Michael Brazeau

Education

University of Michigan: LSA (2020)   *Current*

- Major: Computer Science
    - EECS281: Data structures and algorithms (current)
        - **Path finding:** Created a program that can efficiently determine the shortest path between two words given a set of morph operations. Knowledge in how to utilize caching as well as how to effectively use data structures and library functions.
        - **Graph path finding design:** Implemented three types of priority queues and created a program that could escape from a 2D grid based upon a specific set of rules efficiently. Knowledge in designing effective and efficient data structures.
        - **SQL database:** Created a program that can create and maintain databases based upon the SQL syntax. Knowledge in hash tables and preprocessing to speed up programs.
    - EECS280: Programming and introductory data structures
        - **Machine learning**: Utilized a simple NLP language model to create a program that could predict forum post labels that was trained with the previous semesters' posts and labels. Knowledge in how to create ML programs from scratch.

Work Experience

Ann Arbor Racket Club   *Summer 2018*

- Grounds crew
- Responsibilities: Training new crew members, landscaping, general maintenance, event setup and staff, various other daily tasks

SkySync, Inc.   *Summer 2015*

- Junior software developer intern
- Responsibilities: Managed a data migration from one cloud virtual server to another
- Assisted in a C# application that translated REST functions/API calls

Organizations

Michigan Autonomous Aerial Vehicles (MAAV)

- Currently working on the GNC *(Guidance Navigation Control)* sub-team working on pathfinding in C++
- Creating the path-finding module that uses an implementation a*
- Educated on how to use git when working with a team and how to use Lunix *(Ubuntu 16.04)*

Languages

Strong in C++

- Considerable experience with C++ and have also coded in C#, python, javascript/jquery, html, css

Projects

IQN *(Artist name)*

- https://github.com/MichaelBrazeau/IQN-WWW
- Music project released for album and project display
- Utilizing Github site-hosting for ongoing development

Volunteer Work

Haiti mission trip   *Summer 2014*

- Instructed students percussion basics
- Instructed students in French as well as non-verbal instruction
- Helped install/configure a wireless network across the school grounds