Trent Cooper

trentscooper trent-cooper.github.io

Technical Experience

Creator, Software Engineer

Tailslide (tailslide-io.github.io)

2022 - present

Tailslide is an open-source feature flag framework with automated failure protection, designed for easier code deployment and feature release for companies with a microservice architecture.

- Constructed a full-stack application for management of feature flag and circuit breaking functionality with an Express backend, PostgreSQL database, and a React/Redux dashboard.
- Managed real-time communication with fault-tolerant async messaging using NATS JetStream.
- Spearheaded implementation of the circuit breaker stability pattern with automated recovery logic by coordinating communication between SDK instances, a RedisTimeSeries cache, a Node.js app, and the Express backend.
- Led design of React dashboard following Material Design principles using MUI.
- Implemented real-time circuit health visualizations by leveraging websocket connection to NATS.
- Solved challenges related to horizontal scaling of microservices, such as consistency, availability and load on the feature flag framework to handle multiple applications and their scaled instances.
- Developed server-side SDKs for evaluating feature flags and emitting circuit telemetry data in Go, Javascript, Python and Ruby.
- Automated the deployment of framework and containerized all components with Docker.
- Configured unit testing for the Express backend, a Node.js app, and SDK components using Jest.
- Authored documentation and a comprehensive <u>case study</u> on deployment strategies, framework architecture and design decisions + trade-offs encountered during implementation.
- Collaborated remotely with a team of 4 software engineers across North America.

Software Engineer

Self Employed

2020 - 2022

- ReqBin: a tool to receive and debug webhooks (Node.js/Express, WebSockets, PostgreSQL, MongoDB, Pug)
- Ello: a kanban-style app for task/deadline management (Node.js/Express, MongoDB, React/Redux Toolkit)
- U-Do: a to-do tracker with user login/state and custom theming (Node.js/Express, PostgreSQL, MongoDB, Pug)

Skills

Back End

Front End

Other

Node.js, Express, Go, PostgreSQL, SQLite, MongoDB, Restful APIs, Webhooks JavaScript, React/Redux, HTML/CSS, MUI, Chart.js, Prism.js, jQuery, Handlebars/Pug Docker, Git/GitHub, Redis, NATS, WebSocket, Axios, HTTP, SSH, SSE, Digital Ocean

Professional Experience

Technical Designer

Club Monaco / Ralph Lauren

2017 - 2022

- Daily communication with overseas vendors, cross functional team, and manager + department director.
- Leading bi-weekly fittings and attending weekly manager's meetings + internal category meetings.
- Management of 2 product categories, taking 50+ products from ideation to bulk production per quarter.

Education

Bloomington, IN

Indiana University

• B. A. in Fashion Design. - Focus on Technical Design. - Minor in French.