Jonah Coffelt

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Summary

Detail-oriented student with demonstrated leadership experience, strong technical skills, and the ability to learn concepts quickly. Executes successfully in high-stress environments while exhibiting patience, kindness, and calm. Passionate about computer science and gaining and sharing knowledge with others.

Skills Clubs

Python AI & ML TAMU Robomasters Aggie Competitive C++ 3D Graphics Texas Aggie Game Developers Programming Club HTML/CSS/JS Computer Vision Engineering Honors Edge

Experience

Audio/Visual Engineer

Woodlands Methodist Church

2020-Present

Operate audio on various sound platforms and program and execute lighting on the GrandMA2 and GrandMA3 systems. Coordinate with lead pastors, tech directors, and music directors to bring together many technical elements and demands into a cohesive service experience. Program the lighting file on the GrandMA2 board for the student service, creating a dynamic show that still presents an easily-operated interface for student volunteers.

Chess Tournament Organizer

Magnolia High School

2022-2023

Led and organized the first MHS Annual K-12 Regional Chess Tournament. Promoted the event through advertising and networking. Created an online presence connecting with local experts and managing online registrations. Programmed an intuitive software platform to coordinate the tournament with four simultaneous team and individual brackets. Managed leadership team, trained over 30 volunteer workers, and oversaw delegated check-in, room monitoring, and concessions. Tournament attendance totaled over 150 participants and earned \$1,200 for future chess club tournaments and operations.

Projects

Neural Network Model 2022

Programmed a simple neural network from scratch in python using exclusively the Numpy library. Trained the model using the MNIST dataset to recognize handwritten numbers with 95.3% accuracy. This project provided valuable insights and experience on the functions and mathematics of a crucial component of modern AI.

3D Python Engine 2024

Wrote a custom 3D engine from scratch using python and the ModernGL library. Created systems to handle rendering, lighting, shaders, textures, meshes and objects. Integrated marching cubes algorithm for real time scalar field polygonising and manipulation. Developed skills in computer graphics, physics, algorithms and memory management.

Accomplishments

Dean's Honor Roll President's Endowed Scholarship 39 IB Diploma Score 4.0 GPA Chun Kuk Do Second-Degree Black Belt Tae Kwon Do First-Degree Black Belt Top 5 HS Class Rank (Class of 2023) AP Scholar with Distinction HS Band State Ensemble (2020, 2021, 2022) HS Marching Band Section Leader (2020-2022)