# **Bohao Zou**

First Year Master of Biostatistic & Minor Computer Science at University of California, Davis

#### Links

Mob: +1-5302207495 Email: bhzou@ucdavis.edu Github:// **Bohao Zou** 

### **Skills**

COMPUTER LANGUAGES Java (Proficient), Python (Proficient), R (Proficient)

**OTHERS** 

Machine Learning Computer Vision Natural Language Processing Statistical Method (Regression Models) Web Crawler (By Using Java Language)

#### Coursework

Probability Theory Introduction to Mathematical Statistic Computational Statistic Statistical Methods for Research Bioinformatics Big Data & Statistical Computing Data Structure

### Education

2019-2021

**MASTER DEGREE** 

Master of Science

Major : Biostatistic, Minor Computer

Science

School: University of California, Davis

GPA: 3.75 / 4.0 (Expected) GPA: 3.62 / 4.0 (Current)

2014-2019

BACHELOR DEGREE Bachelor of Science Major: Biotechnology

School: Harbin Medical University

GPA: 3.23/4.0

### Experience (Can be linked to GitHub)

2018.06-2018.08 Researcher (intern)

Shenzhen Qianhai Yichain Network Technology Co., Ltd. Analyzed the algorithm of Alpha Go Zero and achieved a Alpha Go Zero simulation program by using python and tensorflow. Github: Alpha Go Zero Simulation Program.

#### 2018.08-2019.01 Researcher (intern)

Ping An Technology (Shenzhen) Co., Ltd. Explore new architecture of CNN. Participated Kaggle pneumonia objection detection competition. Result: Top 11% of 1445 global teams. Github: New architecture: ResNeXt-FPN; Competition Model: Mask-RCNN and Faster-RCNN

### 2019.01-2019.03 Researcher (intern)

3D Medicines Co., Ltd.

Use CNN to detect the SNP or SNV position in the genome. Based on two theses: **DeepVariant** of Google Brain and **NeuSomatic** of Roche. Use CNN to extract feature of some special biology data. **Github: DeepVariant Workflow With Java**; **SNP or SNV Detect Workflow**;

### Achievements/Awards

2016 National College Students Mathematical Modeling Competition

Provincial Third Prize

2017 Eighth National College Students Mathematics Competition
Provincial Second Prize

2017 American College Students Mathematical Modeling Competition SP Award

2017 Northeast Three Provinces Mathematical Modeling Competition

First Prize

2017 National College Students Mathematical Modeling Competition

Provincial First Prize

## Projects (Can be linked to GitHub)

- Bachelor Graduation Paper: 1) English Complete Version; 2) Chinese Original Version; Codes Click Here (Statistic & Machine Learning)
- Use ALBERT Model to Judge If One Sentence Depicts RNA and RNA Interaction. AUC: 0.975. Will be Published. (NLP. A Part work of a Paper)
- Use Bayes Optimization to Find Hyper-parameters for Bias SVD Matrix Factorization. Will be Published. (Opt-Algorithm. A Part work of a Paper)
- Kaggle SIIM-ISIC Melanoma Classification Competition. LB: Our AUC: 93.1%; Other Team Top AUC: 96.3% .(Computer Vision)
- STA 243, Thesis Summary & Experiment for Newton Sketch Optimization Algorithm (BasedR), [Code]; EM For Gaussian Mixture Model (Based R), [Code] (Convex or Non-Convex Optimization)
- STA 221, Improve CNN image Classification By Ensemble Learning, [Code] (Computer Vision)