# **Trent Cooper**

trentscooper in 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.
- 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 is 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

- RegBin: a tool to receive and debug webhooks (Node.js/Express, PostgreSQL, MongoDB, React/Redux)
- Ello: a kanban-style app for task/deadline management (Node, is/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, HTML/CSS, MUI, Chart.js, Prism.js, Webhooks

JavaScript, React/Redux, ¡Query, 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

2010 - 2014

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