Jitao Zhang

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EDUCATION

University of California, Irvine

M.S. in Networked Systems GPA: 3.64/4.00

Beijing University of Posts and Telecommunications

B.E. in Information Engineering Major GPA: 3.80/4.00

Irvine, California Sep. 2018 - Mar. 2020 Beijing, China

Sep. 2014 - Jun. 2018

Skills

o Programming: JavaScript, Java, HTML/CSS, NodeJS, Python

- o Frameworks: React, Vue, ES6, Express, Webpack, Django, D3.js, Keras, Tensorflow
- o Database & Deploy: MongoDB, MySQL, Redis, Docker, Nginx, AWS, Google Cloud

EXPERIENCE

Big Switch Networks

Santa Clara, California

Jun. 2019 - Sep. 2019

Software Engineer Intern

- o Designed and implemented the new Big Monitoring Fabric topology using React, Antd, Axios and Express.
- o Built two-layer responsive animation view to support showing the different fabrics and multiple columns of 60+ switches with connected service nodes and packet recorders in a single topology.
- o Supported showing 50+ BigTap or normal interfaces' information in real time, showing and highlighting paths and switches for each specific policy and choosing interfaces directly in topology for creating the new policy.
- o Used Express to build a proxy middleware for integrating multiple APIs to decouple the logic with frontend.
- \circ Built a highly scalable React form component for supporting 100+ types in BigDB YANG files with redux-form and antd.

NewBanker Beijing, China

Software Engineer Intern

Jul. 2017 - Apr. 2018

- o Built News Feed in FOF(Fund of Funds) system dashboard and integrated stock, fund and followers information.
- o Used Chart.js and G2 to visualize funds distribution, key infos and funds trends in different time spans with different units.
- o Created two global Vue components: work-info-tips and work-create-form which are used in 8 modules (out of 11) combined in the system for maintainability and reusability.
- o Decreased 30% time in build process and minimized 40% size of the bundles in production mode than before by importing Webpack plugins including CommonsChuncksPlugin, DllPlugin, etc.

PROJECTS

Mock Server Dec. 2017 - Apr. 2018

MEVN (MongoDB, Express, Vue, NodeJS) web application to generate configurable data for speeding up front end development

- o Used Vue, Vue-router, Vuex, Element UI to implement frontend for helping user easily customize RESTful API in real-time (including URL, parameter, query, methods, mainly response data, etc.).
- o Implemented a Vue JSON editor Component to design nested response data structure stored in MongoDB and integrated faker.js to support 100+ various data type for flexibility and scalability.
- o Developed a logical user permission module to support team projects development and API control.

Caltech101 Retrieval System

Feb. 2018 - Jun. 2018

Image retrieval system based on CNN and Caltech 101 datasets $\,$

- Utilized Keras API to build and fine-tune VGG19 network as the core of Django backend with 99.87% accuracy.
- o Extracted 8000+ images' features stored in MongoDB as bson type with other images' key infos for query.
- Used Vue and Element UI for uploading query picture, set click events to send query information via Vue-Resource and displayed all the query results from Django backend.
- \circ Reduced range of (29% 88%) query time in 4000 trials with nearly same MAP (Mean Average Precision) by implementing binary hash code algorithm.

Slender Link
May. 2017 – Jul. 2017

MEAN (MongoDB, Express, Angular, NodeJS) web application to shorten, manage and analyze URL

- o Implemented URL shortener service for supporting customized short URL, setting available time period and providing public/password options for accessing.
- o Used D3.js to visualize user distribution information (country, platform, browser, etc.) and click rates of specific URL over different time intervals (month, day, hour).
- o Deployed app using Docker, Redis as the cache layer and Nginx as a reverse proxy server and load balancer.