

Minghao Wang

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Kowloon, Hong Kong SAR

Latest Update: 1st Oct, 2023

EDUCATION

Hong Kong University of Science and Technology

Doctor of Philosophy, Bioengineering (Scientific Computing Concentration) September 2023 – (Expected) July 2027

- Awards:
 - Postgraduate Scholarship (18,360 HKD monthly)
- Supervisor: Jiguang WANG, Hao CHEN

Hong Kong University of Science and Technology

Master of Science, Big Data Technology September 2022 – July 2023

- Awards:
 - BDT Excellent Student Scholarship 2022 (top 10%, 10,000HKD) **2022 - 2023**
- Main course: Mathematical Methods for Data Analysis (A+), Quantitative Analysis of Financial Time Series (A+), Machine Learning (A+), Computer Vision (A), ...

Southeast University

Bachelor of Science, Computer Science and Technology (Artificial Intelligence) August 2018 - June 2022

- Awards:
 - Lenovo Research Scholarship (top 5%, 5,000 CNY) **2020 - 2021**
 - Huawei Scholarship (top 10%, 5,000 CNY) **2020 - 2021**
- Main course: Reinforcement Learning (95), Pattern Recognition (93), Knowledge Representation (93), Deep Learning (93), Natural Language Processing (90), ...

RESEARCH EXPERIENCE

HKUST SMARTLAB

August/2022- April/2023

Project: Addressing Dataset Bias for Reliable Medical Image Classification

- Mitigating dataset bias in medical image classification task through agree-disagree learning. Evaluate our method on Fitzpatrick 17k, ChestXRay-14, and MIMIC-CXR dataset. The main parts involved are building dataset, baseline implementation (7 baselines), and other studies (include saliency map visualization and ablation study). Supervised by Prof. Hao CHEN.
- Pub: Luyang LUO, **Minghao WANG**, Zhuoyue WAN and Hao CHEN "LAD: Mitigating Dataset Bias by Learning to Agree and Disagree for Trustworthy Medical Image Classification" *ICCV2023* (Under Review)

Southeast University KELab

May/2021- May/2022

Project: Prediction of Incidence of Infectious Diseases Using Machine Learning Methods

- use the 2011-2019 cases of hepatitis E and related meteorological data and the Baidu index to predict the incidence of hepatitis E using Python and the data visualization using Excel, completed independently under the guidance of my instructor. The main parts involved are data cleaning, building BiLSTM-Attention and SARIMAX models, and writing papers.
- Pub: Tianxing Wu, **Minghao Wang***, Xiaoqing Cheng*, Wendong Liu, Shutong Zhu and Xuefeng Zhang* "Predicting Incidence of Hepatitis E for Thirteen Cities in Jiangsu Province, China" *Frontiers in Public Health* (IF=6.461)

Southeast University KELab

February/2021-May/2021

Project: Recognition of the Willingness of Airline Passengers to Pay for Seat Selection

- Participated in the National University Student Service Outsourcing Competition, processed and modeled high-dimensional sparse data, and predicted the final result.
- For the technical aspect, I'm mainly responsible for data visualization, using GBDT for classification. Besides, I also take on task arrangement and the procedure of the whole project.