

JICHAO YU (CIAO)

1234 Steelwood Rd, Columbus, OH
(+1)3802420404 ◇ yu.3608@osu.edu

EDUCATION

Ohio State University

Expected Degree: Master of Electrical and Computer Engineering — GPA: 3.58/4.0

08/2022 - 05/2024

Wuhan University of Science and Technology

Degree: Bachelor of Electronic Information Engineering — GPA: 3.76/4.0

08/2017 - 06/2021

PUBLICATIONS

- Author: "Prediction Model Hadoop-based for High-risk Students," Advances in Computer Science Research, Volume 93. 2019:2352–538X.
- Author: "Research on Personalized Learning Space in Internet and Big Data Environment," Software Guide. 2019,12:1672–7800
- Co-Author: "Features Selection of Exponential Distribution-based Unbalanced Data," Statistics & Decision. 2019,20:1002–6487
- Co-Author: "Research on Prediction of 'Four Challenged Students' Based on Big Data," Information and Communications. 2019,9:1673–1131
- Co-Author: "Analysis on the technical framework of virtual college students' mental health service center," Changjiang Information & Communications. 2022,35(12):123-126

RESEARCH

Research on Federated Learning

OSU Department of Electrical and Computer Engineering
RIT Department of Computing and Information Sciences

05/2023 - 03/2024

Advisor: Jia (Kevin) Liu

Advisor: Haibo Yang

- Using PyTorch to train federated learning heterogeneous models to improve the performance of different heterogeneous models
- ResNet and Transformer models were used to train on the CIFAR-10, CIFAR-100, and Wikitext datasets
- The relevant research results are planned to be submitted in January 2024(ICML).

Research on Detecting Space Satellites

OSU Department of Electrical and Computer Engineering

12/2022 - 5/2023

Advisor: Wladimiro Villarroel

- Use of Matlab to preprocess satellite images and training of a ResNet model using Python.
- Achieved a final accuracy of 99%.

Big data-driven prediction and evaluation of teaching effectiveness

Hubei University of Economic, School of Information Management

01/2023 - 5/2023

Advisor: Xiaogao Yu

- Chinese Society of Higher Education's Special Project on Digital Course Resources, Project Number: 21SZYB01
- Optimization of a weighted voting ensemble prediction model using Python.
- Final ensemble model achieved an accuracy of 99.3%, surpassing that of individual prediction models
- Published literatures "Prediction Model Hadoop-based for High-risk Students"

Research on Mental Health Risk Warning and Crisis Intervention for College Students (Research Assistant)

Hubei University of Economic, School of Information Management

11/2021 - 12/2022

Advisor: Xiaogao Yu

- Part of a major research project in philosophy and social sciences in higher education institutions in Hubei Province (China), project number: 21ZD092.
- Finish feature extraction related to learning psychology and mental health using Python.

Analysis on the technical framework of virtual college students' mental health service center

Hubei University of Economic, School of Information Management

01/2022 - 07/2022

Advisor: Xiaogao Yu

- Using Python to analyze college students' mental health data and extract its characteristics
- I Designed a virtual college student mental health service center using 3DS Max technology

- Published a literature “Analysis on the technical framework of virtual college students’ mental health service center”

Prediction Model Hadoop-based for High-risk Students

Hubei University of Economic, School of Information Management

01/2019 - 06/2019

Advisor: Xiaogao Yu

- Final ensemble model achieved an accuracy of 99.2%, surpassing that of individual prediction models.
- Collect multi-dimensional student data, such as library check-in frequency and internet usage data
- Published a literature “Prediction Model Hadoop-based for High-risk Students” <https://www.atlantispress.com/proceedings/19/125925450>

SKILLS

Programming Languages and Frameworks

Proficient in Python, Deep learning framework, Pytorch framework, MATLAB, C/C++, Digital circuit design