Ryan Voong

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SKILLS

Languages: Typescript, JavaScript, Python, HTML, CSS

Data: PostgreSQL, SQAlchemy, MongoDB, Mongoose, Cloud Firestore, NoSQL, SQL

Libraries/Frameworks: ReactJS, ExpressJS, FastAPI, React Native, Tailwind CSS, Bootstrap, Firebase

Other: Git, GitHub, GitHub Actions, REST, AWS (CloudFront, API Gateway, Lambda), Jest, Mocha, Chai, Supertest, Pytest

EXPERIENCE

Software Developer, Freelance

PolishByCin: (Website) (GitHub)

2024

- Deployed full stack nail service appointment application for booking and business management using Typescript and ReactJS for the frontend and ExpressJS with PostgreSQL for the RESTful backend.
- Collaborated with nail industry professionals as the sole software developer and developed the website to their specifications.
- Features photo gallery caching to enhance performance by reducing calls to the Instagram API resulting in faster load times by 50% resulting in improved user experience.
- Implemented server caching to support concurrent request handling for up to 200 connections.
- Utilize role-based access control to provide business owner with flexibility in site content management while ensuring data security.

PROJECTS

AI Voice Chatbot: (GitHub)

2024

- Developed a voice assistant that allows users to interact with it through voice recordings, delivering natural, human-like audio responses.
- Built a server with FastAPI to process audio transcriptions by leveraging OpenAI's Whisper-1 model and generating responses through Chat Completions API.
- Integrated ElevenLabs API to synthesize text into audio responses with customizable voice options to enhance user experience.
- Managed conversation flow by storing recent chat history in locally stored JSON file to maintain context across interactions.
- Established response parameters by incorporating pre- and post-system learning instructions to control the

WorldAnime: (Website) (GitHub - Frontend) (GitHub - Backend)

2023

- Deployed full stack application for retrieving and storing data on anime titles and trailers using ReactJS on the frontend and ExpressJS, Firebase, and Cloud Firestore database for the backend.
- Collaborated with users through user interviews and feedback analysis to enhance UI/UX and introduced locally stored features.
- Deployed with Firebase Hosting and Firebase Functions to use serverless architecture achieving up to 100 concurrent requests.
- Optimized for scalability with CRUD operations through data caching and pagination resulting in 30% reduction in load times.
- Implemented Continuous Integration/Continuous Delivery (CI/CD) pipeline through automated GitHub Actions to improve production deployment.

Video Streaming Server: (GitHub) (Blog)

2023

- Designed and created ExpressJS server that leverages AWS CloudFront signed URLs to securely deliver video content.
- Resolved slow video content delivery by converting media to use HLS (HTTP Live Streaming) protocol to stream video on-demand.
- Increased performance by using CloudFront CDN and edge-optimized API gateway to delivery content more quickly.
- Developed with AWS services, such as CloudFront for content delivery, API Gateway to manage API, and Lambda for serverless architecture, to produce reliable, secure, and scalable performance.

ADDITIONAL EXPERIENCE

Applied complex problem-solving skills in a high-stakes medical environment, routinely analyzing patient data and adapting treatment protocols in real-time.

Present

- Excelled in a collaborative multidisciplinary team environment, effectively communicating with doctors, patients, and staff to deliver optimal healthcare outcomes.
- Demonstrated leadership by spearheading redesign of clinic flow plan for a mass vaccination clinic resulting in a 15% increase in clinic productivity by 15%, and enhanced client and staff satisfaction.
- Rapidly adapted to new medical technologies and protocols, ensuring precise management of equipment and patient care.