Zhiyu Xue

Phone: (+1) 517-944-9646 / Email: xzy990228@gmail.com [Google Scholar] [LinkedIn]

EDUCATION

Michigan State University (MSU)

East Lansing, USA

Graduate Student of Engineering in Computer Science

Fall 2021

GPA: 3.8/4.0

University of Electronic Science and Technology of China (UESTC)

Chengdu, China Fall 2017

Bachelor of Engineering in Data Science and Big Data Technology

GPA: 3.81/4.0; 87.9/100

PUBLICATIONS & PREPRINTS

Relative Position and Map Networks in Few-shot Learning for Image Classification

Zhiyu Xue, Zhenshan Xie, Zheng Xing, Lixin Duan CVPR Workshops, 2020, pp. 932-933 {Paper} {Codes}

Differentially Private Pairwise Learning Revisited

Zhiyu Xue*, Shaoyang Yang*, Mengdi Huai, and Di Wang (*equal contribution) IJCAI, 2021{Paper}

Region Comparison Network for Interpretable Few-shot Image Classification

Zhiyu Xue, Lixin Duan, Wen Li, Lin Chen, Jiebo Luo arXiv preprint,2020, arXiv:2009.03558 {Paper} {Codes}

UNDER REVIEW MANUSCRIPTS

1 Paper About Group Fairness on AdaBoost Submitted to ICDM 2022 (First Author)

1 Paper About Multi-modal Early Detection of Dementia Submitted to Pacific Symposium on Biocomputing 2023 (Second Author)

1 Paper About Long-tailed Heterogeneous Federated Learning Submitted to ICLR 2023 (First Author)

1 Paper About Adversarial Robustness Submitted to ICLR 2023 (First Author)

INDUSTRIAL EXPERIENCES

Intern, ByteDance AI Lab, Beijing, China

Mar. 2021-Jun. 2021

- Developed deep learning models for fine-grained food image classification and retrieval under the extreme long-tailed dataset generated by TikTok or TouTiao
- Matched the fine-grained food videos and their relative texts on TikTok by deep learning models

Intern, Big Data R & D Centre of Fintell Fintech Inc, Beijing, China

Jun. 2019-Jul. 2019

- Maintained the database and established a new version of dataset for risk management modelling
- Developed a model with Apriori and GBDT algorithm to provide the company with better plans and solutions based on the company's database

RESEARCH EXPERIENCES

Research Assistant of <u>ILLIDAN Lab</u>, MSU

Aug. 2021-Present

Supervised by Prof. Jiayu Zhou on Model Fairness and Federated Learning

Research Assistant of **Data Intelligence Group**, UESTC

Aug. 2018-Dec. 2020

Supervised by Prof. Lixin Duan on Few-shot Learning for Image Classification

Intern of **PART Lab**, King Abdullah University of Science and Technology

May. 2020-Dec. 2020

Supervised by Prof. Di Wang on Differential Privacy for Pairwise Learning

Intern of VIStA Group, University of Rochester

Dec. 2019-Feb. 2020

Supervised by Prof. Jiebo Luo and Prof. Wen Li on Interpretable Few-Shot Learning

Intern of **Explainable AI Group**, Shanghai Jiao Tong University

Jun. 2020 - Aug. 2020

Supervised by Prof. Quanshi Zhang for Explainable Deep Learning Models

HONORS AND AWARDS

Reviewer of CVPR 2020 VL3 Workshop	Mar. 2020
Sub-reviewer of KDD 2022 & CHASE 2022	Apr. 2021
Excellent Student Scholarship at UESTC	Sept. 2018 & Sept. 2019
2 nd Prize (Group Award) of Mathematical Modelling Competition at UTSEC	Sept. 2018
National 1 st Prize of the Fifth National College Students Art Exhibition, Viola Performance	Apr. 2018

LEADERSHIP AND ACTIVITIES

Founder, Hongya Markoo Children Programming Centre, Hongya, China	Jun. 2019-Jul. 2019
Participant, Summer Camp on Innovation and Global Leadership, UC Berkeley, USA	Aug. 2018
Kindergarten Volunteer Teacher, Sri Lanka International Volunteer Support Programme	Dec. 2017-Jan. 2018

ADDITIONAL INFORMATION

Language Skill: Chinese (Native), English (Fluent)

Computer Skills: Python (Numpy, Pandas, Pytorch and so on), C, Java, Linux, MATLAB

Interests: Music (Member of UESTC Orchestra Playing Viola)