Chicago, IL 📍
trent-cooper.github.io

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 microservices based 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 NodeJS app, and the Express backend.
- Led design of React dashboard following Material Design principles.
- 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 Express, NodeJS 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. *(tailslide-io.github.io)*
- 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, React, PostgreSQL, MongoDB)
- Ello: a kanban-style app for task/deadline management (Node.js/Express, MongoDB, and React/Redux)
- U-Do: a to-do tracker with user login/state and theming (Node.js/Express, PostgreSQL, MongoDB, Pug)

Skills

Back End	Front End	Other
NodeJS, Express, Go, PostgreSQL, MongoDB, Restful APIs, Webhooks	JavaScript, React/Redux, HTML/CSS, MUI, Chart.JS, Prism.js, jQuery, Handlebars/Pug	Docker, Git/GitHub, HTTP, Axios, Redis, NATS, Websocket, SSH, 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*   **2010 – 2014**

- B. A. in Fashion Design with focus on Technical Design - Minor in French.