📍 Chicago, IL
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Trent Cooper

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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.
- Developed server-side SDKs for evaluating feature flags and emitting circuit telemetry data in Go, Javascript, Python and Ruby.
- 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.
- Implemented real-time circuit health visualizations by leveraging websocket connection to NATS.
- Led design of React dashboard following Material Design principles using MUI.
- 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.
- 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 case study 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, PostgreSQL, MongoDB, React/Redux)
- 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, Deployed on DigitalOcean Droplet with Nginx + PM2)

Skills

Back End	Other	Front End
Node.js, Express, Go, PostgreSQL, SQLite, MongoDB, RESTful APIs, Webhooks, NATS	Docker, Git/GitHub, Redis, Axios, HTTP, SSH, Object-oriented Programming, DigitalOcean, EventSource, AWS, Jest, npm/yarn	JavaScript, React, Redux, HTML, CSS, Material UI, Chart.js, Prism.js, jQuery, Handlebars, WebSocket, React Router

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.
- Translation of design concepts into technical instructions/processes for manufacturing.

Education

Bloomington, IN *Indiana University* **2010 - 2014**

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