XIIE WII

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SKILLS

Languages: Java, Python, Scala, C, C++, R,

Cloud computing: Hadoop MapReduce, Spark, TensorFlow, Kafka, Zookeeper, Eureka, Mesos, Redis

JavaScript, SQL, php, html; Kafka, Zookeeper, Eureka, Meb: Spring Boot, Flask and Django, Node.js, Database: Hive, Cassandra,

Docker, RabbitMQ, WebSocket;

Database: Hive, Cassandra, MongoDB, HBase, MySQL,

PostgreSQL, Teradata

EDUCATION

University of California, Davis, Davis, CA

M.Sc. Computer Science & M.Sc. Statics, (Double Major)

GPA: 3.5 Graduation: Mar. 2017

Northeastern University, Shenyang China

B.Sc. Applied Physics

(Scholarship from Chinese Academy of Science, top 1%)

PUBLICATION

Integrating Predictive Analytics into a Spatiotemporal Epidemic Simulation

Visual Analytics Science and Technology (VAST), 2015 IEEE Conference on Oct, 2015, pp. 8

WORK EXPERIENCE

Software Engineer, Co-op | *Lattice Co., Ltd.*

San Jose, CA Jun. 2014 ~ Sep. 2014

• Implemented an online translation web service system with Python Django Framework;

• Developed a translation system with recursive neural network integrated with a data processing pipeline which efficiently parsing data and translate C code into hardware description language for hardware programming;

• Collaborated with NEC-Japan, analyzing the translation system testing data to improve the model.

PROJECTS

Real-time Stocks Big Data pipeline

Mar. 2017 ~ Apr. 2017

• Implemented a real-time big data processing pipeline with Kafka, Cassandra, Spark, Zookeeper and Mesos.

- Collected real-time stock data from google finance API, transmitted data with Kafka, stored in Cassandra Clusters;
- Used Spark streaming processed the data from Kafka Broker, computed the real time average price of stocks;
- Pushed the data to Redis hub, displayed the real-time dynamic data with Node.js, Bootstrap, jQuery and D3.js;
- Used Apache Zookeeper to coordinate the distributed system, and Apache Mesos on work scheduling;
- Encapsulated the pipeline infrastructure with Docker.

Real-time running location simulation and monitoring system

Jun 2017 ~ July. 2017

- Designed and developed a real-time running location simulation and monitoring system using Java Spring Boot, Spring Data, Spring Cloud, RabbitMQ, MongoDB, MySQL and Docker Container;
- Based on Microservices architecture, incorporated Netflix Eureka as service registration, RabbitMQ as message queue, implemented back-end services such as location update, distribution and persistence services;
- Developed single page front-end to integrate with backend using HTML, CSS, JavaScript, REST and WebSocket;
- Persisted data to MongoDB and MySQL using Spring Data as Data Access Layer;
- Utilized Docker to containerize infrastructure and Maven to manage dependencies.

Search Ads Web Service

May. 2017 ~ present

- Designed and developed web crawler which crawled half million product data from Amazon;
- Designed and developed Search Ads Web Service which supports, Query understanding, Ads selection from inverted index, Ads ranking, Ads filter, Ads pricing, Ads allocation;
- Built Ads forward index with MySQL Database which store Ads Id, bid, title, url, campaign data, Ads inverted index with Memcached; Built Ads Index Server which use gRPC to send ads candidates to Ads Web Server;
- Designed feature engineering pipeline, generated features for query understanding, click prediction with Spark;
- Predicted query intent, click probability with pageRank, impression count, click count, category as features.

News Recommendation System with Web Mining

Jun. 2016 ~ Aug 2016

- Developed a single-page web application for users to browse news with React.js, Node.js, RPC;
- Implemented a data pipeline to monitor, scrape news and dedupe the news with RabbitMQ, tf-idf, MongoDB;
- Classified news topics with over 60% accuracy by building an offline Conventional Neural Network deep learning model for news topic modeling using TensorFlow;

Collaborative Online Judge System

Dec. 2016 ~ Jan. 2017

- Built a web-based collaborative code editor allowing multiple users editing simultaneously with Node.js. Angular2 and Socket.io, built backend service with Docker and Flask;
- Decoupled services by integrated the RESTful API with Nginx as load balancer to improve system throughput around 20,000 edit requests at the perk time.