Ethan Zhu

ethan.vs.zhu@gmail.com | linkedin.com/in/yisheng-zhu | github.com/wontonion

Skills

Languages: TypeScript, JavaScript, Java, Kotlin, Go, Python, SQL, C/C++, HTML, CSS

Web & App: Next.js, React.js, Zustand, tRPC, TailwindCSS, Spring Boot, Node.js, Express.js, Hono.js, FastAPI Data & Infra: MySQL, PostgreSQL, MongoDB, Redis, RabbitMQ, Kafka, Nginx, Caddy, Spark, Hadoop, Dask, Ray DevOps:Linux/Unix CLI, Shell Script, Git, CI/CD, Docker, Kubernetes, Jenkins, Github Action, Google Cloud, AWS

Experience

Full Stack Software Engineer - SiengDart LLC. Accounting and Project Management Platform

Aug 2024 - Nov 2024 Newark, Delaware

- Reduced accounting time from 8 hours to 2 hours and data entry errors by 99% via building a full-stack bookkeeping system with Nest.js and Next.js in TypeScript
- Enhanced stakeholder oversight of projects, ownership, and profit distribution by engineering an interactive shareholder dashboard using React, shaden/ui, and Tailwind CSS
- Established role-based control for financial data by **OAuth2** and **JWT** authentication via passport.js

Software Engineer - Yufeili Medical Commercial Co.,Ltd.

June 2022 – July 2024 Guangdong, China

Medical Consumables Procurement Platform

- Designed and implemented 4 microservices (User Info, Merchant, Order Management, After-sales) for medical consumable ordering and sales by using Java, Spring Boot, RESTful API, and MySQL
- Optimized database performance for frequent queries and increased QPS from 1,000 to 1,500 by analyzing slow queries with EXPLAIN and composite indexes, reducing 10% in average search time for daily business
- Accelerated load times from 2000 ms to 200 ms in high-traffic periods by implementing hot data caching using Redis and LRU eviction to store seasonal frequently accessed consumables
- Designed fault-tolerant order mechanism and eliminated order failures by 99% during peak time by using RabbitMQ with Topic Exchange to segregate orders from major and minor suppliers
- Identified pain points in invoice processing and minimized manual entry time from 5 hours to 30 minutes by implementing batch invoice title upload/download functionality using Apache POI

Financial System Consultant - HAND Enterprise Solution Co., Ltd. Oracle ERP/EPM System

July 2018 - Apr 2020 Shanghai, China

- As team leader, optimized budget planning procedure and decreased planning time from 5 months to 3 months by Business Process Reengineering (BPR) and delivering features by SCRUM agile method
- Led integration of data schema between ERP and legacy systems and achieved 99.9% data consistency for financial statement generation by implementing ETL pipelines using Python

Projects

Full-stack Project Management System | Bun, Next.js, Hono, Prisma, PostgreSQL

- Implemented **feature-based architecture** with three main features (workspaces, projects, tasks), featuring real-time task tracking, project analytics, and team collaboration capabilities
- Built **RESTful API** for backend using **Hono RPC** with **Zod** validation, ensuring end-to-end type safety
- Designed state management using @tanstack/react-query for efficient data fetching, caching, and updates
- Implemented responsive design Kanban with optimistic updates and bulk operations for task management

Distributed Document Search System | Apache Zookeeper, HAProxy, Wireshark

- Implemented Leader-Worker distributed system with auto-healing and re-election using Apache Zookeeper
- Implemented Time Frequency-Inverse Document Frequency algorithm to enhance search accuracy
- Built load balancer by HAProxy, improving system's availability by routing TCP and HTTP traffic

Education