Matthew Farah

 $(647) - 819 - 0208 - \underline{matthewtamerfarah@gmail.com} - \underline{Personal\ Website} - \underline{LinkedIn} - \underline{GitHub}$

EDUCATION

MCMASTER UNIVERSITY

Hamilton, ON

September 2022 – April 2026

B.E in Software Engineering

- **Honors**: *cum laude* (GPA: 11.4/12)
- Relevant Coursework: Introduction to Object Oriented Programming, Introduction to Software Development, Data Structures and Algorithms, Computer Architecture, Discrete Mathematics and Applications I & II.

PROJECTS

Spotisize (September 2023 – Current):

- Lead team of 4 people in development of website to visualize user data using Spotify's API.
- Integrated **D3.Js** in **Next.Js** with **Typescript** framework to implement dynamically rendered and interactive UI to display a user's top songs and artists.
- Designed **responsive** UI for mobile and desktop devices using **Tailwind**.
- Used **GitHub actions** and **Vercel** for automatic redeployment of the website.

Skills Used: Next.Js, React, Typescript Git/GitHub, Vercel Deployments, RESTful API's, Tailwind, D3.Js

Alzheimer's AI Detection Model (August 2023 – September 2023):

- Used **PyTorch** to develop a Convolutional Neural Network (**CNN**) AI image model to detect Alzheimer's early through brain scan data.
- Transformed brain scans stored in the NIFTI file format into tensors needed for the training process using **NumPy** and **NiBabel**.
- Cleaned and organized classification data into CSV's using python scripting and **Pandas**.

Skills Used: Python, PyTorch, Pandas, NiBabel, NumPy,

WORK EXPERIENCE

Tutor (September 2021 - Current)

Hanathan Tutoring Services

- Tutored international students of all ages in subjects including English, math, and economics.
- Responsible for creating personalized lesson plans and instructional material.

Inbound Fraud Agent (May 2022 – August 2022)

Scotiabank

- Handled and resolved 120+ calls per day from customers regarding credit and debit fraud.
- Trained in use of banking systems including **AS400**, **PRM**, and Interac/Visa/American Express proprietary systems.

SKILLS OVERVIEW

- Technical skills: HTML5, CSS, JavaScript, ReactJS, Next.Js, Three.Js, D3.Js, Vercel, Tailwind, Bootstrap, HTML/CSS, Python, PyTorch, TensorFlow, C, and SQL Server.
- Expertise in programming & coding, solution design, project management, software testing, database management, product development, and Agile methodologies.