

MATTHEW CURTIS

✉ mcurtisbusinesses@gmail.com 🌐 Personal-Portfolio 📞 2892595350 in matthewcurtis14/ 📺 MatthewCurtis4

EDUCATION

McMaster University - Hamilton, ON

Software Engineering and Management (B.Eng.Mgt)
CGPA: 10.5/12.0 (3.80/4.00)

Sept. 2018 - Apr. 2024

SKILLS

LANGUAGES: Swift, Python, Java, C#, HTML, CSS, C, JavaScript, SQL, MATLAB

TECHNOLOGIES: Node.js, Git, React, Bootstrap, Scikit Learn, Pandas, Selenium, SSH, Express.js, Linux, db2, .NET 4.5, Bash, GitHub, GloVe, NumPy

EXPERIENCE

STOCCS Inc., Lead Developer of Mobile Application Team

May 2023 - Current

- Developed and released an **IOS** mental health and self improvement productivity mobile application "**HabitPal: Build, Track, Thrive**" that helps users build, track and maintain good habits and break bad ones using scientifically proven methods
- Developed in **Swift**, incorporating **UserDefaults** for efficient storage, manipulation, and real-time updates of user data

Old Republic Insurance Company of Canada, Software Engineering Intern

May 2021 - Aug. 2022

- Analyzed data from **thousands of data points** through advanced CSV **parsing** to develop an **automated testing framework** for **integration and regression testing** using **C#**, saving over **200+ hours** of manual labor annually
- Developed a user-friendly **Selenium-based** testing system using **C#** and **NUnit** for efficient **integration testing** before each deployment
- Designed an intuitive **Angular frontend** and testing framework to empower testers in creating their own Selenium-powered automation suites

Conservation Halton, Camp Counsellor

July 2016 - Aug. 2020

- Demonstrated excellent **problem solving** and **creativity** to ensure that all campers had an engaging active experience
- Exhibited **strong verbal communication skills** to prevent poor camper behaviour along with **managing conflicts** and concerns raised by parents in an ethical and professional manner

PERSONAL PROJECTS

NLP-Based Mental Health Disorder Detection

- Led projects using **NLP** techniques, including **BERTopic** modelling and **GloVe** embeddings, to detect early signs of mental health disorders
- Engineered feature vectors by leveraging **TF-IDF** and **cosine similarity metrics**, managing data from over **500k+ data points** in an end-to-end **machine learning pipeline** to facilitate predictive scaling and conducted in-depth data evaluation
- Conducted thorough **error analysis** by comparing predicted scores to ground-truth data to improve the models

SpotiStat (Spotify API)

- Developed a **web-based** application enabling users to access statistics on their listening history
- Established a responsive and interactive application interface using **React**, paired with **JavaScript** and **Node.js**, hosted through **Vercel**
- Utilized the **Spotify Web API** to fetch user and song data including the users listening history, top played artists and songs etc
- Implemented Spotify account login and credential verification using **Node.js** with **Express.js**, incorporating **OAuth2** authorization

Tagwell

- Developed an **Android application** to gauge Twitter hashtag popularity, providing real-time insights into social media trends
- **Parsed 100,000 data points** from **JSON** files, graphing past tweet data with **BFS** and **merge sort** algorithms

ACTIVITIES

University Intramural Sports

2019 - 2024

Organized and participated in various intramural teams at McMaster, including soccer, football, floorball, and dodgeball

Highschool Football, Quarterback and Captain

2014 - 2017

Led as quarterback and captain, contributing to overall success through teamwork both on and off the field.