Aidan Kelley

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EDUCATION

University of Michigan Ann Arbor, MI

Bachelor of Science in Engineering in Computer Science

April 2024

GPA: 2.97 / 4.00

Coursework: Data Structures and Algorithms, Introduction to Computer Organization, Introduction to Machine Learning, User Interface Development, Introduction to Theory of Computation

SKILLS

Computer Skills: Windows, Unix, Git, Microsoft Office, Autodesk Inventor/Fusion 360, PC Building Programming Languages: C, C++, Python, Java, MATLAB, HTML, CSS, JavaScript

PROJECT EXPERIENCE

University of Michigan

Ann Arbor, MI

Log Manager

October 2021 – November 2021

- Created a program using C++ to manage data logs including functionality to search by upload times, categories, and contained words
- Designed custom classes and data structures to allow for efficient organization and access of log files
- Optimized runtime and memory usage by analyzing and improving algorithms and data structures currently in use

Pipeline Simulator

February 2022 – March 2022

- Created a program in C to simulate the processes in a pipelined CPU including hazard handling and memory management
- Analyzed and produced assembly code and machine language to interact with the pipeline and further understand the innerworkings of a processor

Obstacle Course Robot

January 2021 – April 2021

- Assembled and coded a robot in Arduino using a closed-loop, PI control scheme that successfully completed an obstacle course involving navigation and pallet lifting
- Collaboratively worked through the engineering design process of ideating, prototyping, programming, and testing

Speech Sentiment Predictor

January 2023 – February 2023

- Utilized Python to train SVM classifiers and predict the sentiment of online comments
- Applied cross validation with a variety of performance metrics to select a model and appropriate hyperparameters

Personal Project Ann Arbor, MI

Wordle Bot

April 2022 - Present

- Created a Discord bot in Python to automatically collect Wordle scores and hold a current leaderboard and record of players' past scores
- Utilized libraries and read documentation to understand asynchronous events and real time communication with servers
- Created repositories and hosted the bot remotely to learn about the active development cycle of an application

WORK EXPERIENCE

Lowell Senior High School

Lowell, MI

Assistant Varsity Tennis Coach

April 2021 - July 2022

- Aided students in learning technique and game strategy resulting in exceptional tournament results
- Promoted a positive environment for all athletes, which helped to diminish stress and increase enthusiasm
- Coordinated successful region-wide events involving 8 schools and over 100 athletes by communicating effectively with a team of coaches

ACTIVITIES/INTERSTS

Lowell Fusion Rock Orchestra, National Honor Society, Track and Field, Table Tennis, Pickleball, Chess