

# Yisheng Zhu

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## Education

**Johns Hopkins University** | MS in Engineering, Computer Science Aug 2024 – Dec 2025  
**Guangdong University of Finance & Economics** | BA in Logistics Management Sept 2014 – June 2018

## Experience

**Full-stack Software Engineer** - Shaoxing Geek Info LLC. July 2024 – Sept 2024  
Accounting and Project Management Platform | TypeScript, Nest.js, Next.js, PostgreSQL Remote

- Architected a full-stack bookkeeping solution with **Nest.js** and **Next.js**, streamlining financial operations by digitalizing manual ledger processes, reducing manual accounting time by 70% while enhancing data accuracy
- Engineered an interactive shareholder dashboard using **React** and **Tailwind CSS**, facilitating projects management across stakeholders with ownership registration and real-time profit distribution tracking
- Implemented secure **OAuth2** and **JWT** authentication via **passport.js**, establishing role-based access control for sensitive financial data

**Backend Software Engineer** - Foshan Yufeili Medical Commercial Co.,Ltd. June 2020 – July 2024  
Yufeili Procurement Platform | Spring Boot, MySQL, Redis, Rabbit MQ Foshan, Guangdong, China

- Designed and implemented 4 micro-service modules (User Info, Merchant, Order Management, After-sales) based on **Spring Boot**, completing project 10% under budget and improving procurement efficiency
- Optimized database performance for frequent queries, increasing 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 operation
- Designed robust caching and message queue architecture using **Redis** and **RabbitMQ**, ensuring system stability during peak seasons while reducing database load by 70% and maintaining 99.9% uptime
- Identified pain points in invoice processing workflow and implemented batch invoice title upload/download functionality using **Apache POI**, reducing manual data entry time by 80% and improving operational efficiency

**Financial System Implementation Consultant** - HAND Enterprise Solution Co.,Ltd. July 2018 – Apr 2020  
Design of the budget planning schema and implementation of the Oracle planning system Shanghai, China

Worked as group leader, spearheaded business process reengineering(BPR) for enterprise budgeting, and designed data integration schema between legacy and new systems. Monitored clients' requirement and delivered projects using **SCRUM** methodology, resulting in 50% reduction in clients' budgeting costs and received two commendation letters

## Projects

**Full-stack Project Management System** | Bun, Next.js, Hono.js, Appwrite, TailwindCSS

- Implemented a **modular feature-based architecture** separating concerns into discrete features (workspaces, projects, tasks), featuring real-time task tracking, project analytics, and team collaboration capabilities
- Built API routes using **Hono RPC** with **Zod validation**, ensuring end-to-end type safety between frontend and backend
- Designed a scalable state management system using **@tanstack/react-query** for efficient data fetching, caching, and real-time updates across the application
- Implemented a **drag-and-drop Kanban board** with optimistic updates and bulk operations for task management

**Distributed Document Search System** | Apache Zookeeper, HAProxy, Wireshark

- Designed and implemented a Leader-Worker cluster architecture based on **Apache Zookeeper** featuring auto-healing and re-election mechanisms by utilizing sequential lock with predecessor watching strategy to mitigate the Herd effect
- Implemented a document ranking algorithm using Time Frequency-Inverse Document Frequency (**TF-IDF**) to enhance search result relevance and accuracy
- Built load balancing mechanism by integrating **HAProxy**, enabling Layer 4 (TCP) and Layer 7 (HTTP) traffic routing to enhance the document search system's stability and performance

## Skills

**Languages:** Java, Typescript, JavaScript, Python, SQL, C/C++ , HTML, CSS

**Framework and Middleware:** Spring Boot, Nest.js, Hono.js Next.js, Redis, Rabbit MQ, Nginx, MySQL, PostgreSQL

**Tools:** Git, Docker, Linux/Unix command line, Postman, Wireshark