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## *EDUCATION*

**University of California, San Diego** **September 2025 - June 2027 (Expected)**
Master of Science in Electrical and Computer Engineering *GPA*: 4.0
- Research Area: Machine Learning and Data Science

**California State University, Fullerton** **August 2022 - December 2024**
Bachelor of Science in Computer Science *GPA*: 3.72

## *WORK EXPERIENCE*

**Software Engineer | SimInsights** ***July 2025 - Present***
- Engineered natural language processing pipeline using LangGraph, LangChain, and LLMs to transform conversational prompts into production VR simulations, reducing simulation creation time by 70% and implementing SQL telemetry for API cost tracking
- Developed machine learning system for adaptive learning using Hidden Markov Models to track student knowledge states, building React/D3.js dashboard to visualize learning progression and mastery predictions
- Refactored UI for Unity-based platform homepage and implemented lazy loading with asynchronous pagination in C# to improve initial load performance by 40%

**Software Engineer Intern | PanPalz** ***July 2024 - July 2025***
- Architected and migrated registration and authentication flow to new React Navigation system, improving code maintainability and user experience across 20+ screens
- Built component library and design system using React Native and TypeScript, establishing reusable UI patterns adopted across authentication, settings, and profile modules
- Implemented comprehensive Jest testing suite for critical user flows, improving code coverage and reducing production bugs

## *PROJECTS*

**VRecover: 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 200+ 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

## *SKILLS*

- Python, Javascript, Typescript, C#, Unity, React, React Native, Next.js, Node.js, Swift, MySQL, HTML, CSS, Docker, AWS, LangGraph, Flask, FastAPI, Pytorch, D3.js