# 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 Development Engineer Intern

- Developed an Ali MiniApp with the features of server side rendering and compiling at runtime by using Rax(an Ali progressive React-compatible JS framework)
- Participate in the development of advanced components for Rax, such as GestureView, Animation based on bindingx and Advanced Slider
- Added two features to Rax VS Code extension: 1) quick components conversion between Rax and React, 2) visualizing the performance of the Ali MiniApp within an entire cycle

#### Care Labs, Los Angeles

May 2019 – Aug 2019

Web Development Engineer Intern

- Built an official website with MVC pattern by using Angular 7 and Node.js and MySQL
- Created database on MySQL and used libuv to handle heavy I/O requests on Node.js
- Ported the website to an Android app with the features of dynamic fragments, loading images by Picasso, splash screen and 3-level cache
- Used Github Actions and Docker to implement CI/CD Pipeline

# **♥** PROJECT

## Visual Analysis of the COVID-19 Cases within LA County

Mar 2020 - Jun 2020

- Proposed a hybrid model-and-data-driven Bayesian approach to measure the infection risk based on SIR epidemic model, and simulated the effectiveness by using Networkx
- Used ECharts to render highly interactive plots to visualize the epidemic data

## Classification and Statistical Analysis of the Mobile App Reviews

Jun 2019 – Aug 2019

- Annotated reviews of mobile apps manually based on the software quality issues that these reviews involved
- Cleaned the raw corpus with NLTK, and vectorized the text with the methods of Word2vec
- Constructed a SVM model using scikit-learn to classify new user reviews into suitable category of software quality automatically, and optimized the hyper-parameters to keep the F1 score > 0.9

#### **Development of the Unified Code Counter Software (Java Version)**

Jan 2019 – Apr 2019

- Implemented the functions of physical/logical SLOC counting based on the SEI code-counting framework
- Designed the language-specific test unit, and generated bug reports automatically
- Built the graphical interface by using Java Swing

# SKILLS

- Languages: Python, Java, C/C++, Javascript/Typescript, SQL
- Framework: Angular, Node.js, React, Android Studio, Sklearn, MySQL, AWS, Github, Linux, Redis
- Coursework: Machine Learning, Web Technology, Computer Networking, Embedded System