

## EDUCATION

**Duke University**

M.S. Interdisciplinary Data Science, GPA 3.66/4.0

May 2020

Durham, NC

**Huazhong University of Science & Technology**

B.E. Electronic Science and Technology

Jun 2013

Wuhan, China

## EXPERIENCE

**Data Science Intern - Duke Health**

06/2019 - 05/2020

Collaborated with Duke University Hospital to conduct mortality risk evaluation of cardiac decompensation patients.

Durham, NC

Converted rules in "*Hospital Toolkit for Adult Sepsis Surveillance*" by CDC into Python algorithms.**Product Manager - Aibee**

12/2017 - 08/2018

Designed and launched AI-driven customer insight products as the first PM.

Beijing, China

Cooperated with 3 \$2.7-\$35B clients and integrated solutions into clients' BI system.

- [Best Employee Award in 2018 \(1/31\)](#)

**Product Cofounder - Zhonggua Technology**

03/2017 - 12/2017

Established a freelancer platform that connected top companies' employees and startups.

Beijing, China

Acquired by Aibee in Dec 2017.

**Director of Mobile Platforms - Genetalks Biotechnology**

02/2016 - 02/2017

Digitalized Genetalks' sales channel and established an app for post-sales service.

Beijing, China

**Senior Product Manager/Product Manager - Baidu**

07/2013 - 12/2015

Led product design for FaceYou App. Acquired 5M users in Dec 2015, ranked 3rd in AppStore China.

Beijing, China

Initiated innovative AI assistant project BaiduEye, coordinated product design &amp; development.

- [Outstanding Employee Award in 2015 \(1/~150\)](#)

## PROJECTS

**Face Generation and Interpolation:** Trained a face generator using a Generative Adversarial Network architecture (BEGAN) and celebrity face dataset. Also conducted an interpolation analysis (generate faces gradual change between 2 destination faces) which showed an understanding of the face structure has been developed in generator. [GitHub](#)

**Emotional States:** A research project about if emotional states can be inferred from wearable activity sensor data. Trained a CatBoost models on Fitbit data along with personality, physical health, and demographic data collected from 153 participants. Model performance is precision: 0.595, recall: 0.877, F1: 0.75. [GitHub](#).

**Friendship Inference based on Network Analysis:** Studied how personality traits (Big Five) relate to friendship. Used a network model and linear regression to uncover a significant negative correlation between the personality trait agreeableness and friendship rating ( $p\text{-val}=0.017$ ). [GitHub](#)

**Seinfeld TV Script Generation:** A text generation model using LSTM and Word2Vec, trained on Seinfeld TV script, then generate new script based on a given starting text sequence. [GitHub](#)

More data science projects can be found in [GitHub](#), other projects in Portfolio: [www.SicongZhao.com](http://www.SicongZhao.com)

## AWARD &amp; PATENT

Best Use of Outside Data @DataFest 2109 (Duke)

04/19

LED Light visual feedback help users locate the direction of head-mount devices' camera

[WO2016176950A1](#)

## WRITE-UPS

Demystify Transposed Convolutional Layers by Visualization and PyTorch

[Link](#)

Value Investing in Python

[Link](#)

Insights of Google Employees from Glassdoor Data

[Link](#)

## SKILLS

**Tech:** Deep Learning (FNN, CNN, RNN, GAN, Auto-encoder), Reinforcement Learning, Machine Learning, Stochastic Processes, Bayesian Analysis, Statistical Modeling, Text Analysis, Python, R, Tableau, SQL

**Design** - Data Visualization (Tableau, Keynote), Interface Design (Photoshop, Sketch, AI), 3D Design (Cinema 4D)