

HANWEN LIAO

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EDUCATION

New York University, NY, US Jan. 2021

M.S. - Computer Engineering

Beijing University of Posts and Telecommunications, Beijing, China Jun. 2019

B.E. - Telecommunication Engineering

WORK EXPERIENCE

Yuanfudao, Beijing, China Mar. 2021 – Sep. 2021

Software Engineer - Basic R&D Department, Live Broadcast Center, Data Platform Group

- Used Doris, Flink, Spark, Iceberg and other tools for big data analysis, completed Java Web development for multiple requirements, and presented data indicators of live broadcast through reports and other forms
- Maintained and iterated the data query and visualization tool Redash, which includes support for new data sources, expansion of SQL writing methods, optimization of alarm, and access to ldap login
- Token responsible for log collection services based on Netty, completed service suppression
- Optimized the problem of log duplication and loss, proposed an optimization plan and led the implementation, and reduced the proportion of problem users from a few thousandths to one ten thousandths
- Designed the protocol for sample reporting of logs and led the implementation of related functions
- Intercepted Sentry data in Kafka, classified client crash reason, and analyzed it with other indicators
- Completed the migration of client-side millions of QPS logs from Alibaba Log Service to Elasticsearch

Huawei, Shenzhen, China Aug. 2020 – Dec. 2020

Software Engineer Intern - 2012 Lab, Central Software Institute, Poincaré Lab

- Analyzed the function call relationship of Linux kernel and learned the principles of LLVM compilation
- Developed variable tracer based on LLVM

Eastcom-BUPT Information Technology Co.,Ltd., Beijing, China Jun. 2018 – Aug. 2019

Software Engineer Intern - ISMP Department

- Maintained the ISMP with C++ (Integrated Service Management Platform)
- Developed the interface module, which encodes and decodes between HTTP message and JSON message
- Modified the Lua compiler. Added a new grammar (like annotation in Java) and banned specific variable names by modifying the lexical analyzer of the Lua compiler
- Restructured the message distribution method, completed load balancing, and improved availability
- Created the interface of ISMP and microservice platform with Golang, which passes JSON message

PERSONAL PROJECTS

Intelligent Healthcare Project, Beijing, China Oct. 2018 – Apr. 2019

Supported by Wireless Communication Center, BUPT

- Collaborated with a group of graduate students to develop intelligent mattress
- Developed server program, which receives data from devices and store it in MySQL database
- Built an Android APP, which is able to access data from the server and show with charts using Chart.js

IoT Nodes Embedded Development Project, Beijing, China Jun. 2018 – Oct. 2018

Supported by Becstrong Co.,Ltd.

- Developed IoT node program on STM boards
- Built an Android APP to receive data and show with charts

SKILLS

- **Program Languages:** Java, C/C++, Golang, Python, SQL, Shell Script
- **Technologies:** Git, Gerrit, Linux