Jonathan Mai

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EDUCATION

California State University, Fullerton

Bachelor of Science in Computer Science, 2022 - 2024 Winter (Expected)

GPA: 3.73

EXPERIENCE

Software Engineer Intern | PanPalz

July 2024 - Present

- Migrated and restructured legacy registration code into the new project setup
- Created and updated 3+ UI components, enhancing user interaction and consistency across the platform.
- 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 and problem-solving

PROJECTS

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

- Developed custom buffering and data handling logic using MediaSource API and RecordRTC, achieving a 50% increase in video playback smoothness by dynamically managing video chunks in a source buffer and handling multiblob data
- Built functionality for editing and deleting timestamped flags, using React state management to allow users to dynamically label and return to key parts in lecture
- Developed video saving and download function using blob storage to capture streams and generate downloadable files, with a "Go Live" option to jump to the latest buffered content for a real-time lecture catch-up

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

- Integrated Spotify API 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

AI Personal Finance App (Swift, OpenAI API, iOS)

- Developed a SwiftUI-based iOS app for budgeting, reminders, and a chatbot, featuring interactive pie charts for financial planning
- Implemented user-specific budgeting calculations based on student and debt status, with dynamic expense categories and visual representation
- Integrated notification scheduling for reminders and a chatbot using OpenAI API, providing financial advice and support through a conversational interface

TECHNOLOGIES AND LANGUAGES

Python, C++, Java, JavaScript, Typescript, React, Node.js, Swift, MySQL, HTML, CSS, Tailwind CSS