LILI LIANG

EDUCATION

Carnegie Mellon University (Incoming Student)

Master's degree, M.S. in Software Engineering 08/2024 – 12/2025

Northeast Normal University

Bachelor's degree, B.Eng. in Software Engineering 09/2017 – 06/2021

TECHNICAL SKILLS

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

Frameworks: RPC(Thrift), RocketMQ, Kafka, SpringBoot, MyBatis, Node.js, Zookeeper

Databases: MySQL, Redis, ElasticSearch, Hive, MongoDB

Tools and Services: Linux, Git, IATEX, Swagger, Google Cloud Platform, Amazon Web Services

WORK EXPERIENCE

ByteDance (Parent company of *TikTok*)

Shenzhen, China

Backend Software Engineer Full-time, TikTok E-commerce Fulfillment Group

07/2021 - 10/2023

Mountain View, CA

Changchun, China

- **Merchant Fulfillment**: *Core developer*. Supported the construction of the multi-end capabilities for merchant fulfillment and launched 23+ large and medium-sized projects. The average daily order volume of the business increased from 56k to 10 million.
- **OpenAPI**: *Business owner*. Reviewed the historical architecture, tracked online issues, identified and promptly addressed 16 historical bugs. Based on software development principles, took the lead in formulating interface change specifications.
- **Stability Construction**: *Business owner*. Completed the basic construction of business problem troubleshooting tools, including the full-link tool reporting SDK, data cleaning, and full-scenario data dashboard, etc. For online problem solving, it saved 75% of human resources (21 people to 5 people).
- Achievement
 - \circ Annual performance appraisal: *Exceed Expectation* and promoted $(Top \ 1\%)$
 - o Global E-Commerce *Spot Bonus* Award, Outstanding Job Performance (*Top* 3%)

PROIECT EXPERIENCE

Fulfillment Decision System and Configuration SDK Project @ByteDance

09/2022 - 11/2022

Project Owner. Technologies: Golang, KiteX, RocketMQ, SDK, RPC, Metrics, Grafana

- Implemented an action decision system that can encapsulate business decision logic, achieve configurability, support grayscale release mechanism and exception rollback.
- Converted 25 business rules into rule expressions in the MVP version and designed a rule engine to complete the logical calculation of the regular expression.
- Used the company's basic component TCC to configure rules, provide rule management, and read and write capabilities. Completed the configuration management of business rules.
- Designed an action verification service based on the rule engine, which could offer two integration methods, SDK and RPC, preventing single-point issues.
- Result: 3 months after being launched, access to SDK QPS: 1.1k, access to RPC QPS: 115 (B-side business).

Fulfillment Oncall Tool Efficiency Improvement Project @ByteDance

12/2022 - 03/2023

Project Owner. Technologies: Golang, KiteX, SDK, ElasticSearch, Hive, RocketMQ, Metrics, Grafana

- Abstracted the key actions in each business, classified key actions according to e-commerce scenarios, and designed common reporting business data for each key action.
- Designed a general business data reporting SDK for low-cost access to business services. Pushed the reported data to ES via RocketMQ.
- Exported ES data to the data analysis platform through Hive for PM and operations to perform data analysis.
- **Result**: Based on the data reported by ES, SDE can quickly check the full-scenario data of the order based on the key ID. For online problem solving, it saved 75% of human resources (21 people to 5 people).