# Fawaz Mujtaba

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#### **Education**

B.S. in Computer Science and Minor in Math at UNLV Honors CS Student 3.7 GPA Graduating Fall 2021

#### **Skills**

Languages: C, C++, C#, Java, JavaScript, HTML, CSS, Python, Flutter, RISC/MIPS Assembly

Software: Unity Game Engine, Unreal Game Engine, Blender, MATLAB, MS Office

Extra: TensorFlow and Keras, ROS/ROS2, LWJGL, OpenGL, GitHub, Jira, MySQL, AWS Cloud, NodeJS, IBM Quantum, ExpressJS, Lamp Stack, VR, Windows, Linux, Mac, REST API, Android Studio

#### **Experience**

# NASA(JPL) Intern (Jun - Aug 2019)

- Developed communication methods with Drones through ROS and ROS2
- Converted 2D Lidar and Height Maps into 3D environment scenes for simulations

### Intellimind Full Stack Dev (May 2020 - Present)

- Created databases and web scrapers to obtain financial and social media data for stock market prediction
- Developed Server-based Websites using ExpressJS and and NodeJS
- Designed Serverless website development using REST APIs and AWS S3

# UNLV CubeSat Team (Aug 2020 - Present)

- Designing simulators, communication software, and ADCS control systems for CubeSat team.
- Using Matlab/Simulink for simulation programs

# **Personal Projects**

#### **Aircraft Simulator**

- Programmed Flight Simulator with Unity, featuring Neural Network controlled enemy aircraft
- Coded missile tracking system to calculate target position based upon current velocity and rotation

# **Self-Driving AI**

 Trained AI to look at distance measurements of incoming obstacles and traverse through difficult paths and curves without crashing

#### **Pong Learning AI**

- Trained AI to use data about opponent and current "ball" vector positions to predict optimal intersection points with the ball

### **Cider Truck Mobile Game**

- Developed a mobile game from start to finish within Unity and published it on the Play Store

#### **Camera Based Food Barcode Scanner App**

 Developed Android Program within Android Studio and Java which used APIs and an item database to scan and determine which item the barcode refers to

#### Vehicle and Human 3D Modeling

- Designed Character Models with full skeleton animations using Blender
- 3D Modeled numerous objects including Jet Fighters, Cars, Tables, and more

#### **Game Engine From Scratch**

 Using only OpenGL and LWJGL, used matrix manipulations to convert 3D model vertex points into game objects which could be rotated, translated, and scaled along with control methods to use objects