LILI LIANG

(86) 175-4399-9485 | l2liang@cmu.edu | ⌨ leungll | 🔗 l2liang | ❯ leungll.site

EDUCATION

Carnegie Mellon University (Incoming Student)	Mountain View, CA
Master's degree, M.S. in Software Engineering	08/2024 – 12/2025
Northeast Normal University	Changchun, China
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, LaTeX, 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

- **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**
  - **Annual performance appraisal:** *Exceed Expectation* **and promoted** ($Top\ 1\%$)
  - Global E-Commerce *Spot Bonus* Award, Outstanding Job Performance ($Top\ 3\%$)

PROJECT 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).