

EDUCATION

University of California, San Diego

Masters of Science in Electrical and Computer Engineering, May 2027

- Research Area: Machine Learning & Data Science

California State University, Fullerton

Bachelor of Science in Computer Science, Dec 2024

GPA: 3.72

EXPERIENCE

Software Engineer Intern | PanPalz

July 2024 - Present

- Migrated and restructured legacy registration code into the new project setup to use react navigation
- Developed 15+ core UI screens and reusable components using React Native, Typescript, and CSS, including a date of birth screen, gender select screen, avatar select screen for the registration/login flow, and settings module screens
- Developed and executed comprehensive Jest test cases for key features, ensuring reliability and performance

Substitute Teacher | The Education Team

May 2024 - October 2024

- Managed classrooms of 30+ students across various grades, ensuring curriculum continuity in subjects like math, science, and language arts
- Conducted daily lessons and managed classroom dynamics in the absence of regular teachers, ensuring a smooth learning experience for students
- Collaborated effectively with school staff to address concerns and resolve issues, emphasizing open communication

PROJECTS

VRrecover: Exposure Therapy in VR (Unity VR, AWS, C#, FishNet Networking, Docker)

- Worked with four other students to develop a VR exposure therapy application using Unity and C#, that enables therapists to create customizable therapy scenarios for treating phobias virtually
- Developed a serialized UI system using C# scripts to enable dynamic and customizable therapy scenarios, reducing configuration time by 50% and enabling therapists to easily design scenes without technical expertise
- Designed and implemented the DynamicUIManager, leveraging Unity's event handling and FishNet Networking to ensure synchronized and adaptive VR interactions across diverse scenes

Spotify Mood Analyzer (React.js, Tailwind CSS, Node.js, Express, MySQL, SpotifyAPI, D3.js)

- Built a Full Stack application with Spotify API integration to analyze 150+ songs, helping users track mood variations based on musical attributes such as valence and acousticness
- Utilized d3.js to design interactive graphs, improving data interpretation compared to static charts
- Reduced API data-fetching time by 25% through optimized backend processes in Node.js and Express

Rewind: Real-time Zoom Playback and Flagging (React.js, Material-UI, RecordRTC, MediaSource API)

- Developed a real-time lecture playback tool that allows students to rewind Zoom recordings, flag key moments, and catch up in real time, achieving a 50% increase in playback smoothness by dynamically managing video chunks in a source buffer and handling multiblob data using MediaSource API and RecordRTC
- Built functionality for editing and deleting timestamped flags, using React state management and Javascript to allow users to dynamically label and return to key parts in lecture

TECHNOLOGIES AND LANGUAGES

- Python, Javascript, Typescript, C++, C#, Java, React, React Native, Node.js, Swift, MySQL, HTML, CSS, Tailwind CSS