

Jacob Sage

Website: jacobsage.com | 727-271-6660 | jacobsageucf@gmail.com | GitHub: [SageJacob](https://github.com/SageJacob)

Education

University of Central Florida

Expected Graduation: May 2022

B.S. Computer Science w/ Minor in Mathematics

GPA: 3.55

Enrolled in the Accelerated Computer Science M.S. program

Leadership: Club Officer for the University's Artificial Intelligence club (AI@UCF) w/ **over 850 members**

Skills

Languages: Python, C, Java, C#, C++, JavaScript, HTML, CSS

Frameworks: NumPy, pandas, PyTorch, Unity, PyGame, React.js

Experience

EC-Council

June 2020 – August 2020

Machine Learning Engineering Intern

Remote

- Created software that, based on user activities within a competition, can predict the time required for future users to complete competition challenges
- Created a 3D data visualization tool in Unity to aid the team's data analysis

Esaote North America

October 2019 – November 2019

Freelance Software Engineer

Tampa, FL

- Created software in Python that reformats patients' files in mass quantity to aid the company's transition into newer equipment

Notable Projects

Super Smash Bros. RL Python

- Leading a five-person team to make a reinforcement learning agent for Super Smash Bros. Melee
- Leading weekly discussions on reinforcement learning papers to ensure the team is knowledgeable on the subject
- Accessed the emulator's program memory to obtain relevant information on the game state

Maze Solver Python, PyGame

- Built a program that allows the user to draw a maze out of a grid and uses a search algorithm to direct Toby (the in-game character) through the maze

Visa Job Finder React.js, JavaScript, JSX, Node.js, HTML, CSS

- Handled the front-end development of a website used to help immigrants find work based off of their visa
- Created for a group project at SwampHacks (University of Florida hackathon)

Compiler C

- Created a recursive descent parser that converts input from a pseudocode-like language, SimpleC, into LLVM IR machine code
- Able to parse functions, if-statements, variable assignment/declaration, and regular expressions

Relevant Academics and Coursework

Algorithms and Data Structures I/II, OOP, Discrete Mathematics, Statistics, Calculus I/II, Physics I/II