

JOSHUA YE

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EDUCATION

Vanderbilt University

B.S. Computer Science (*GPA 3.91*)

Relevant Courses: Intermediate Software Design, Data Structures & Algorithms, Discrete Structures

Nashville, TN

2023 - Present

EXPERIENCE

VANDERBILT UNIVERSITY - COMPUTER SCIENCE DEPARTMENT

Teacher's Assistant

Nashville, TN

2024 - Present

- Supported Data Structure and Algorithm course by assisting professors with grading assignments, facilitating lab sessions, and providing one-on-one support to students through weekly office hours, enhancing comprehension of programming concepts and algorithms.

ASPIRING SCHOLARS DIRECTED RESEARCH PROGRAM

Premier precollegiate research & development institution in California

Danville, CA

2022 - 2023

Student Researcher

- Conducted research on applications of Artificial Intelligence/machine learning in medicine to improve patient recruitment for medical clinical trials.
- Analysis of Machine Learning model implementation into Emergency Department triaging, highlighting improvements and recommending implementation to improve predictive decision-making in critical care.

QUARRY LANE FIRST-PERSON-VIEW (FPV) FREESTYLE DRONE CLUB

Founder and President

Danville, CA

2022 - 2023

- Collaborated with school administrators and the student body to establish the FPV Drone Club, securing approvals, funding, and resources to create a platform for students to explore drone technology and STEM innovation. Grew club from 0 to 16 students in 2 years as President.
- Designed and built custom FPV drones, managing all aspects from hardware assembly to software calibration for optimal performance, focusing on flight dynamics and signal integrity.
- Organized and led training workshops, teaching mechanical engineering principles, drone assembly strategies, and piloting skills to equip members with technical expertise and hands-on experience.

TRI-VALLEY GARDENING CLUB

Founder and President

Trivalley, CA

2020 - Present

- Founded the Tri-Valley Gardening Club by identifying and connecting individuals with a shared passion for gardening, fostering a collaborative community for sharing knowledge, resources, and sustainable gardening practices.
- Organized lectures for 60 youths from 10+ schools to learn about horticulture, including special topics such as urban preservation and plant breeding/biotechnology
- Led volunteer activities in farms and grew over 600 pounds of organic produce annually for the poor and homeless, coordinating with local shelters for distribution.

CRISIS TEXT LINE

Volunteer Crisis Counselor

Danville, CA

2023 - Present

- Provide compassionate and immediate support to individuals experiencing emotional distress, guiding them through moments of crisis via text-based communication.

PROJECTS

Arch Linux Enthusiast - Self initiated project

- Installed and configured Arch Linux, including advanced setup of Linux filesystems.
- Published solutions of configuration challenges for arch hyprland on GitHub, contributing valuable resources to the Linux community.

ADDITIONAL INFORMATION

Technical Skills: Language (Python, C/C++, JavaScript, HTML/CSS, R), Frameworks (React, Node.js), Developer Tools (Git, VS Code, PyCharm, IntelliJ), Libraries (Pandas, NumPy, Matplotlib)

Honors and Distinctions: The President's Volunteer Service Award - Gold 2020 – 2024, The Quarry Lane Excellence in Innovation in Advanced Engineering Honors 2021, FIRST Robotics Competition (FRC) Silicon Valley Regional Tournament Winner 2022, National AP Scholar with Honor Award 2022