# Dong Yunpeng

Apply for the position IT Developer

## **Education**

# Shanghai Jiao Tong University

B.E. in Software Engineering 3.93/4.3(4 semesters) 2021.09-Present Expected Graduation June 2024

## Info

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## **Skills**

## **Programming**

Familiar C++ • Java Knowledge C • Go • 上下X • Javascript • HTML • Assembly • Shell • Python

## **Cloud Computing**

Familiar Micro Services •Docker • Kubernetes Knowledge Spark • Kafka • Hadoop • Prometheus

# **Projects**

### Remote Shuffle Service Owner

2023.03

- Using Spark-on-K8s-Operator to run spark-application
- Using Kafka to implement ETL scenarios.
- Using **Pyspark** to compute on streaming ETL scenarios
- Subscribing to messages from two Kafka topics using **Structured Streaming**
- Enabling Remote Shuffle Service for Spark on Kubernetes
- Set up another Remote Shuffle Service cluster on Hadoop and managed it using YARN
- Deploy and test the performance differences between different RSS implementations such as Zeus, shuttle and Celeborn

#### Flash Sale Platform Owner

2022.09

- Using Redis to optimize inventory queries and intercept failed flash sale requests in advance significantly improves the overall throughput of the system
- Adopting the spring cloud microservice architecture, splitting the service into four microservices and managing them using Eureka
- Adopting the floating layout to Supports both mobile and web terminals
- Integrate spring security with Zuul, intercept user requests, perform login validation, and **generate a token**. For other requests, validate the token. If the token is valid, the identity verification is successful and resource requests can be performed. All service is stateless
- Using message queues to reduce peak write traffic to databases in the flash sale scenario
- Adopting the client/server architecture, following the principles of MVC pattern and component-based development
- The unit tests are implemented using JUnit, which is included in Spring Boot, and the stress tests are performed using JMeter.

#### CHFS Owner

2022.12

- A basic file system with inode manager
- Using the redo-undo log mechanism to ensure the atomicity, consistency, durability, and isolation of transactions.
- Add 2PL to ensure that concurrent operations to the same file/directory from different chfsClients occur one at a time
- Design a **Raft library** to make this filesystem fault-tolerant and distributed
- · As the log grows longer, Raft will compact the log via snapshotting
- Build a MapReduce framework on top of this Distributed Filesystem

### Tiger Compiler Owner

2022.12

- A compiler for Tiger Language
  - Implement the escape analysis and translation of tiger compiler
  - Make compiler generate working code(IR->Assembly) that runs on x86-64 platform
  - Implement register allocation by graph coloring algorithm

# **Open Source Contributions**

youngyangyang04 / leetcode-master Contributor

#### **Awards**

2021-2022 Scholarship Huawei