

YIYAN(FLORENCE) KONG

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EDUCATION

University of California, Irvine

Sep. 2024 – Dec. 2025

Master of Computer Science, GPA: 4/4

Irvine, CA

Northeast Normal University

Aug. 2017 - Jun. 2021

Bachelor in Software Engineering, GPA: 3.76/4

Changchun, China

TECHNICAL SKILLS

Programming Languages: Java, C/C++, Python, SQL, JavaScript, HTML/CSS, Bash, Markdown

Frameworks and Libraries: SpringBoot, MyBatis, Flask, Kafka, RabbitMQ, RPC(Thrift), PyTorch, React, Node.js

Database and Tools: MySQL, MongoDB, Redis, Elasticsearch, Docker, Kubernetes, Git, AWS, RESTful API, Linux

WORK EXPERIENCE

Meituan [HKG: 3690]

Beijing, China

Meituan Youxuan E-Commerce Group, Back-end Software Engineer

Jul. 2021 – Sep. 2023

- Played a key role in building marketing channels for Meituan Youxuan, focusing on exposing promotional content to target users via social media to drive GMV(Gross Merchandise Value) growth.
- Contributed as a core developer to building a WeCom-based marketing system for delivering promotional messages via group chats, private messages, and posts, effectively increasing product visibility and engagement. Successfully launched 43 projects while supporting business UV(Unique Visitor) growth from 1M to 6M.
- Led system optimization initiatives, including automated marketing workflows, message frequency rate control, sensitive content control, and embedded tracking links to measure campaign performance, achieving over 2.5M daily automated messages with a 99.5% success rate.
- Built a real-time monitoring and alerting system with full-process tracking for message construction, delivery, and result feedback, enabling developers to receive alerts within 2 minutes in case of abnormal delivery success rates.
- **Awards:**
 - Most Outstanding Junior Employee of the Business Group (top 5%) @Meituan Jan. 2022

PROJECT EXPERIENCE

Thread-Safe Log-Based Storage Project

University of California, Irvine

C, Linux, POSIX Threads, Cache, Memory Alignment, GDB, Valgrind, Strace

Nov. 2024

- Managed read and write threads using POSIX Threads, leveraging mutex locks and semaphores for inter-thread communication. Successfully passed heavy test with over 20,000 high-intensity read and write operations.
- Designed and deployed a write buffer, utilizing head and tail pointers to aggregate smaller write operations into block-aligned units, reducing write frequency and improving efficiency.
- Ensured device and memory consistency by implementing forced buffer flushes before read operations.
- Applied a restore metadata field to save and recover file system metadata, enabling persistent state support.

WeCom-Based Marketing System

Meituan

Java, Thread Pool, Kafka, Thrift, MySQL, Redis, EXPLAIN, Metrics

Jul. 2021 - Mar. 2023

- Contributed to the design and development of a full-chain marketing system leveraging 3rd-party APIs from WeCom for promotional message delivery.
- Utilized Kafka to distribute peak-period requests and reallocate invocation times, employing a key-value storage tool to implement a counter for controlling 3rd-party API frequencies. Integrated delayed messaging to trigger actual API calls, increasing system capacity by over 4x.
- Applied MCC (Meituan Config Center) pre-checks and real-time API validations to filter sensitive content, ensuring compliance and preventing restricted content exposure to users, while maintaining a 0% error rate
- Optimized large-scale data processing by adopting multi-threaded asynchronous operations, handling requests that required storing over 10,000 records in the database per operation, and reducing response time by 5x.
- Enhanced database efficiency in MySQL by balancing field indexing with in-memory filtering and leveraging the EXPLAIN method to optimize SQL queries, resolving 5 slow queries.