

Cunji Song

(+1) 858 952 3026 | 3994 CAMINITO PATRICIA, SAN DIEGO, CA

EDUCATION

-University of California, San Diego

M.S in Mechanical Engineering,

Anticipated Graduation Dec 2020

-Tianjin University (top 15 in China)

B.S in Mechanical Engineering,

2015.9 - 2019.7

-CS Related Courses Taken (overall GPA: 3.8):

Computer Networking; Advanced Data Structure; Algorithm Design and Analysis; Principle of Operating System; Introduction to Computing Principles; Basis of Computer Software Techniques

SKILLS

- Proficient: Java, Python, C++, git, HTML, CSS, Unix, Linux, C
- Intermediate: SQL, Android Studio, JavaScript

RELATED EXPERIENCE

Garbage classification, Tianjin University

April 2019

- Developed a website that helps users with classifying recyclable and non-recyclable garbage in a team and won second prize.
- Constructed the relational database as backend using AWS services.
- Language and frameworks: AWS, SQL, JavaScript, Python, HTML, CSS, Bootstrap

On site bookstore, Tianjin University

May 2019

- Built an onsite bookstore in a commercial competition and won second prize.
- Used Spring Boot to develop backend and use JavaScript and JQuery to manipulate DOM objects.
- Language and frameworks: HTML, CSS, SQL, JavaScript, Git

Alien Invasion, Tianjin University

May 2019

- Initiated a vertical scrolling shooter arcade video game with multiple levels with teammates.
- Designed the mechanism and implemented it with Python and Pygame library.
- Language and frameworks: Python, Pygame, Git

PROJECTS

Huffman Encoding and Compression, UCSD

- Implement a Huffman Coding Tree and bitwise i/o to compress files.
- Statistically, the data compression ratio reaches up to 60%.
- Language and frameworks: C++, Huffman Tree, I/O stream

Social Network Model, UCSD

- Designed and implemented a social network model using relationship data from IMDB to test the " six degrees of separation"
- Find the shortest relationship path from one actor to another actor through shared movies.
- Predicting future links in a social network and infer future collaboration.
- Language and frameworks: C++, Meson, Dijkstra algorithm, Kruskal algorithm