# Matthew Fernandez

# Computer Engineer

## PROJECT EXPERIENCE

August 2022 – December 2022 | Four Person Team

Junk – Local Co-Op Multiplayer Game – Built on Unity

- Scripted a Movement State Machine for the playable characters, along with an Input Reader script to give players control.
- Scripted a Level Manager object that processed scene data to handle
   UI elements, data tracking, data transfer, and level end conditions.
- Integrated art, animations, and logic into functional levels.
- Collaborated with team by using Agile Development methodologies.

January 2022 – May 2022 | Four Person Team

Descent – Single Player Boss-Rush Game – Built on Unity

- Scripted Movement and Combat Logic for the playable Angler character, using coroutines and kinematics.
- Handled player animation integration, using enumerated move states with freely available Mixamo animations.
- Integrated music, art, animations, and logic into functional boss battles.

January 2022 | Two Person Team

Space Search – Single Player Word Trivia Game – Built in Android Studio

- Developed the front end of our application entirely in XML.
- Handled the design of the gameplay loop, giving the player access to multiple
  options in the main menu, while allowing the player to return to the main menu
  afterwards.
- Collaborated with my partner to integrate NASA database information into the gameplay loop.
- Won award for Best Space App powered by Space Force at a local hackathon.

(954) 668-8778

fernandezmatthewkyle@gmail.com

in <a href="https://www.linkedin.com/in/matthew-kyle-fernandez/">https://www.linkedin.com/in/matthew-kyle-fernandez/</a>

https://fernandezmatthew.github.io/

## **EDUCATION**

2021 - 2024

University of Florida,

Gainesville, FL

Pursuing Bachelor of Science, Engineering GPA: 3.71

2018 - 2020

Santa Fe College,

Gainesville, FL

Associate of Arts, Engineering GPA: 3.93

## **RELEVANT SKILLS**

#### Programming/Hardware Languages -

C/C++ (3 years)

Java (1 year)

C# (2 years)

VHDL (1 year)

XML, CSS, HTML (<1 year)

Various Assembly Languages

## **Movement Programming –**

State Machine Encapsulation

3D Kinematics

Inheritance

Parameterization

# User Interface Implementation -

**Image Editing** 

I/O Processing

Back-End Linking

#### Hardware Design -

FSM Controllers

**CPU Datapaths** 

Instruction Set Architectures