

Yang Ouyang

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Durham, NC

PERSONAL SUMMARY

- I am a highly self-motivated and self-driven developer, known for my friendly and sincere approach.
- Proficient in utilizing Java, Spring Framework, SpringMVC, and SpringBoot to construct a wide variety of programs and tools to provide high-quality and cost-effective applications /systems to boost organizational efficiency and productivity.
- Proficient in HTTP, TCP/IP, etc. network requests, and ProtoBuf and JSON data parsing.
- Possess unmatched coding and testing skills to deliver client/business-specific programs. Delved into open-source projects like DJL-Serving etc.

EDUCATION EXPERIENCE

Duke University Aug 2022 - May 2024
Master of Engineering in Electrical and Computer Engineering Durham, U.S.A

- GPA: 4.0 / 4.0
- Relevant Coursework: Fundamentals of Computer Systems and Engineering; Programming, Data Structures and Algorithms in C++; Software Engineering; Systems Programming and Engineering.

Shenzhen University Sep 2018 - Jul 2022
Bachelor of Engineering in Computer Science and Technology Shenzhen, China

- GPA: 3.98 / 4.50
- Relevant Coursework: Calculus; Data Structure; Computer System; Operating Systems; Computer Network.
- Honors/Awards: Two times winner of The Second Award of Studying Star in 2020 & 2021 (Ranked in 4 & 6);

INTERNSHIP EXPERIENCE

Trip.com Group Ltd May 2023 - Aug 2023
Summer Intern of BackEnd, Flight Ticket Department Shanghai, China

Contributed to the optimization of MegaSearch which serves as an aggregation and cache layer for Trip's international ticket responses using **Java**.

- Optimized the response size to fit AWS's smaller bandwidth while saving some storage costs. Reduced the **Protobuf** response size by 50% in total using a variety of methods.
- Compared a variety of serialization and deserialization means using **JMH**: including the latest open source Fury, Kryo, and ultimately found that Protobuf is the most efficient serialization, but Kryo in the serialization of the size of a small advantage.

Amazon Web Service Jul 2022 - Oct 2022
Summer Intern of BackEnd, DeepJavaLibrary San Jose, U.S. (Remote)

Integrated the DeepJavaLibrary Model Server with the the open source KServe platform deeply through a well thought out plan.

- Developed 3 HTTP APIs applicable to the KServe inference engine for DJL-Serving using **Java**, which respond to the users with the **DJL-Serving** running model's health status, the serving model's information, and inference results which also need the request data.
- Made each API return a response code and pass the corresponding unit test.
- Hosted containerized DJL-Serving on KServe, writing **yaml** files specifying its ports, and related parameters.
- The specified DJL-Serving model can be run in the KServe framework by deploying a test yaml file.

Tencent Music Entertainment Group May 2021 - Sep 2021
Summer Intern of FrontEnd, Security Center Shenzhen, China

Applied **Vue2.0** framework based on **JavaScript** to develop the inner front-end of content audit security platform. The main content is as follows:

- Built and maintained middle ground management system.
- Developed search, collection and recently used functions for the middle ground management system
- Utilised Least Recently Used (LRU) rule to design a cache that was able to clear cache efficiently
- Configured Webpack to optimise the local development and deployment and increased the packaging speed by 75% and decreased the packaging size by 10%

PROJECT EXPERIENCE

Implementation of Malloc Function Jan 2023 - Feb 2023

- Implemented the **malloc()** and **free()** functions with the best fit and first fit policies using **C language**.
- Optimized the **malloc()** and **free()** functions with Double Linked List and decrease the execution time by 84%, making the fragmentation ratio drop from 36% to 6%.
- Utilized the tests allocating large, equal, and small memory sizes to compare the difference between the two policies regarding execution time and fragment size.

CookBook Distributed Lottery System (Processing) Aug 2023 - Present
Durham, NC

- Developing for one Course Entrepreneurship Project called Cookbook, implementing the recreation function of the whole System.
- Using Domain-Driven Design (DDD) ideas
- Technology including SpringBoot, Mybatis, Dubbo, MQ, Redis, Mysql, ELK, Split Library Split Table, and so on.