Liming Huang



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EDUCATION

Northeastern University, Boston, MA

Jan.2023 – Dec.2025

• Master of Science in Computer Science (GPA: 3.8/4.0)

University of International Business and Economics, Beijing, China

Sep.2015 - Jun.2017

• Master of Finance Engineering (GPA: 3.9/4.0)

China University of Geosciences, Wuhan, China

Sep.2011-Jun.2015

• Bachelor of Computer Science (GPA: 3.7/4.0)

CERTIFICATIONS & TECHNICAL SKILLS

AWS Certified Solutions Architect - Associate

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

Web Development: Spring Boot, gRPC, Kafka, Kubernetes, NodeJS, Express, React, MySQL, MongoDB, Redis, Git, Docker

Concepts: Linux, Cloud Computing, Distributed System, Object-Oriented Design, Algo Trading, Linear Programming

EXPERIENCE

1 Thing Boston, MA

Intern | Backend Software Engineer

Aug. 2024 - Present

- Created a registration system for therapy kits integrated with RESTful APIs by Node.js serving more than 800 clients
- Automated real-time data transformation and analysis by **AWS lambda** to enable scalable serverless management, reducing monthly cost by 54% compared to a provisioned instance
- Performed cleaning of the data using **PostgreSQL** on **Linux** servers, achieving a 27% reduction in query latency

Hundsun Electronics

Hangzhou, CN

Intern | Software Engineer

Jul.2022 - Oct.2022

- Restructured the workflow by splitting serial processes into parallel branches with a parallel gateway, using **ConcurrentHashMap** for thread-safe context management and implementing a merge node for result aggregation, achieving an 81% decrease in execution time
- Developed a query interface leveraging Elastic Search to retrieve **Rowkeys** for **HBase**, resulting in a 73% improvement in query speed
- Addressed the need for real-time message handling over 1,000,000 per second by using **Kafka** to process user actions and inventory updates instantaneously

Caitong Securities Shanghai, CN

Quantitative Research | Research Institute

Jul.2017 - Jun.2018

- Designed and implemented a Deep Q-Network (DQN)-based index timing strategy. Tested the sensitivity of the discount
 factor gamma and performed parameter optimization. Achieved a Sharpe ratio of 1.05 over three years on the CSI 1000
 index
- Optimized the multi-factor model by designing **factor layering** to address **non-linear characteristics** of the factors. Backtested the framework resulting in a 126.40% improvement in return and a 20.73% reduction in maximum drawdown
- Utilized **Pandas** and **NumPy** for data processing, and managed **parallel computing** using the multiprocessing module, achieving a reduction in strategy execution time from 2 hours to 45 minutes on Alibaba Cloud

SELECTIVE PROJECTS

Fault-tolerant SDN Controller | Golang, AWS

- Designed and developed a custom SDN controller using **OpenFlow** protocol, integrating algorithms and data structure like **Raft** and **MWMR** for distributed system to reach consensus and simultaneous access
- Utilized network simulation tools such as Mininet for testing and validation, ensuring the correctness and robustness of the controller in various network scenario
- Deployed the controller on **Amazon EKS** involves creating the cluster, pushing **Docker images**, managing **Kubernetes** nodes, and monitoring container performance and logs through **CloudWatch**