Wilson Sie

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Skills

Languages - Typescript, Javascript, Python, SQL

Frameworks & Technologies - React, NextJS, NodeJS, ExpressJS, FastAPI, GraphQL, PostgresQL, Git, Docker, Nginx

Experience

Fullstack Software Engineer

January 2024 - Present

Mastplot - ST Engineering

- Built 5 services by implementing RESTful APIs with MVC architecture using Python FastAPI as a web server. Also collaborated with backend engineers to handle data migrations with Postgres in between releases.
- Led the development of the interactive frontend for a live navigation application used by seafarers, utilizing technologies such as NextJS, Typescript, DeckGL, Maplibre and Tileserver-GL to ensure smooth navigation even with limited internet connectivity.
- Boosted developer efficiency by 50% by introducing Docker Compose. This addressed challenges of inconsistent environments and difficulty replicating production issues, leading to a smoother development workflow.
- Built container images for services (e.g. Python FastAPI, NextJS) and architected CI pipelines using Github Actions and bash scripting to easily deploy applications to on-premise servers with every push.

Associate Software Engineer

June 2022 - January 2024

Trustana

- Played a key role in establishing the company's component library using Storybook that was published as a package via AWS Codeartifact.
- Built and maintained reusable components for the component library to be used across different projects to ensure UI consistency and improve developer efficiency.
- Orchestrated the setup of multiple projects and pipelines, enhancing the development and deployment experience for fellow developers utilizing Gitlab CICD and bash scripting.
- Successfully built and deployed multiple frontend features leveraging optimization strategies such as caching and debouncing, resulting in reduced server load and improving product search times.
- Engineered AWS Lambda functions and APIs orchestrated by a Step function, leveraging parallelism to significantly reduce product data generation time.

Education

University of London

2019 - 2022

B.S (Hons) Computing and Information Systems

Certis Cisco

Cisco Certified Network Associate (CCNA)

Projects

Code Editor

- This application serves as a browser code sandbox that is able to compile and execute user input code and judge its output performance.
- Technologies used: Typescript, TailwindCSS, NodeJS, Docker, Github Actions

Design System

- A design system package that provides a set of UI components to reuse across different projects. It is built with React and tested with Storybook. A CICD flow was implemented to automatically deploy to NPM with every push.
- Technologies used: Typescript, TailwindCSS, Storybook, Rollup, Github Actions

Homelab

- To understand the use of distributed systems, a 4-node cluster was built from recycled hardware that serves as a mini datacenter for self-hosted software projects. This project leverages on containerization technologies such as Docker and Kubernetes that is managed by Ansible scripts for automation. A reverse proxy was also set up to direct incoming network requests to the appropriate services based on domain name.
- Technologies used: Nginx, Docker, Github Actions, Proxmox Virtual Machines, Ansible, Kubernetes (K3s) Shell

Evergreen

- Written in Typescript and Python, Evergreen is a fullstack application that provides monitoring services for self-hosted apps.
- Technologies used: NextJS, FastAPI, ExpressJS, Typescript, Python, Postgres, Docker, Github Actions