Yanxiong Chen

La Jolla, CA, United States | (858) 539-5606 | yac004@ucsd.edu | GitHub Link

EDUCATION

University of California, San Diego, La Jolla, CA Sep. 2020-Jun. 2024
Degree: Bachelor of Science in Mathematics-Computer Science
Bachelor of Science in Cognitive Science with a Specialization in Machine Learning and Neural Computation

- **Cumulative GPA**: 3.6/4.0
- **Relevant Coursework:** Software Engineering, Data Structures, Computer Organization and Systems Programming, Object-Oriented Design, Computer Graphics, Mathematics for Algorithms and Systems, Abstract Linear Algebra, Mathematical Reasoning
- **Provost Honors:** Fall 2022, Spring 2022, Fall 2021

COMPUTER SKILLS

- Languages: C++, Python, C, Java, ARM Assembly Language, MATLAB, HTML, CSS, JavaScript
- Frameworks/Libraries: OpenCV, NumPy, Pandas, Jest, OpenGL, GLSL
- Software Tools: Git, Tableau, Puppeteer

RELEVANT EXPERIENCE

Computer Vision Team Member, **Triton Robotics Club** Sep. 2021-Oct. 2022

- Developed the robot's auto-aiming feature using C++, OpenCV, and Python
- Researched YOLOv5 object detection models and trained YOLOv5s model to detect the target armor plates
- Implemented a function that reduced the processing time of the auto-aiming feature and provided a precision record of the trained model to aid the team in selecting the robot's optimal algorithm

RELEVANT PROJECTS

Grocery Gadget Sep. 2022- Dec. 2022
Software Engineering Link

- Created a local-first online application with a ten-person team using the Agile framework, aiming to help users record their shopping lists and split the bills with others
- Developed backend functionalities, like creating new categories and website local storage using JavaScript and HTML, and wrote unit tests to test the backend functions using Jest
- Successfully built a functional website that made it easy for users to split bills and classify the purchased and needed items and create, read, update, and delete grocery items in their own customized categories

Huffman Coding May 2022
Advanced Data Structures

- Built a file compression and decompression tool that could compress the file size and encode/decode the file content
- Created the compress and decompress programs using C++ by implementing Huffman Algorithm with serialization/deserialization that used data structures such as priority queue and binary tree
- Efficiently compressed files without losing any information and reduced 20% to 90% space from its original size depending on the file size, with processing speed within 5 seconds for files smaller than 1 megabyte and within 30 seconds for files larger than 1 megabyte