

XU ZHENG

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EDUCATION

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|---|-----------------------|
| Florida International University(FIU) | Jan. 2023 - Now |
| · Ph.D. in Computer Science Advisor: Prof. Dongsheng Luo | Miami, USA |
| University of Electronic Science and Technology of China (UESTC) | Sep. 2018 - Jul. 2021 |
| · M.E. in Control Science and Engineering | Chengdu, China |
| Chongqing University (CQU) | Sep. 2014 - Jul. 2018 |
| · B.E. in Electronic Science and Technology | Chongqing, China |

RESEARCH AREAS

Explainable AI, Graph Neural Networks(GNNs), Time Series Learning, Contrastive Learning

WORKING EXPERIENCE

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|---|-----------------------|
| DSSS, NEC Lab | May 2024 - Aug. 2024 |
| Research Intern, Mentor: Dr. Junxiang Wang | Princeton, NJ |
| · Multi-Modal Time Series Anomaly Detection | |
| Department of Image Algorithm, ZTE | July 2021 - Jan. 2023 |
| AI and Algorithm Design | Chengdu, China |
| · Created automation data collection pipeline, designed deep neural network for restoring images for Under-Display Camera(UDC) | |
| · Implemented pruning, and quantization methods for Raw Image Denoising Networks . | |
| · Tested and deployed deep neural networks on Android platform with Tflite, Snapdragon QNN . | |

SELECTED PROJECTS

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| Explainable Graph Neural Networks | Nov. 2023 - Now |
| Advisor: Prof. Dongsheng Luo, FIU | |
| · Explainability-Assisted Graph Neural Networks for Data Efficiency. | |
| · Robust Evaluation Metrics for Explainable GNNs. | |
| Time Series Contrastive Learning with Adaptive Augmentations | Jan. 2023 - Sept. 2023 |
| Advisor: Prof. Dongsheng Luo, FIU | |
| · Information-theoretic framework for time series data augmentations. | |
| · Contrastive learning augmentation framework for time series representation. | |
| Generative Adversarial Learning for 3D Human Shape Generation | May 2019 - May 2021 |
| Advisor: Prof. Yali Zheng, UESTC | |
| · Explored human mesh generating by using Conditional GAN and optimization-based method from a single picture based on SMPL . | |
| · Explored human mesh recovery under multi-view constraints. | |
| · Estimated human mesh postures using 2D postures and weak depth labels. | |

SELECTED PAPERS

1. **Xu Zheng**, Farhad Shirani, Zhuomin Chen, Chaohao Lin, Wei Cheng, Wenbo Guo, Dongsheng Luo, "F-Fidelity: A Robust Framework for Faithfulness Evaluation of Explainable AI", ICLR, 2025
2. Zhuomin Chen, Jingchao Ni, Hojat Allah Salehi, **Xu Zheng**, Esteban Schafir, Farhad Shirani, Dongsheng Luo, "Explanation-Preserving Augmentation for Semi-Supervised Graph Representation Learning". Preprint, arXiv:2410.12657
3. **Xu Zheng**, et. al, Dongsheng Luo, "PAC Learnability under Explanation-Preserving Graph Perturbations". Preprint, arXiv:2402.05039

4. Zichuan Liu, Tianchun Wang, Jimeng Shi, **Xu Zheng**, et. al, Dongsheng Luo, “TimeX++: Learning Time-Series Explanations with Information Bottleneck”. ICML, 2024
5. **Xu Zheng**, Tianchun Wang, Wei Cheng, Aitian Ma, Haifeng Chen, Mo Sha, Dongsheng Luo, “Parametric Augmentation for Time Series Contrastive Learning”, ICLR, 2024, IJCAI workshop AI4TS, 2023. (**Best Paper Award**)
6. **Xu Zheng***, Farhad Shirani*, Tianchun Wang, Wei Cheng, Zhuomin Chen, Haifeng Chen, Hua Wei, Dongsheng Luo, “Towards Robust Fidelity for Evaluating Explainability of Graph Neural Networks”, ICLR, 2024.
7. **Xu Zheng**, Tianchun Wang, Samin Yasar Chowdhury, Ruimin Sun, Dongsheng Luo, “Unsafe Behavior Detection with Adaptive Contrastive Learning in Industrial Control Systems”, IEEE European Symposium on Security and Privacy Workshops, EuroS&PW 2023.
8. Minghao Lin, Minghao Cheng, Yueqi Chen, **Xu Zheng**, Dongsheng Luo, Huajiang Chen, “CLExtract: An End-to-End Tool Decoding Highly Corrupted Satellite Stream from Eavesdropping”, Black Hat USA Arsenal 2023.
9. **Xu Zheng**, Yali Zheng, Shubing Yang, “Generating Multiple Hypotheses for 3D Human Mesh and Pose using Conditional Generative Adversarial Nets”, Proceedings of the Asian Conference on Computer Vision, ACCV 2022.

TEACHING EXPERIENCES

Intermediate Java Programming	Jan. 2024 - Apr. 2024
<ul style="list-style-type: none"> · Role: Teaching Assistant · Instructor: Prof. Mustafa Ocal, FIU · 69 Students 	
Introduction to Artificial Intelligence	Aug. 2023 - Dec. 2023
<ul style="list-style-type: none"> · Role: Teaching Assistant · Instructor: Prof. Yanzhao Wu, FIU · 39 Students 	
System Programing	May 2023 - Aug. 2023
<ul style="list-style-type: none"> · Role: Teaching Assistant · Instructor: Prof. Latesh Kumar KJ, FIU · Over 40 Students 	

PROFESSIONAL SERVICES

Reviewer
<ul style="list-style-type: none"> · NeurIPS 24 · CIKM 24 · ICLR 25 · AISTATS 25
External Reviewer
<ul style="list-style-type: none"> · ICDM 22,23,24 · WSDM 23,24 · SDM 24 · KDD 23 · ICLR 24 · IJCAI 23, 24 · ICML 23, 24 · NeurIPS 23 · AAAI 25 · IEEE CLOUD 2023 · ACM TKDD · PAKDD 24

SOFTWARE AND DATA RELEASE

A Robust Decoding System for Highly Corrupted Satellite Stream Recovery
<ul style="list-style-type: none"> · https://github.com/AslanDing/CLExtract

AutoTCL: Automated Time Series Contrastive Learning with Adaptive Augmentations

· <https://github.com/AslanDing/AutoTCL>

Towards Robust Fidelity for Evaluating Explainability of Graph Neural Networks

· <https://github.com/AslanDing/Robust-Fidelity>