Azanda Lyu

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EDUCATION

MS in Cyber Security (GPA: 3.6/4.0), New York Institute of Technology, Vancouver, BC	Sept 2019 - 2021
BSc in Computer Science(GPA: 3.6/4.0), Qingdao University, Qingdao, China	Sept 2014 - Jul 2018

SKILLS

Languages: Java,Python,C/C++/STL, JavaScript/ES6, SQL, Bash, Dart, HTML5/CSS3

Frameworks: Boost, libev, Spark, Spring Boot, MyBatis, Netty, Flume, KafKa, Redis, Ribbon, Hystrix, Feign, Hibernate, Node.js, NextJS, Express, Redux, D3.js, Hadoop, MapReduce, Django, Flask, TensorFlow, scikit-learn, Numpy, Scipy, Scrapy

Databases/Tools: MySQL, SQLite, MongoDB, Firebase 5, Docker, Maven, Git, Jenkins,Tomcat

Knowledge: OOP/OOD, MVC pattern, Factory pattern, Big Data, Linux, Android, IOS.

WORK EXPERIENCE

Spark/Flume/Kafka based Real Time Data Analytic For Gas Station   Jul 2018- Aug 2019

Dhand Technology Company, Software Developer, Qingdao, China

- Developed data analysis system with Spark, Kafka, ZooKeeper, MySQL, InnoDB, Flume, SpringBoot, and Echarts.
- Integrated data distributed on 30 servers to Kafka in JSON using Flume and implemented data ingestion and handling clusters in real-time processing using Kafka.
- Used ZooKeeper to co-ordinate cluster services.
- Consume live data from Kafka topics with Spark Streaming to create continuous sequences of RDDs.
- Generated distributed computing Map and Reduce for RDD stream to improve writing speed to MySQL, and implement transaction features with InnoDB.
- Transfer offsets generated by Spark Streaming to MySQL and Implemented visualization with SpringBoot and Echarts.

C++/ WebRTC based Streaming Media Server   Jul 2017- Oct 2017

Institute of Computing Technology, Chinese Academy of Science, Software Developer Intern, Beijing, China

- Optimized existing media server with WebRTC, Libevent, Libuv,STUN,TURN, and MediaSoup.
- Developed callback functions with Libevent and Libuv APIs to improve the efficiency of asynchronous I/O server.
- Improved peer communication with SDP and WebRTC and applied MediaSoup for multi-party communication.
- Optimized network congestion as well as flow control with STUN and TURN.

Java/ERP/Spring based Kingdee EAS Management System   Jul 2016- Oct 2016

Kingdee International Software Group, Software Developer Intern, Beijing, China

- Developed and maintain an existing in-house EAS system with Java, Spring, Maven, Webdriveio, MySQL and Docker.
- Generated a distributed job with Lambda functions and improved TPS of EAS by 200%.
- Used Jenkins to deploy service with CD/CI and integrated Webdriveio, increasing total test efficiency by 20%.
- Test case development for new features with Lombox and Junit tests.

PROJECTS

SpringCloud/Kafka based Coupon Management System   Jan 2020- Mar 2020

- Developed smart coupon management system with SpringCloud, Redis, Kafka, Hibernate-JPA, MySQL,Ribbon, Hystrix and Feign.
- Registered various eureka clients to the eureka server and synchronously implemented replication between each eureka server.
- Generated Zull to implement requests dispatch and applied Feign and Ribbon to implement communication among microservices.
- Used Actuator to monitor each endpoint and applied Hystrix for latency and fault tolerance.
- Set different expiration time and default key value to avoid Cache Avalanche as well as Cache Penetration in Redis.
- Developed and configured Kafka brokers to pipeline generated coupon codes to MySQL asynchronously and implemented object-oriented mapping model with Hibernate.

React/Scrapy based Online Shop Tracker   Aug 2019- Oct 2019

- Worked with React, NextJs, Express, Redux, Firebase 5, Scrapy for online shop tracker system development.
- Implemented automatic image downloading with ImagesPipeline of Scrapy and schedules the task to deploy images online with Firebase Storage.
- Developed components with NextJS and used redux for state management.
- Used Express for development of Restful web service on Firebase as well as middleware configurations, and implemented real-time chatting with Firebase real-time database.

SpingBoot/Netty based RealTime Chatting Mobile Application   Jun 2018- Aug 2018

- Developed chatting mobile application with SpringBoot, Netty, Websocket,FastDFS, Nginx, MyBatis, and MySQL.
- Registered different Interceptors into Channel through pipelines and set up the Netty server.
- Implemented communication over single TCP connection with Websocket to realize realtime chatting.
- Generated Mybatis to determine the mapping rules of SQL through configuration and store chunk data into MySQL.
- Collaborated Nginx with FDFS to optimize large volume file storage.