

Thorn Hall

Location: Marion, Illinois U.S. **Email:** thorn@alumni.stanford.edu **LinkedIn:** thorn-hall

Technologies

Languages: Python, Java, C#, JavaScript

Technologies: PostgreSQL, Django, REST APIs, Celery, Apache Kafka, Microservices, gRPC, React, Kubernetes, NoSQL

Experience

Senior Software Engineer

Remote

Shippo

Sept 2023 – Present

- Wrote and designed a microservice with Python, Kubernetes, Kafka, and New Relic as a data pipeline to automatically alert engineers in the event of business-critical bugs
- Developed a data pipeline using Kafka, Django, and PostgreSQL to store information needed by finance teams to reconcile and report on \$1 billion in financial data annually
- Implemented a framework which created a repeatable, efficient process for implementing Kafka consumers in Django, reducing development time from 2 weeks to 2 days
- Reduced the time it takes to run a core CI/CD testing pipeline by 66%
- Designed and implemented core components of a reconciliation pipeline with Kafka, Django, and PostgreSQL used to save Shippo and premier customers up to \$5 million annually

Software Engineer III

Remote

Shippo

Sept 2021 – Sept 2023

- Designed and built an internal REST API in Django with PostgreSQL which enabled the automated creation of accounts for premier partners, unlocking \$10 million in annual revenue
- Developed a process to automate the migration of premier customer accounts, saving \$5 million in compliance fees and preventing \$10 million in revenue loss annually
- Participated in an oncall rotation responsible as a first line of defense for keeping all production APIs of the company online with a 99.9% uptime SLA. Worked with cross-functional teams to troubleshoot and solve over 50 real-time incidents with distributed production systems
- Wrote a program which queued automated real-time updates to a production pricing database, a core piece preventing us from incorrectly charging customers up to \$5 million annually

Software Engineer II

Remote

Shippo

Sept 2020 – Sept 2021

- Created an internal tool using Django for modifying internal account credentials that is widely used by several engineering teams
- Designed and implemented a system for automatically delivering webhooks to customers with critical financial reconciliation data in Django with PostgreSQL
- Actively maintained over 100 external API integrations across 7 problem domains. Maintained, optimized, and designed abstractions and infrastructure built on top of these API integrations

Software Engineer I

San Francisco, CA

Shippo

Sept 2019 – Sept 2020

- Implemented a settings web page in React which communicated with a Django REST API to enable 500k users to store and manage several different types of accounts
- Integrated with 3 external APIs, unlocking \$1 million in annual revenue

Education

Stanford University

BS in Computer Science

Sept 2015 - June 2019