Abraham Taha

Software Engineer

📞 (438) 725-9002 | ✉ tahaa8@mcmaster.ca | 🖥 abdallahtaha.netlify.app | 🎧 abrahamtaha1 | **in** abrahamtaha

Education

Bachelor of Software Engineering & Management   Graduating April 2023

McMaster University   Hamilton, ON

• Maintaining a GPA of 3.75 on a 4-point scale
• Related Software Engineering Coursework
  o   Data Structures and Algorithms, Software Design, Software Testing, Engineering Statistics, and Scientific Computations
• Related Management Coursework
  o   Operations Modelling and Analysis, Business Policy, Applied Marketing Management, and Database Design Management

Technical Skills

Languages	React.js, JavaScript, HTML, CSS, Python, C, Java, MATLAB, Bash, SQL, LaTeX
Tools	Microsoft Office Suites
Frameworks	NodeJS, AngularJS

Engineering Experience

Software Developer Intern   Summerside, PE

PEI Bag Company   2020 Summer

• Maintained and updated the company website by revising back-end database so that it corresponds with front-end of the website
• Gained experience with WordPress by providing revisions and updates to the company
• Developed a marketing strategy, digital signage, and social media presence for the company
• Used Syspro to make price adjustments, data entries, and to modernize the inventory system

Projects

Audio Recognition Bracelet 🎧   Software Capstone Project

• Developed a wearable device and mobile application for hard-of-hearing individuals that uses a microcontroller to detect and alert the user of user-specified audio signals from the environment
• Designed Android application using **Android Studio** to interface with wearable device
• Implemented Bluetooth Low Energy communication between wearable device and Android application using **Java**

McMaster Student Hub 🎧   Academic Project

• Worked in a group to create a website, using **React.js**, that offers a GPA calculator, prerequisite checker, financial calculator, and property reviews for McMaster students
• Students upload a copy of transcript which is parsed using a custom **parsing algorithm**. Data such as completed courses, grades etc. are extracted and stored in a database where they are used by other modules
• Developed the prerequisite checker which involved compiling the student's completed courses and cross-referencing them with the required courses for selected masters' programs
• Project completed using **JavaScript, HTML, CSS**

New York Crime Tracker 🎧   Academic Project

• Collaborated with a group to develop a program that increases the safety of tourists by identifying crime hotspots along a route and providing a safer alternative
• Employed **Dijkstra's** and **breadth-first search algorithms** to determine the most efficient routes between tourist destinations while avoiding crime hotspots
• Implemented project in **Java** using Eclipse IDE

Priority Calendar Generator ⟲   Hackathon Project

• Developed a day-planning application that optimizes the order of daily tasks and automatically integrates them into Google Calendar through Google API.

• Ordering of tasks was done using a **priority queue** with priority based on category and urgency of given task.

• Project developed using **Python**

Tetris Game ⟲   Academic Project

• Created Tetris using **JavaScript, HTML and CSS**

• Developed software to recognize a game grid with predetermined shapes flowing down

• Implemented a UI and different game modes as well as a scoring system

Airplane Flight Manual Distribution   Management Capstone Project

• Worked with an aerospace company to solve a distribution problem regarding international distribution of aircraft flight manuals

• Demonstrated research skills by accumulating international aerospace manual regulations and laws

• Showed critical thinking skills by developing solutions and implementation plans for the company

• Presented findings to the company through a detailed business report

Accomplishments

McMaster Deans List   2018 - Present

• Given to students who maintain a minimum cumulative GPA of 3.7 on a 4-point scale

President Award Scholarship   September 2018

• Admission scholarship awarded to students who achieve an average of 95% or higher