Yiqing Wang

132wyq1937@sjtu.edu.cn · (+86) 132-9353-1937 · Homepage ·

Education

Shanghai Jiao Tong University (SJTU), Shanghai, China 2019 – Present

Undergraduate student major in Biomedical Engineering (BME), minor in Computer Science (CS)

- GPA: 3.85/4.3
- Rank: 5/76
- Major Coursework: Digital Electronics (99), Microcomputer Principles (96), Biomedical Signals and System (94.5), Biomedical Image Processing (95), Principles of Automatic Control (92)
- Minor Coursework: Discrete Mathematics (94), Software Engineering (87), Computer Network (85), Operating Systems (80)

Honor and Awards

Scholarship of School of Biomedical Engineering Alumni Association	Nov. 2022
Merit Student of Shanghai Jiao Tong University	Oct. 2022
Shanghai Municipal Government Scholarship	Oct. 2021
Class A Scholarship of Shanghai Jiao Tong University	Oct. 2020
Scholarship of School of Biomedical Engineering Alumni Association	Oct. 2020

Scholar Experiences

IMIT @ SJTU directed by Lichi Zhang Dec. 2022 – Present

Thesis Intelligent Registration and Parameter Planning for Lower Limb Multi-modal Image

- Construct a 2D-3D registration method for plain X-ray and CT images
- Compute the optimal parameters to guide the plate for HTO surgery

CCVL @ JHU directed by Alan Yuille & **VLAA @ UCSC** directed by Yuyin Zhou & Cihang Xie June. 2022 – Nov. 2022

Summer Internship Multi-view MAE for 3D medical image representation learning

- Presented the first multi-view pipeline for self-supervised medical image analysis
- Achieved a comparable performance to the current state-of-the-art method with less training cost
- Submitted to *CVPR 2023*

Advanced MRI Lab @ SJTU directed by Hongjiang Wei Feb. 2022 – Jan. 2023

Internship Brain Region Segmentation and Age Estimation Using QSM

- Created a novel network to segment several key brain areas on QSM images to improve brain age prediction
- Improved brain age estimation compared to previous studies based on T1w MRI
- Accepted by *ISMRM 2023* and submitted to *NeuroImage*

CITI @ SJTU directed by Guoyan Zheng Aug. 2021 – Feb. 2022

Student Project Key Algorithms for 3D Reconstruction from 2D X-rays and Intelligent Diagnosis

- Evaluated popular deep-learning segmentation networks
- Improved the performance of domain adaptation segmentation based on Cross Domain Transformer
- Awarded an outstanding student project

Publications

(First Author) [1]**Yiqing Wang**, Yuting Shi, Hongjiang Wei. A Brain Age Estimation Network based on QSM using the Segment Transformer. *2023 International Society for Magnetic Resonance in Medicine (ISMRM).* (Accepted)

(Co-first Author) [1]Mingxing Chen, [1]**Yiqing Wang**, [1]Yuting Shi, Xiaojun Guan, Yuyao Zhang, Hongjiang Wei. Brain age prediction based on QSM using Segmentation Transformer. *NeuroImage.* (Submitted)

(Co-first Author) [1]**Yiqing Wang**, [1]Zihan Li, Zihao Wei, Jieru Mei, Li Liu, Chen Wang, Alan Yuille, Shengtian Sang, Cihang Xie, Yuyin Zhou. SwinMM: Masked Multi-view with Swin Transformers for 3D Medical Image Segmentation. *2023 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR).* (Submitted)

Skills

Programming Languages Python, C, C++, Matlab

Deep Learning Frameworks PyTorch, TensorFlow, Keras

Languages

English Fluent

- **TOEFL** Total 107, Reading 30, Listening 29, Speaking 22, Writing 26
- **GRE** Quantitative 170, Verbal 153, Analysis Writing 3.5

Chinese (Mandarin) Native Speaker