

Stanton Zeng

☎ (858) 663-1990 • ✉ stantonzeng@gmail.com
<https://stantonzeng.github.io/>

Education

- **University of California, Riverside** **Riverside, CA**
Bachelor of Science in Physics, Concentration in Computer Science, Expected Graduation: June 2022
- **University of California, Riverside** **Riverside, CA**
Masters in Computer Science, Expected Graduation: June 2023
Coursework (Physics): Classical Mechanics, Electricity and Magnetism, Thermal Statistics
Coursework (CS): Software Construction (Scrum, Waterfall, Agile...), Discrete Mathematics, Intermediate Data Structures and Algorithms, Machine Learning
Programming Languages: C++, Python(matplotlib, pandas, seaborn), MySQL, Java, HTML, CSS, Unity

Work Experience

- **University of California, Riverside - Bird Labs** **Riverside, CA**
Undergraduate Researcher September 2020 - Current
 - Joined a data science centered research group where I am analyzing hundreds of different cosmological simulations
 - Implemented a script in python that improved the extraction time of specific data points from output files
 - Utilizing simple statistical analysis techniques to measure said extracted data points

Projects

- **ASL translator** **San Diego, CA**
<https://github.com/stantonzeng/sign-language-translator> July 2021 - August 2021
 - Developed and trained a convolutional neural network using deep learning to recognize sign language gestures
 - Used a combination of python, Tensorflow, and Keras for model building, while using openCV for hand recognition
 - Achieved a training accuracy of .92 with a validation accuracy of .85
- **Chess** **San Diego, CA**
<https://github.com/stantonzeng/solo-chess> June 2021 - July 2021
 - Built the game of chess from scratch using C++ so that I could practice and play offline on my own computer
 - Replicated most of the major functionalities(checking, castling, pinning, etc) and bug tested the software rigorously
 - Utilized Object Oriented Programming techniques and design patterns to contain the complexity of the code
- **Text-Based RPG** **Riverside, CA**
<https://github.com/stantonzeng/RYZ> March 2021 - June 2021
 - Collaborated in a group of 3 to build a text-based RPG through C++ and vim
 - Created the different character objects, their unique fighting styles, and their interactions with other characters to promote a more dynamic environment
 - Worked on an extensive amount of unit testing and documentation using tools such as github, valgrind, makefiles, and googletest
- **Aerospace Systems** **Riverside, CA**
Project Member September 2019 - Current
 - Proposed and outlined the early stages of the payload project "Sonic Bloom"
 - Designed to be an effective solution to environmentally significant areas negatively affected by natural disasters
 - Worked with a team of 6 to engineer the design of the launcher and how it will interact with our rocket