

Rancho (赵楠灿)

Sex: Male | Bachelor

Birthplace: Zhejiang | Location: Shanghai

Birthday: 1994.11 | About 7 years of work experience

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Personal Blog: <https://blog.ranchocooper.com>

Github: <https://github.com/RanchoCooper>



Education Experience

2013.09 – 2017.06 Chongqing University of Posts and Telecommunications –
Computer Science and technology – Bachelor Degree

Self Evaluation

Fundamentals: Having a gentle personality, I'm easygoing, willing to communicate and helpful

Self Motivation: I read a lot every year, focusing on communication expression, cognitive improvement, product design, social sciences, and humanities

Learning Ability: Able to quickly complete language transformation, quickly become familiar with unfamiliar technology stacks, and quickly become familiar with company business

Job Performance: Positive and enthusiastic about work, with strong sense of responsibility. Project delivery is of high quality and has a good reputation during his tenure

Engineering Architecture: Have certain practical experience in Domain-Drive-Design(DDD) implementation

Business Experience: Logistics system-rider fulfillment, online education-paid courses, AB experiment system

Professional Skill

- Familiar with Golang (currently the main language) and familiar with common frameworks such as Gin and GORM
- Familiar with Python, familiar with advanced features such as iterators, generators, and coroutines, and master common frameworks such as Flask and SQLAlchemy
- Understand Java and master the use of common frameworks such as Spring and Mybatis
- Familiar with MySQL
- Familiar with Redis

- Familiar with Kafka

- Familiar with Linux system and common commands
- Familiar with IDEA, Familiar with editor like Vim
- Familiar with Git and Git Workflow



Work Experience

2021.09 – 2023.06

Binance – E&C – Expert Backend Engineer

- In charge of the company's AB experience system's functional development and program design
- Responsible for guiding and mentoring junior engineers on the dotted line

2019.11 – 2021.01

Laix – Technology Department – Senior Backend Engineer

- In charge of developing the functional design and program design for small class classes (Elite), authentic pronunciation (Bell) and other business projects

2017.07 – 2019.11

Alibaba Local-life(ele.me) – Logistics R&D Department – Senior Backend Engineer

- Responsible for developing and designing logistics projects such as pick-up and delivery separation, terminal distribution, robot delivery, etc
- Responsible for horizontally improving the single test coverage for each production line within the large logistics department
- Serving as a mentor to new students.

2017.01 – 2017.04

Zhihu.com– Python Engineer(Intern)

- Responsible for the design and implementation of requirements related to Zhihu community website daily report
- Participate in the discussion and formulation of technical solutions



Project Experience

2021.09 – 2023.06

Binance – Themis(AB experience system) – Expert Backend Engineer(Golang)

- In this project, I was responsible for iterating the company's AB experiment system, including management backend, distribution engine, and data analysis modules. Technology stack includes Gin framework, MySQL, Redis, Kafka message queue and OKTA authentication
- Analyze and understand the architecture and functions of the existing AB experimental system to ensure the accuracy and consistency of iterations

- Use the Gin framework to develop backend APIs, including routing design, data processing and error handling, etc
 - Design and optimize the MySQL database table structure and write corresponding SQL query statements
 - Use Redis cache to store and read frequently accessed data to improve system performance
 - Use Kafka message queue to implement asynchronous communication between modules and handle message push of experimental changes (based on the company's internal IM tool)
 - Integrate OKTA authentication to ensure user security authentication and rights management, and protect system data and functions
 - Integrate Casbin permission management to ensure system permission management and protect system data and functions
- Through the above work, the company's AB experience system was successfully iterated, and the core modules were optimized and improved, improving the function and performance of the system while ensuring the safety and reliability of the system. Overall, it improves the company's experimental results and product decision-making, as well as customer satisfaction and team work efficiency

2022.01 – 2022.04

Binance – Go Hexagonal – Expert Backend Engineer(Golang)

Responsible for the development of the internal Golang framework based on hexagonal architecture and DDD domain-driven design

- Conducted design and research on hexagonal architecture and DDD, and gained an in-depth understanding of its principles and practical ideas
- Designed and implemented the Golang framework to ensure that it conforms to the hexagonal architecture and DDD design ideas
- Use principles such as dependency inversion and dependency injection to make the framework highly flexible and testable
- Integrate the company's internal development components, such as databases, caches and other components, to facilitate the use of internal personnel and get started with new projects
- Developed a CLI tool that allows users to generate project structure and initial code with one click through simple command line operations

Through the above work, I successfully developed the Golang framework based on hexagonal architecture and DDD domain-driven design, and integrated internal development components. The design and implementation of the framework

conform to the principles of hexagonal architecture and DDD, and have good scalability and maintainability. The result of this project is a complete set of development frameworks and tools that help development teams quickly start new projects and develop according to best practices. Overall improved development efficiency, code quality and team collaboration effects

2020.02 – 2021.01

● **Laix – Bell – Senior Backend Engineer(Golang)**

As a project member, participate in maintaining the Bell and support feature iterations

- Maintain the Bell project, including troubleshooting and fixing problems, handling user feedback, and supporting the development of new features
- Carry out the sub-database and sub-table transformation of hundreds of millions of large tables, analyze the database structure and business needs, design and implement corresponding sub-database and sub-table solutions
- Use Golang to write the Alibaba OSS unified login interface to ensure that users can perform unified authentication and login
- Use Grafana and Prometheus to build monitoring dashboards, configure monitoring indicators and alarm rules, and detect system performance and health status in real time

Through the above work, the authentic pronunciation project was successfully maintained and functional iterations were supported. The result of the project is that Bell's authentic pronunciation runs stably, new functions are iterated, and performance is optimized. Improved project quality overall, improved user experience, user satisfaction and team work efficiency

2019.11 – 2021.01

● **Laix – Elite – Senior Backend Engineer(Golang)**

Responsible for maintaining the back-end services of Elite, acting as a back-end engineer for maintaining Elite, and responsible for troubleshooting and repairing front-line business problems

- Analyze and understand the architecture and business logic of Elite back-end services to ensure accurate troubleshooting and repair of front-line business problems
- Designed and implemented interaction with Hive data, used Golang to build a Job service for regularly consuming Hive data, and wrote Hive data to MySQL
- Troubleshoot and repair business problems of Elite service to ensure system stability and reliability

- Conduct testing and debugging to ensure stable operation of the service and data accuracy

Through the above work, the Elite backend services were successfully maintained, and front-line business problems were investigated and repaired. The Elite services were stable and business problems were resolved quickly. Overall, the system was more reliable, the data was more accurate, and the team was more productive.

2018.04 – 2019.11

Alibaba Local-life(ele.me) – Robot Delivery – Senior Backend Engineer(Java)

My responsibilities include the unmanned delivery project, which aims to integrate smart devices into the delivery process, including robotics and unmanned vehicles for food delivery. Providing technical solution leadership and implementation of the unmanned distribution technology solution for seamless integration of intelligent hardware into the existing terminal distribution system.

- Analyze the needs and processes of existing terminal distribution projects, determine technical solutions for unmanned distribution, and formulate corresponding implementation plans
- Research and evaluate the feasibility and applicability of intelligent hardware such as robots and autonomous vehicles, and select appropriate equipment suppliers or partners
- Cooperate with equipment suppliers to negotiate and formulate technical specifications and interface standards for equipment access
- Conduct testing and debugging to ensure the stable operation and accurate delivery of intelligent hardware such as robots and unmanned vehicles in actual delivery scenarios
- Coordinate cooperation with other teams, such as algorithm team and operations team, to ensure coordinated operation of the entire delivery system

Through the above work, the technical solution for unmanned distribution has been successfully implemented, and intelligent hardware such as robots and unmanned vehicles have been seamlessly integrated into the existing distribution system. The accurate delivery capability of smart hardware provides delivery efficiency and on-time performance. The successful implementation of the unmanned delivery project has brought technological innovation and competitive advantages to the company

2018.02 – 2019.11

Alibaba Local-life(ele.me) – Terminal Delivery – Senior Backend Engineer(Java)

2017.07 – 2018.02

Responsible for developing SOA services based on Spring, connecting to the company's unified gateway Pizza, and supporting multi-activity in remote locations for terminal delivery business

- Use MySQL as data storage, design and implement relevant database structures and query statements
- Use Redis as a data cache to improve system response speed and performance
- Use JUnit to write unit tests to ensure the functional and logical correctness of the service
- Transform the original Python project into Java based on DDD to improve the maintainability and scalability of the system
- Design and implement terminal data dashboard to provide intuitive data display and analysis functions for the management backend system

Through the above work, we successfully developed and deployed the terminal delivery applet and management backend system

Alibaba Local-life(ele.me) – Separation of pickup and delivery – Backend Engineer(Python)

In order to improve the existing distribution process, improve human efficiency and reduce the average order cost, I am responsible for the design and development of the back-end system for separation of pickup and delivery, which is deployed on the Alibaba Cloud server. It mainly includes order fulfillment process, system order distribution, site management, rider management, order grabbing hall, cabinet management and other modules

- Use the Flask framework to build a back-end system that carries out technical innovation and process optimization based on business needs
- Choose Alibaba Cloud Server as the system deployment platform to ensure system reliability and stability
- Use postgresSQL as data storage, design and implement related database structures and query statements
- Use Redis as cache and order lock to improve the system's read and write speed and data consistency
- Use Pytest to write unit tests to ensure the functional and logical correctness of the system and improve the quality and stability of the system

Through the above work, the back-end system for separation of pickup and delivery was successfully developed. The system leverages technology and business innovation to improve the delivery process. The human efficiency in the gray business

district has increased by 30%, and the average order cost has decreased by 20%

Personal Project

Technical Learning

- [Go-programming-tour-book](#) : Code practices of book 《[Go编程之旅](#)》的代码实践。
- [Learn-Go-with-tests](#) : Learn test-driven development with Go language
- [Go-by-demos](#) : Code practices for Go-related third-party libraries and articles
- [Go-in-action](#) : Code practices of book 《Go In Action》
- [Hacker Rank](#) : Practices of Hacker Rank
- [Leet-code](#) : Practices of LeetCode

Technical Projects

- [Quants](#) : Personal quantitative trading system. Continuously iterating
- [Go Hexagonal](#) : Go template project based on hexagonal architecture and domain-driven design。
- [Hexo-theme-huxblog](#) : Customized theme for Hexo personal blog
- [Buddy-memory-allocation](#) : Buddy memory allocation algorithm implementation。

Open Source Contributions

- [Structs](#) Optimization and improvement of tags functions
- [Vibora](#) Fix routing bug and improve Doc