

Keping(Fred) Tu

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WORK EXPERIENCE

NXGLabs (CharacterX) | Tech Leader

June 2022 – Jan 2024

- Established and managed a high-performing team. Team comprising backend developers, frontend developers, operations engineers, and data analysts was formed.
- Successfully launched 8 APPs, with one of the apps achieving a daily active user base of 100,000 and generating \$6 million in revenue.
- The implemented app incorporated OPEN AI technology, including its prompt engineering capabilities, and utilized long-term memory capabilities. Additionally, a personal knowledge base was trained based on a vector database.
- Utilized: AWS, NodeJS, Docker, Solidity, TypeScript, Azure, Postgres, K8S, Redis.

Zeekr (Geely Group) | Senior Staff Engineer

Nov 2021 - June 2022

- Led the implementation of a complete vehicle delivery fulfillment system using the DTC (direct-to-user) vehicle sales model.
- Successfully took over the system from a supplier team of 28 people and optimized the process. Implemented strict control over function iterations, technical solution reviews, and code reviews. Transitioned to a self-developed system by a team of 10 people (Krypton team) within 2 months, resulting in a 50%+ increase in efficiency.
- Managed a system that supports the delivery of 10,000 vehicles and integrates with over 20 external systems, including factory operations, warehousing, logistics, finance, payment, contracts, invoices, insurance, charging infrastructure, OTA (over-the-air) updates, and vehicle activation.
- Utilized: Java, SpringBoot, Nacos, APISIX, K8S, Redis, MySQL.

Lookwide - (LMK App) | Staff Engineer

June 2020 – July 2021

- Led and implemented the "Recommended Friend System," which involved designing an RDS+ graph database and utilizing both PULL and PUSH models. This significantly improved user stickiness and connectivity at a strategic level, resulting in a 20%+ increase in user follows and a 10%+ improvement in retention.
- Led the implementation of the "Voice Party" feature using Kotlin, SpringBoot, gRPC, and AWS cloud. This transitioned the company from a single subscription-based revenue model to two sources of income: virtual gifts and subscription members. This change led to a 120%+ revenue increase, 100%+ increase in DAU (Daily Active Users), and a 30%+ improvement in retention.
- Led the development of an AB test platform that facilitated over 50+ parallel experiments for the business. This platform played a crucial role in product decision-making, user experience enhancements, and product quality improvements. After using the AB Testing platform, DAU saw a growth increase of 15%+.
- Utilized: Kotlin, Python, NodeJS, AWS, K8S, Git, Serverless, SpringBoot, gRPC, SQS/SNS, Redis, Neptune, DynamoDB, S3, Postgres, Kinesis, Elasticsearch, Quicksight.

CAINIAO (ALIBABA Group) | Senior Engineer

March 2018 – Sep 2019

- Developed and led the team in building the transport vehicle dispatching subsystem for the Cainiao logistics operation and dispatching system. Implemented domain-driven design (DDD) to handle complex business scenarios and distribution methods. After refactoring, the system supported over 5,000 dispatching vehicles daily, with peak loads exceeding 100,000 during events like e-commerce shopping festival. Achieved a 30% reduction in system load rate while ensuring error-free Cainiao logistics operation in 2018 and 2019.
- Collaborated on the Cainiao intelligent dispatching project, addressing issues of low efficiency, accuracy, and resource underutilization. Collaborated with the algorithm department to create a quasi-real-time scheduling plan, increasing vehicle loading rate by 15%, cross-point rate by 10%, and reducing logistics costs by 6%, resulting in a savings of \$2 million in shipping costs. The project was recognized as the project of the year.

- Led the Ministry of Transport designated project for capacity "co-allocation" between Hellobike and Snow Beer. Developed a TMS transportation management platform tailored to the "less-than-truckload" scenario, successfully deploying the project in Hangzhou.
- Utilized: Java, Git, Maven, Pouch Docker, Pandora OSGi, Spring, SpringBoot, HSF, Dubbo, MetaQ Kafka, Tair Redis, MyBatis, TDDL, SchedulerX, MaxCompute Spark.

Enniu Network Technology I Senior Development Engineer

January 2016 – March 2018

- Developed and led the credit review and risk control system, implementing customized review processes and integrating robot review calls. This resulted in a 30%+ increase in review efficiency and a 40%+ increase in the average daily review order volume.
- Developed an automated risk control platform utilizing big data quantitative analysis. With the risk control strategy in place, the pass rate for eligible applicants increased by 7%, providing a solid foundation for loan applications.
- Successfully integrated Rong360 Loan Supermarket into the company's loan entry pool, establishing a high-throughput architecture. Achieved an average daily loan application volume of over 15,000. The risk control data aligned with the expected model, yielding valuable portrait data of risk control figures exceeding 30,000 pieces.
- Utilized: Java, Git, Maven, Jenkins, Docker, Spring, SpringBoot, SpringCloud, Consul, Kafka, MyBatis, MySQL, Postgres, Cassandra, Groovy.

JIULI Network Technology I Co-Founder

June 2015 – January 2016

- Based on the relationship between restaurants, consumers, and a cloud platform, design a product and business model where consumers can directly place orders on iPads placed on their tables, and subsequently, the kitchen receives cooking notifications, and the waitstaff delivers the orders to the consumers' hands.
- Utilized: NodeJS, Java, Netty, Electron, PHP, HTML, CSS, MYSQL.

SkyMobi I Server Development Engineer

Aug 2014 – June 2015

- Developed and constructed the CMS content management system using the ESB message bus and Mina framework. This system facilitated real-time interaction and content push between operators and gamers on the "Nokia" platform.
- Led the development of an information crawling platform using the Java crawler framework Spider for distributed crawling and data cleaning.
- Utilized: Java, NodeJS, Jenkins, SVN, Ant, Mina, ESB, HTML, CSS, MYSQL.

LongShine I Software Development Engineer

March 2011 – Aug 2014

- Implemented the OSGi architecture with microkernel and business plug-ins to enable rapid business development and deployment capabilities. Successfully deployed the developed solutions within the State Grid.
- Led the research and development of large-scale power grid projects, including "Smart Substation," "State Grid Branch Integration," and "Distribution Network Fault Diagnosis." Used SIM card to collect electricity information as a data analysis system.
- Utilized: Java, NodeJS, Spring, Oracle, Delphi, OSGi.

BBCMart I Web Development Engineer

March 2010 – March 2011

- Implemented website services for online flight ticket and hotel booking. Used SOAP architecture to connect to airline API interface.
- Utilized: Java, C#, HTML, CSS, MYSQL.

Publications

- HeronBook: Create stunning children's books in 5 minutes using Generative AI (website: heronbook.store)

SKILLS

- **Programming Languages:** Java, JavaScript, NodeJS, SQL, Kotlin, Python, Go, Solidity, TypeScript, HTML
- **Databases and Cloud Services:** AWS, Azure, Postgres, MySQL, Redis, Elasticsearch, Cassandra
- **Frameworks and Tools:** Git, K8S, Docker, Jenkins, Netty, Spring Boot

EDUCATION

Zhejiang International Studies University of Science & Technology | *Hangzhou, Zhejiang, China*

- College Degree in Computer Technology and Science. **Sep 2007 – June 2010**
- Honor: First place in the provincial level of the 2008 ACM Programming Competition.