

Ryan Voong

Toronto ON, Canada | 647-832-2711 | ryanpvong@gmail.com | [Personal Site](#) | [LinkedIn](#) | [GitHub](#)

SKILLS

Languages: Typescript, JavaScript, Python, HTML, CSS

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

Libraries: ReactJS, ExpressJS, FastAPI, 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 assistance's response scope and reduce irrelevant responses.

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.