developed a Duolingo-like ASL app with **TensorFlow-powered CNNs** for gesture recognition, enabling interactive learning and saving users **5 days** annually
- Crafted a Python script to track hand movements using **Python libraries** and node landmarks, **boosting** model accuracy by 30%

Leadership

McHacks 11 | Devpost Jan 2024

• Managed a team to 3rd place out of 600+ participants, in McGill's largest 24-hour hackathon

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, C++

Developer Tools: Azure, Postman, PowerBI, Git, Azure, Jira, Databricks

Libraries/Frameworks: NextJS, ReactJS, NodeJS, MongoDB, Pyspark, Scikit-Learn, Tensorflow