Ryon Peddapalli

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Education

Clemson University, BS in Computer Science / Math 2023 – 2027

- Honors College
- Secretary of Clemson ACM Chapter
- Participant in CUHackIt, Math Club, Academic Team, Fencing Club

Professional Experience

Lead Developer, Human Computing - Clemson May 2024 – Present

- Developed a tool using JS/React called Collaboration Station by leading a group of 2 other graduate students.
- Held successful two-week long virtual programming camps for 40 neurodivergent high school students using Collaboration Station.
- Conducted visual data analysis using Python to process and interpret data collected during the camp

Application/Game Developer, Self-Employed 2016 - Present

- Asked to utilize GLSL to simulate 2D crepiscular raycasting in Godot, achieving a 60Hz sampling rate
- Developed an android video game for a channel with nearly half a million subscribers that garnered nearly 10k downloads

Projects

Collaboration Station Summer 2024

- Developed a virtual IDE in React where multiple users can simultaneously edit code using drag-and-drop blocks such that it syncs in real-time
- Utilized AWS services to conduct camps of up to 40 students at a time

Predatory Journal Detector Fall 2024

- Updated a Python random forest machine learning application that, when given a URL, returns whether the academic journal is predatory or not with 75% accuracy.
- Used selenium to webscrape 500 journals and manually categorize into predatory for the training set

Colorimetric Nanosensors Spring 2024

- Created Matlab simulations for refractions of visible light of 600 micron silicon wafers on anti-reflective coating properties at the Duke Innovation Lab

Ecosystem Simulator Fall 2023

- Programmed a virtual 3D ecosystem using GDScript where animals are able to simulate hereditary offspring over generations
- Utilized Blender to render the models of the animals

Certifications and Awards

ICPC Nationals Summer 2024
Advanced to the nationals of the International Collegiate Programming Contest.

Advent of Code 2023-2024
Achieved all 50/50 stars for Advent of Code

CUHackIt - Wild Card: Developed an application to auto-submit student projects to Gradescope using a Python webscraper with a GDScript GUI Fall 2023

CUHackIt - Most Creative: Developed a game in Godot that allows players to play various minigames using only their phones to control a player on a T.V. Spring 2024