# ZIYUAN DONG

## **EDUCATION**

### University of Southern California, Los Angeles, US

2018 - 2020

M.S. in Computer Science

#### Nankai University, Tianjin, China

2014 - 2018

B.S. in Computer Science

## **EMPLOYMENT**

#### Alibaba Group, Hangzhou, China

May 2020 – Aug 2020

Software Engineer Intern, Java

- Developed a tool to compare the performance of RocketMQ (a distributed messaging and streaming platform) when using different transport protocols(TCP, SSL, AIO).
- Generated the performance logs when providers publishing services and consumers subscribing services under Ali HSF(High Speed Framework).
- Serialize(deserialized) the request initiated from a HSF consumer and a response from HSF providers.

#### Care Labs, Los Angeles

May 2019 – Aug 2019

Front End Engineer Intern

- Constructed the official website for company using Angular 7, Node.js and Redis, and implemented the functions of posting forms, in-station search, uploading/downloading files.
- Deployed the website on AWS, and wrote documents for futher development.

## **PROJECT**

#### Visualization and Analysis of COVID-19 Cases within LA County

Mar 2020 – Jun 2019

- Designed a hybrid model-and-data-driven Bayesian approach to infection risk scoring based on a time-varying SIR epidemic model.
- Built a website under the Flask framework to collect covid-19 data and render interactive plots automatically(https://dongziyuan.github.io/).

#### Classification and Statistical Analysis of the Mobile App Reviews

Jun 2019 – Aug 2019

- Labeled over 2000 user reviews of mobile apps based on the class of software quality issues that these reviews involved.
- Cleaned the raw corpus, and vectorized the text by using TF-IDF / Word2vec / BERT methods.
- Set up a SVC and a Naive Bayes model to classify new user reviews automatically, and optimized the hyper-parameters to keep the F1 score larger than 0.9.

#### Portable Human Fatigue Testing System Design

Apr 2016 – Apr 2017

- Used portable sensors to monitor multiple kinds of physiological data of users.
- Calculated the extent of fatigue for each kind of data independently according to the related medical theories, and merged the results into one fatigue index with the method of fuzzy analytic hierarchy process.
- Developed a mobile application to show the fatigue index and remind the users of having a rest in time.

# **SKILLS**

- Languages: Python, Java, C++, Javascript / HTML / CSS, SQL
- Platform: Angular 7, Android Studio, MySQL, Amazon EC2, Flask, Networkx, Gensim, scikit-learn
- Coursework: Data Mining, Computer Networking, Web Technology, Machine Learning