

EDUCATION

- **University of South Florida** Tampa, Florida
Computer Science, Minor in Mathematics, GPA: 3.35 Comp Sci GPA: 3.58 August 2018 – December 2021
 - **Select Coursework:** Computer Architecture, Object Orientated Design, Data Structures, Analysis of Algorithms, Operating Systems, Automata Theory, AI (Spring '21), and Compilers (Spring '21)

EXPERIENCE

- **USF Society of Aeronautics and Rocketry** Tampa, Florida
IREC Payload Lead and Chief Technical Officer November 2018 – present
 - **IREC Payload Lead:** Created a payload for a sounding rocket that is planned to go 30,000' which has a custom altimeter with a microwave radio to send telemetry to ground during flight.
 - **Chief Technical Officer:** Created a new website for the organization as well as designed promotion material.
 - **Outreach:** Volunteered at multiple events to help under privileged students and Girl Scouts to earn a mechanical engineering badge through learning about rockets and engineering.

PROJECTS

- **Ray Tracer:** A path tracer that supports parallel execution, .obj loading, BVH acceleration with a command line interface that will support most file types for output as well as a WASM based site.
- **6502 Emulator:** Implemented full 6502 instruction set emulated in Rust that supports all indexing modes and is accurate to the cycle. Supports extendability via easily implementable memory maps.
- **6502 Assembler:** Implemented 6502 assembler in Rust that allows for flexibility in the assembly while still being able to assemble into a binary for the emulator or hex codes plus a debug mode.
- **Vote Chair:** A voting website designed for the UCF Knight Hacks 2020 Hackaton. Designed the front end using React and back end using Express.
- **Machine Learning Meme Generator:** Used Keras and Tensorflow with Python to predict what would follow based on training on the book Moby Dick, then formatted that prediction in a standard meme format. Won second place in the USF HackJam hackathon in November 2019.

SKILLS

- **Programming:** C, C++, Rust, Python, Java, C#, Haskell
- **Web:** HTML5, CSS, Javascript, TypeScript, React, Express, WebAssembly
- **Creative Software:** Premiere Pro, After Effects, Photoshop, Illustrator, GIMP, Inkscape
- **Git:** Git with GitHub/GitLab
- **Operating Systems:** GNU/Linux(Arch, Ubuntu), Windows, macOS
- **L^AT_EX:** This resume was written in L^AT_EX
- **3D Graphics Software:** Fusion 360, Blender, Unity, Unreal Engine