

Jacob Maxson

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Education

Ohio State University

Major: BS Computer Science & Engineering

Minor: Business

Expected Graduation: May 2022

GPA: 3.9

Dean's List

Technical Skills

Programming: Java, C, C++, C#, Python

Web Development: HTML, CSS, JavaScript, jQuery, ReactJS

Miscellaneous: Xamarin.Forms, Unity, Linux, ASP.NET Core, SQL, MATLAB, Excel, Word

Projects

Chess AI:

November 2019

- Hackathon project worked on in a team of 4. Created back-end in C# and designed front-end with ReactJS & jQuery. AI used an alpha beta search algorithm with tabular hashing and transposition tables to increase average performance by over 1000%. Estimated Elo of the AI is over 2000.

Schedule Planner:

May 2020—Present

- Developed a schedule planner app using Xamarin. Can dynamically create, edit, and customize events. Data is serialized and stored to maintain the user's state. Compatible with Android and iOS devices.

Personal Website:

October 2019—November 2019

- Designed a mobile-friendly personal website from scratch. Website features multiple themes the user can select from, each incorporating their own unique background effects. Made with HTML, CSS, & JavaScript.

YouTube Playlist Randomizer:

June 2020—July 2020

- Created a website that fixed the broken "shuffle" feature on YouTube. Developed a back-end API that parses through a playlist source page to retrieve a list of videos before randomizing them. Multiple playlists can be appended and mixed together, even if they come from different users. Coded with C#, JavaScript & jQuery.

Penny Football:

July 2020—Present

- Coded a new game called "Penny Football" in Unity. Game utilizes vector math and collision detection to calculate projected paths of objects in real time. Allows for quality and resolution options that are automatically updated based on the user's system. Runs at 300+ FPS on highest settings. Written in C#.

March Madness Predictor:

December 2019—Present

- Implemented a web scraper to retrieve statistics of college basketball teams. Linear regression was used to predict a march madness bracket based on the statistics of the teams competing. Coded in Python.

Robot:

January 2019—May 2019

- Constructed and coded a robot to navigate an obstacle course. Modeled complete robot in Solidworks. Entered the official OSU Robot Competition and placed 3rd overall, receiving a cash prize. Coded in C++.

Other Experience

Shadowing

May 2018

- Shadowed a Lead Applications Developer at Kent State University.
- Gained 30+ hours of field research experience focused on web development.