SEAN (XIAO) ZHAN

EDUCATION

Brown University, Rhode Island

September 2019 - Present

GPA: 4.0/4.0. Pursuing Sc.B in Applied Mathematics - Computer Science.

Cate School, California

September 2015 - May 2019

GPA: 4.57/5.0, Cum Laude Graduate, Graduated with Highest Honor

TECHNICAL EXPERIENCE

Full Stack Web Apps Developer, Team Leader at Malle Lab, Brown University

June 2020 - Present

- Developed two modular and scalable React web apps that allow Brown's Malle lab researchers to study people's perception of fairness in criminal justice. One app is for researchers to customize experiments (with normal curves and bar graphs) and view participant data, the other is for people to participate in those experiments.
- Used MongoDB and built a versatile Node.js API that enables integration across the two apps and Qualtrics survey tool. Discovered my strength in backend development and designing a customer-focused product.
- Led the development team by 1.communicating with researchers to make sure the apps meet their needs 2.planning out weekly goals for the team 3.drawing app flow charts so that everyone stayed on the same page.

Autonomous Drone Flight Independent Project

March 2019 - Present

• Programmed an open-source DJI Tello drone and incorporated a body-detection image-recognition algorithm (OpenPose) to achieve autonomous flight. The drone is able to track and follow a person based on body keypoints and respond to gestures to fly in all directions.

Club Scheduler High School Project

September 2018 - May 2019

- Developed a prototype app *Club Scheduler* for club heads at my high school to post events and manage club members. Club members would sign up for events and get notified.
- Learned how to collaborate on github, taught my team how to use github, and designed an organized workflow for our team.

Connect-4 Game Class Project

November 2019

• Implemented the minimax algorithm and alpha-beta pruning. The game A.I. can play against human players and other A.I.'s. My algorithm beat 95% of other A.I.'s in the class.

LEADERSHIP

Prefect High School Senior Community Leader at Cate School

September 2018 - May 2019

- Lived in a freshman boys dorm to guide and support students, such as resolving conflicts, organizing dorm olympics, and having late-night talks with students who didn't feel like they fit in at the boarding school.
- Remembered every faculty and student's name in our school of 300 people.

Treasurer, Board Member Chinese Student Association at Brown University September 2019 - Present

- \bullet 2020 Fall Organized an event to send care packages to incoming freshman Chinese American students and welcome them to Brown University virtually.
- 2019 School Year Hosted Lunar New Year Show to celebrate Chinese culture. Coordinated with performers and directed the show with an auction to donate to COVID-19 relief in China.

Math Peer Tutor Program Tutor, Head Tutor

September 2017 - May 2019

• Tutored peers in math every Thursday night, coordinated with other math tutors, and organized meetings with math teachers. Number of tutees who came for help doubled since I became math tutoring head.

TECHNICAL SKILLS

Programming & Skills Software & Tools JavaScript, Java, Python, Java, Swift, ReasonML Visual Studio Code, PyCharm, IntelliJ, Xcode