

KAIXUAN GAO

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EDUCATION

University of Washington

M.S. in Computer Science and System

09/2017-12/2018

Current GPA:4.0/4.0

Jilin University, China

B.Eng. in Material Forming and Control Engineering

09/2013-07/2017

GPA: 3.6/4.0

SKILLS

- Java, C, Node.js, SQL, R
- AWS, Distributed System, Docker, MEAN stack, Nginx, Redis
- HTML&CSS, jQuery, AngularJS, Bootstrap, D3.js

SELECTED PROJECTS

Distributed Key-Value Store with Raft Algorithm (Distributed system project) 11/2017-12/2017

- Developed a distributed key-value store application using TCP protocol and Raft consensus protocol with Java RMI and thread pool
- Supported loss and restoration of minority nodes as well as leader election and re-election inside the system without data loss
- Dockerized the application and tested it on AWS EC2 instance

TinyURL Service (Full Stack Web Application project) 11/2016-02/2017

- Developed a web server using MEAN stack (MongoDB, Express, AngularJS and Node.js)
- Built a Single Page Web UI using AngularJS and Bootstrap
- Employed Redis as cache database and Nginx HTTP server, reverse proxy server and load balancer.
- Dockerized the server and ran multiple instances of it, switched it to use Cassandra to distribute the data after TBs of data and logs were persisted

Full Stack Data Analysis 11/2016-12/2016

- Wrote a crawler and adopted request pool to manage the data capture processing speed
- Preprocessed and cleaned up raw data using R, conducted geographical clustering analysis by K-means algorithm and showed the result with ggplot2
- Made house price predication using multi-variation linear regression
- Built a Single Page Web UI to show the house price by colors and coordinate in Shanghai map

Mini-Flickr (Front-end web development project) 09/2016

- Developed a web application showing photos from Flickr app in a masonry layout for the users to “pin” liked photos and search photos by tags
- Designed a Single Page Web UI and implemented advanced features, such as calling official Flickr API, page lazy-loading to increase speed, responsive design and real-time search

EXPERIENCE

SDE Intern, Qunar.com. 07/2016-08/2016

- Selected structured attribute from user feedback data to make item representation, conducted profile learning using VSM and contributed to content-based recommender system modeling
- Integrated visualization component with web-based application to realize interactive visualization

Research Assistant, Analysis and Design of Flexible Blank-Drawer Forming Device Frame

(Research Project at Roll Forging Institute of Jilin University) 12/2014-06/2016

- Established numerical simulating models with various amounts of stiffeners to conduct analysis on the strength and stiffness of the frame and ribs using CATIA and ABAQUS