Wenqi Jiang

Data Engineer / Backend Engineer

My name is Wenqi Jiang. I'm a software engineer with 3 years' experience in **big data** infrastructure and **backend** services, specializing in scalability, high availability, and low latency distributed systems design and implementation. I am proficient in `Java` and `Scala`.

Currently, I'm working with the Ontology Engineering Group (OEG) and studying for a master's degree in Data Science from the Polytechnic University of Madrid (UPM). In addition to my regular duties, I have learned to `react` and `flutter` for searching for new challenges.

Contact:

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Experience

OEG-UPM │ Ontology Engineer

Dec. 2021 - Present

> A student scholarship for the development of linking algorithms and graph linkers.

LOOM-LD

- Analyzed ontologies from different data sources;
- Specialized 7 linking discovery algorithms, including text similarity and spatial relationships;
- Implemented a Sparql-based knowledge graph linker using customized Apache Jena functions;
- Evaluated those algorithms with OAEI-2021 datasets;
- Completed the master's thesis.

Keywords: `Ontology Graph Linker RDF SPARQL Apache Jena Text Similarity DE-9IM WKT OAEI`

TOGIC │ Big Data Engineer

May 2019 - Aug. 2021 · 2 yrs 4 mos

Offline Data Warehouse

- Designed a STAR model Data Warehouse, which contained four-layer: ODS, DWD, DWS, and ADS, saving over 80% of storage and fixing small files' problems on HDFS;
- Developed and managed the Data Warehouse, which comprises over 150 tables and 200 TB of data, including user and system logs from Togic and Webox, producing 300 GB each day;
- Upgraded almost all big data components, including HDFS, Spark, Kafka etc.

Keywords: `CDH Kafka HDFS HIVE Spark`

Data Statistics System

- Restructured the statistics system based on the new Offline Data Warehouse;

- Rewrote the code by using DataFrame, making them more readable and maintainable, and reducing the process time to 25% compared to the previous one;
- Implemented more than 30 new statistical demands and fixed bugs.

Keywords: Sqoop Hive Spark SQL Scala Elasticsearch MySQL MongoDB

Log Collection Service

- Designed and implemented the log collection pipeline based on Nginx and Netty, improving performance and stability;

- Processed all logs into the message queues in Kafka, which has five brokers, three data backups, and seven days of log redundancy, improving the robustness of this service.

Keywords: Nginx Netty Java Kafka HDFS

WEBSTUDIO ｜ Backend Engineer

Jul. 2018 - Apr. 2019 · 10 mos

- Implemented backend APIs of big data visualization dashboards and general reports for the BI applications;
- Developed more than 25 data operators, such as summation, date conversion, string processing etc.;
- Implemented the one-click function of syncing all user information;
- Expanded 16 data sources, including MySQL, SQL Server, MongoDB etc.;
- Maintained the big data platform;
- Fixed bugs and developed new features for the previous company's projects.

Keywords: Dubbo Spring Boot MyBatis Hibernate Nginx Docker FastDFS CDH HBase Impala

KEG-THU ｜ Software Engineering Intern

Feb. 2018 - Jul. 2018 · 6 mos

- Organized and annotated critical illness insurance documents;
- Trained models to extract the logical structure of insurance documents by using GROBID;
- Created a desktop application using above models;
- Maintained datasets in NoSQL database, like MongoDB, Neo4j;
- Completed the thesis.

Keywords: NLP CRF GROBID Neo4j MongoDB Java FX

Open Source

Dapp Learning DAO

Apr. 2022 - Present

- Contributed various tutorial tasks;
- Translated the basic tasks;
- Shared the latest blockchain news and cutting-edge technics in the community.

Keywords: Blockchain web3.js Solidity Dapp Ethereum Hardhat Alchemy Infura DAO.

Education

- **MS Data Science** · Polytechnic University of Madrid ｜ *2021 - Present*
- **BE Computer Science & Technology** · Beijing Information Science & Technology University | *2014 - 2018*