

ANIRUDH EMMADI

emmadi.anirudh@gmail.com | (469) 403-1726 | [linkedin.com/in/anirudhemmadi](https://www.linkedin.com/in/anirudhemmadi) | github.com/aemmadi

EXPERIENCE

Full Stack Software Engineer, iLink Digital

Jul 2022 - Present

- Engineered **Socket** servers to integrate with **Confluent Kafka** and enable real-time data streaming events to be processed using **kSQL** queries.
- Sanitized data streams and built pipelines to feed **Rockset VectorDB** for powering custom **Large Language Models (LLM)** and **OpenAI GPT-4**.
- Developed a SaaS tool for real-time analysis of video feeds from multiple cameras using **Angular**, **TypeScript**, **Python (PyTorch)** and **AI Computer Vision** models.
- Implemented a meticulous refactoring process, transitioning the codebase from **React**, **JavaScript**, and **Python (Flask)** to **NextJS**, **TypeScript**, **Redis**, and the **Serverless framework**, resulting in improved code maintainability and reusability, saving engineering time and cost.
- Maintained **Docker** containers and **Kubernetes** clusters on **Azure Cloud** and **Edge Servers** for localized on-premise deployments to improve latency.
- Pioneered an A/B product testing framework to validate user assumptions and enable an incremental feature roll-out, empowering data-driven business decisions to maximize the impact of product enhancements.
- Implemented **REST APIs** catering to internal business intelligence needs, while also delivering comprehensive technical support to clients, users, and the internal team.
- Managed a technical team of four software engineers across numerous product releases, and incorporated automated workflows to increase developer productivity.

Cloud Software Engineer, BizCloud Experts

Sep 2021 - Jul 2022

- Designed and implemented scalable, production-ready cloud solutions for multiple companies, leveraging **Amazon Web Services (AWS)** such as **Lambda**, **DynamoDB**, **S3**, **Aurora (PostgreSQL)**, and more, utilizing the **Serverless framework**.
- Spearheaded the migration of multiple **Monolith systems** to an **Event-Driven Microservice Architecture** on AWS, strategically scaling the product tech-stack to enhance performance and reduce cloud costs by over 40%.
- Developed inventory management system and application for retail businesses leveraging **React**, **TypeScript**, **Python**, and **MySQL**.
- Streamlined architecture to achieve lower latency by introducing data streaming services like **Amazon Kinesis** for real-time data processing, resulting in a 20% reduction in overhead costs.
- Built shared internal libraries to improve development velocity for cloud native development.
- Interfaced as a support engineer, conversing with users and businesses to provide technical support and **Root Cause Analysis (RCA)**.

Software Engineer Intern, Walmart Global Tech (Walmart Labs)

May 2021 - Aug 2021

- Built internal tools for validating millions of documents across multiple databases (**Big Query**, **Cassandra**, **ElasticSearch**) efficiently using **Java** and **Google Cloud** to ensure 100% data integrity, reducing monthly costs by over \$1000.
- Implemented data metric visualizations, automated alerts, and notifications using **Grafana** and **Strati**.

PROJECTS

coursebook-api

- Served an unofficial API of the UT Dallas backend for course enrollment and catalog data, enabling the 1000+ student developer community to build projects on top of it.
- Optimized runtime by 35% by implementing **Redis** for data caching and improving web scraping performance.
- Developed using **Python**, **Flask**, **Selenium** (Web Scraping), **MongoDB**, and deployed it on **Heroku**.

plan.degree

- Degree planning solution for students to customize personal degree tracks, ensuring a successful graduation timeline.
- Built custom authentication flow using **JWT** and notification system involving Push Notifications, Email and SMS triggers, by leveraging **Mailgun** and **Twilio** respectively.
- Developed using **React**, **TypeScript**, **Redis**, **Python**, **Flask**, **PostgreSQL**, and deployed using **AWS Amplify**.

SKILLS

Languages/Frameworks: JavaScript, TypeScript, React, NodeJS, NextJS, Python, Flask, Java, Spring Boot

Tools/Technologies: REST API, SQL, PostgreSQL, MySQL, NoSQL, MongoDB, Firebase, AWS (Lambda, DynamoDB, S3, Cloudfront, EC2), Serverless, Docker, Kubernetes, Linux, Cassandra, ElasticSearch, Grafana, Kafka, Confluent, Cloudflare, Azure, Microservices, Git, GitHub, OAuth, Postman, JIRA

EDUCATION

Bachelor of Science, Computer Science
The University of Texas at Dallas

Aug 2018 - May 2022