# SIZHE WEI

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No.800, Dongchuan Road, Minhang District, Shanghai 200240, China

## **EDUCATION**

#### Shanghai Jiao Tong University (SJTU), Shanghai, China

Sep 2017 – Jun 2021

Bachelor of Engineering in Dept. Electronic Engineering.

School of Electronic Information and Electrical Engineering.

Zhiyuan Honors Program of Engineering (An elite program for Top 5% students).

GPA: 85.203 / 100

#### **★** RESEARCH INTERESTS

My research interests lie in Computer Vision, Machine Learning and Explainable Artificial Intelligence (XAI).

## 

#### **Xtra Computing Group, National University of Singapore**

Jun 2019 - Sep 2019

Research Intern Under the supervision of Prof. Bingsheng He

- In order to explain some unexplainable models in artificial intelligence, we used simple machine learning models such as weighted k-means to approximate the unexplainable models.
- We finished one demo and our method will give explanations in 4 different aspects.
- The result of our work will be submitted to KDD 2020.

## Google Machine Learning Winter Camp, Shanghai

Jan 2020

Member Selected as one of 100 participants nationwide for Google ML Winter Camp.

- The camp is a programming competition run by Google Information Technology (China) Company Limited.
- We designed a demo named AI One Image, which contributes to matting, auto-beauty and style transfer. The project was completed using PyTorch based on U-Net, VGG, and generative CNN.
- Our project won the prize for People's Choice. And we have open sourced our code here, which can be used on local devices.

## **COURSEWORK PROJECTS**

## **Medical 3D Voxel Classification**

Oct 2019 - Dec 2019

- Using PyTorch to implement a voxel calssifer based on Densenet.
- The dataset contains 500 patients' 3D CT scan and manual masks.
- The AUC on test dataset is above 0.70.

#### RELATED COURSES

**Mathematics Foundation:** Mathematical Analysis(H), Physics(H), Linear Algebra(A), Discrete Mathematics(A), Probability and Statistics(A), Linear and Convex Optimization(A)

**Professional Courses:** Thinking and Approach of Programming(A), Introduction to Electronics(A), Data Structures and Algorithms(A+), Electronics System Design Based on Android System(A), Analog Electronic Technology(A-), Signals and Systems(A), Machine Learning(A)

#### THONORS AND AWARDS

#### **Meritorious Winner, 2018 Interdisciplinary Contest In Modeling (Problem D)**

Consortium for Mathematics and Its Applications.

## Zhiyuan Honors Scholarship of Shanghai Jiao Tong University

Top 5%, Zhiyuan College, Shanghai Jiao Tong University.

2017, 2018, 2019

## Academic Excellence Scholarship (Third-Class) of Shanghai Jiao Tong University

Top 20%, Shanghai Jiao Tong University

2018, 2019

## People's Choice of Google Machine Learning Winter Camp

China Talent & Outreach Program Team, Google Information Technology (China) Company Limited. 2020

## TEACHING

#### **CS 158: Data Structures (Honours)**

Teaching Assistant

Mar - Jul, 2020 (Expected)

## SKILLS

• Programming: Python, C/C++, MATLAB, Verilog HDL

• Tools & Frameworks: LATEX, Git, PyTorch

• Languages: English, Mandarin (Native)

## ACTIVITIES AND HOBBIES

- SJTU Chu Cai Program member (Top 45 students of Class 2021)
- SJTU Baidu® club member
- Zhiyuan college basketball team member

Last Update: January 29, 2020