# **Trent Cooper**

trentscooper intrent-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.
- 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 <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, 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)

# **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, Object-oriented Programming, Digital Ocean, Server-sent Events

# **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.