

Xingyu Wu

The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong SAR, China
xingy.wu@polyu.edu.hk • +86 18505692256, +852 59307974 • https://wuxingyu-ai.github.io/

RESEARCH EXPERIENCE

Assistant Professor, The Hong Kong Polytechnic University
- Department of Data Science and Artificial Intelligence — Jan 2026 – At Present
- Affiliated with the Machine Intelligence and Nature-Inspired Computing Lab (MIND Lab)

Postdoctoral Research Fellow, The Hong Kong Polytechnic University
- Supervised by **Prof. Kay Chen Tan** (IEEE Fellow) — Aug 2023 – Dec 2025
- Affiliated with the Machine Intelligence and Nature-Inspired Computing Lab (MIND Lab)

EDUCATION

University of Electronic Science and Technology of China, Chengdu, Sichuan, China
- B.Eng. in Computer Science — Sep 2014 – Jun 2018
  - Graduated with Honors of Outstanding Graduate Awards of Sichuan Province and UESTC.
  - Cumulative GPA: 3.87 / 4.00
  - Ranking $3^{rd}/303$ in major.

University of Science and Technology of China, Hefei, Anhui, China
- Ph.D. in Computer Science — Sep 2018 – Jun 2023
  - Thesis: Causality-based Feature Selection Research (2023.06)
  - Adviser: **Prof. Huanhuan Chen** (IEEE Fellow)
  - Focus: Causality-based machine learning, e.g., causal feature selection and causal discovery.
  - Cumulative GPA: 3.48 / 4.00

RESEARCH INTERESTS

Automated Machine Learning (AutoML)
- Feature Selection, Automated Algorithm Selection, Automated Algorithm Design, Neural Architecture Search, and Large Foundation Model Merging

Causality-based Machine Learning (CausalML)
- Causal Discovery, Markov Boundary Discovery, Causality-based AutoML, and Causality-based Real-world Applications

Large Language Model (LLM) Reuse
- LLM Routing, LLM Merging, LLM Reassembly, LLM Self-Evolution, LLM-based Machine Learning and Optimization

AWARDS & SCHOLARSHIPS

Professional Awards
- Best Paper Award, The 2025 International Conference on Machine Intelligence and Nature-inspireD Computing — Nov 2025
- First Prize (with Cash Prize of USD 15,000), IEEE CIS FLAME Technical Challenge 2024 — Dec 2024
- Top Performance Award, ACM Multimedia 2022 Social Media Prediction (SMP) Challenge — Dec 2022
- CAST 2022 Annual Science and Technology Journal Bilingual Dissemination Project, China Association for Science and Technology — Dec 2022

Mathematical Competition Awards
- Second Prize of The Chinese Mathematics Competitions, Chinese Mathematical Society — Oct 2015
- Second Prize of China Undergraduate Mathematical Contest in Modeling, China Society for Industrial and Applied Mathematics — Oct 2016
- Finalist of Contemporary Undergraduate Mathematical Contest in Modeling of USA, Consortium for Mathematics and Its Application — Oct 2017
  The designation Finalist recognizes teams whose solution reports are exemplary and therefore reached the final round of judging, about top 0.3%.

Academic Awards and Scholarships
- Outstanding Graduate Award of USTC, USTC — Jun 2023
- Intel Scholarship, Intel — Dec 2022
- Huawei Scholarship, Huawei — Dec 2022 Dec 2020

- National Scholarship, Ministry of Education of the People's Republic of China Dec 2019 Dec 2016
  To reward exceptionally outstanding (approximately the top 1%) students funded by the central government.
- Outstanding Graduate Award of Sichuan Province, Education Department of Sichuan Province Jun 2018
- Outstanding Graduate Award of UESTC, UESTC Jun 2018

PROFESSIONAL SERVICE & ACTIVITIES

Organization Services,

- Vice Chair of IEEE Computational Intelligence Society (CIS) Task Force on LLMs and Computational Intelligence for General-Purpose Artificial Intelligence Systems 2025 – 2027
- Co-Chair, IEEE Congress on Evolutionary Computation (CEC) 2026 Special Session on Evolutionary Computation Meets Large Language Models: Foundations, Synergies, and Emerging Paradigms, Maastricht, Netherlands. Jun 2026
- Co-Chair, International Joint Conference on Neural Networks (IJCNN) 2026 Special Session on Intelligent Applications for Industrial Systems (IAIS): The Role of AI-Based Methods, Maastricht, Netherlands. Jun 2026
- Co-Chair, IEEE Conference on Artificial Intelligence (CAI) 2026 Workshop on General-Purpose Artificial Intelligent Systems, Granada, Spain. May 2026
- Special Session Chair, 2026 International Conference on Machine Intelligence and Nature-inspired Computing (MIND), Xiamen, China. Nov 2026
- Session Chair, 2025 International Conference on Machine Intelligence and Nature-inspired Computing (MIND), Xiamen, China. Nov 2025

Journal Associate/Guest Editors,

- Associate Editor of Pattern Recognition 2026 – 2026
- Guest Co-Editor (with Yuejiao Gong, Jun Zhang, and Kay Chen Tan) of a Special Issue of IEEE Transactions on Evolutionary Computation entitled "Meta-Learning and Automated Design of Evolutionary Algorithms" 2026

Area Chair of Conferences,

- Annual Conference on Neural Information Processing Systems (NeurIPS) 2026 – 2026
- International Conference on Learning Representations (ICLR) 2026 – 2027
- International Conference on Machine Intelligence & Nature-inspired Computing (MIND) 2025 – 2025
- IEEE International Conference on Cybernetics and Intelligent Systems Robotics, Automation and Mechatronics (CIS-RAM) 2024 – 2024

Senior Program Committee Member of Conferences,

- AAAI Conference on Artificial Intelligence (AAAI) 2026 – 2026
- International Joint Conference on Artificial Intelligence (IJCAI) 2025 – 2026

Program Committee Member of Conferences,

- AAAI Conference on Artificial Intelligence (AAAI) 2021 – 2026
- Conference on Empirical Methods in Natural Language Processing (EMNLP) 2021 – 2026
- International Joint Conference on Neural Networks (IJCNN) 2023 – 2025
- International Joint Conference on Artificial Intelligence (IJCAI) 2024 – 2025
- ACM International Conference on Multimedia (MM) 2024 – 2026
- Annual Conference on Neural Information Processing Systems (NeurIPS) 2024 – 2025
- International Conference on Learning Representations (ICLR) 2025 – 2025
- International Conference on Artificial Intelligence and Statistics (AISTATS) 2025 – 2027
- International Conference on Machine Learning (ICML) 2025 – 2026
- IEEE Congress on Evolutionary Computation (CEC) 2025 – 2025
- European Conference on Artificial Intelligence (ECAI) 2025 – 2025

Reviewer of Journals,

- IEEE Transactions on Knowledge and Data Engineering (TKDE, IEEE)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS, IEEE)
- IEEE Transactions on Evolutionary Computation (TEVC, IEEE)
- IEEE Transactions on Cybernetics (TCYB, IEEE)
- IEEE Transactions on Services Computing (TSC, IEEE)

- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT, IEEE)
- IEEE Transactions on Network Science and Engineering (TNSE, IEEE)
- IEEE Transactions on Automation Science and Engineering (TASE, IEEE)
- IEEE Transactions on Cognitive and Developmental Systems (TCDS, IEEE)
- IEEE Computational Intelligence Magazine (CIM, IEEE)
- IEEE Wireless Communications Magazine (WCM, IEEE)
- IEEE/CAA Journal of Automatica Sinica (JAS, IEEE)
- IEEE Robotics and Automation Letters (RA-L, IEEE)
- IEEE Journal on Selected Areas in Communications (JSAC, IEEE)
- IEEE Internet of Things Journal (IoT, IEEE)
- ACM Computing Surveys (CSUR, ACM)
- ACM Transactions on Knowledge Discovery from Data (TKDD, ACM)
- Artificial Intelligence (AIJ, Elsevier)
- Information Fusion (INFFUS, Elsevier)
- Pattern Recognition (PR, Elsevier)
- Neural Networks (NEUNET, Elsevier)
- Swarm and Evolutionary Computation (SWEVO, Elsevier)
- Information Processing and Management (IPM, Elsevier)
- European Journal of Operational Research (EJOR, Elsevier)
- Communications in Nonlinear Science and Numerical Simulation (CNSNS, Elsevier)
- Engineering Applications of Artificial Intelligence (EAAI, Elsevier)
- Knowledge-Based Systems (KNOSYS, Elsevier)
- Neurocomputing (NEUCOM, Elsevier)
- Applied Soft Computing (ASOC, Elsevier)
- Computer Science Review (COSREV, Elsevier)
- Electronic Commerce Research and Applications (ECRA, Elsevier)
- Reliability Engineering & System Safety (JRESS, Elsevier)
- Automation in Construction (AUTCON, Elsevier)
- Journal of Information and Intelligence (InteCom, Elsevier)
- Advanced Engineering Informatics (ADVEI, Elsevier)
- ARRAY (ARRAY, Elsevier)
- Measurement (MEAS, Elsevier)
- International Journal of Approximate Reasoning (IJAR, Elsevier)
- Expert Systems With Applications (ESWA, Elsevier)
- Computer Methods and Programs in Biomedicine (CMPB, Elsevier)
- International Journal of Forecasting (IJF, Elsevier)
- Pattern Recognition Letters (PRL, Elsevier)
- Reliability Engineering & System Safety (JRESS, Elsevier)
- Aerospace Science and Technology (AESCTE, Elsevier)
- Intelligent Systems with Applications (ISWA, Elsevier)
- SoftwareX (SOFTX, Elsevier)
- World Wide Web (WWW, Springer)
- The Journal of Supercomputing (TJSC, Springer)
- Complex & Intelligent Systems (CAIS, Springer)
- Scientific Reports (Sci. Rep., Springer)
- Soft Computing (SOCO, Springer)
- International Journal of Fuzzy Systems (IJFS, Springer)
- Journal of Ambient Intelligence and Humanized Computing (AIHC, Springer)
- Complex & Intelligent Systems (CAIS, Springer)
- INFORMS Journal on Computing (JOC, INFORMS, UTD-24 Journal)
- Evolutionary Computation (ECJ, MIT Press Journals)
- Transactions on Machine Learning Research (TMLR, OpenReview)
- International Journal of Intelligent Systems (IJIS, Wiley)
- Intelligent Automation and Soft Computing (IASC, TSI Press)
- CMC-Computers, Materials & Continua (CMC, Tech Science Press)
- JMIR Medical Informatics (JMI, JMIR)

PUBLICATIONS

(FIRST AUTHOR & CORRESPONDING AUTHOR)

[1] Jiangeng Chang, Xingyu Wu*, Kay Chen Tan, Mengling Feng, "A Systematic Survey of Large Language Model Routing," in *Proceedings of the 2026* ***Conference on Empirical Methods in Natural Language Processing (EMNLP'26)***, Budapest, Hungary, Oct 2026.

[2] Xingyu Wu, Yu Zhou,Kay Chen Tan, "Building LLMs Like LEGO: Two-dimensional Architecture Reassembly of Large Language Models," in *Proceedings of the 64th* ***Annual Meeting of the Association for Computational Linguistics*** *(****ACL'26****, Main Track)*, San Diego, California, United States, Jul 2026.

[3] Zhaolong Ling, Dongliang Liang, Xinyan Liang, Xingyu Wu*, Peng Zhou, Kui Yu, Xindong Wu, "Multi-view Causal Feature Selection," ***IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)***, vol. 48, no. 10, pp. 13236–13251, Jun 2026.

[4] Yu Zhou, Xingyu Wu*, Jibin Wu, Liang Feng, Kay Chen Tan, "CausalBN-Bench: A Comprehensive Benchmark for Causal Learning Capability of LLMs," ***IEEE Transactions on Artificial Intelligence (TAI)***, vol. 7, no. 11, pp. 5892–5907, Jun 2026.

[5] Jian Yao, Zhiyao Zhang, Yichen Li, Xingyu Wu*, Kay Chen Tan*, "Algorithm Modelization: Transforming Optimization Algorithms into Evolvable Intelligence," ***IEEE Computational Intelligence Magazine (CIM)***, 2027.

[6] Xingyu Wu, Kui Yu, Jibin Wu, Kay Chen Tan, "Reassessing the Role of LLMs in Causal Discovery: Critical Analysis, Benchmark Evaluation, and Exploratory Framework," ***Pattern Recognition (PR)***, vol. 182, no. 2, art. 114825, 2027.

[7] Shenghao Wu, Xingyu Wu*, Kay Chen Tan, Zhi-hui Zhan, "SAFAS: Simulated Algorithm Feature-enhanced Automated Algorithm Selection for Black-Box Optimization," in *Proceedings of the 19th* ***International Conference on Parallel Problem Solving From Nature (PPSN'26****, Oral)*, Trento, Italy, May 2026.

[8] Xingyu Wu, Jibin Wu, Yu Zhou, Liang Feng, Kay Chen Tan, "Towards Robustness and Explainability of Automatic Algorithm Selection," in *Proceedings of the 42rd* ***International Conference on Machine Learning (ICML'25****, Spotlight)*, Vancouver, Canada, Jul 2025.

[9] Xingyu Wu, Yinglan Feng, Jibin Wu, " LLM-driven Evolutionary Algorithm Selection: Bidirectional Framework and Sampling Paradigm," in *Proceedings of the 2025* ***International Conference on Machine Intelligence and Nature-inspired Computing (MIND'25, Best Paper Award)***, Xiamen, China, Oct 2025.

[10] Xingyu Wu, Sheng-hao Wu, Jibin Wu, Liang Feng, Kay Chen Tan, "Evolutionary Computation in the Era of Large Language Model: Survey and Roadmap," ***IEEE Transactions on Evolutionary Computation (TEVC)***, vol. 29, no. 2, pp. 534–554, Apr 2025.

[11] Zhaolong Ling, Mengxiang Guo, Xingyu Wu*, Debo Cheng, Peng Zhou, Tianci Li, Zhangling Duan, "Gradient-based Causal Feature Selection," in *Proceedings of the 34th* ***International Joint Conference on Artificial Intelligence (IJCAI'25****, Oral)*, Montreal, Canada, Aug 2025.

[12] Beichen Huang, Xingyu Wu*, Yu Zhou, Jibin Wu, Liang Feng, Ran Cheng, Kay Chen Tan, "Evaluation of Large Language Models as Solution Generators in Complex Optimization," ***IEEE Computational Intelligence Magazine (CIM)***, vol. 20, no. 4, pp. 56–70, Oct 2025.

[13] Haiyun Qiu, Xingyu Wu*, Ran Cheng, Kay Chen Tan, "DB-Merging: Distribution-Aware Model Merging for Multi-Task Inference," in *Proceedings of the 2025* ***International Conference on Machine Intelligence and Nature-inspired Computing*** *(****MIND'25****, Poster)*, Xiamen, China, Oct 2025.

[14] Yu Zhou, Xingyu Wu*, Jibin Wu, Liang Feng, Kay Chen Tan*, "HM3: Hierarchical Multi-Objective Model Merging for Pretrained Models," in *Proceedings of the 39th* ***Annual Conference on Neural Information Processing Systems*** *(****NeurIPS'25****, Spotlight)*, California, United States, Dec 2025.

[15] Li Zhang, Dong Li, Yan Zhong, Jiaying Zhu, Rujing Wang, Xingyu Wu*, Xue Wang*, Liu Liu*, "Rethinking Image Forgery Detection and Localization via Regression Perspective," ***IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI)***, vol. 9, no. 5, pp. 3488–3500, Oct 2025.

[16] Xun Zhou, Xingyu Wu*, Liang Feng*, Zhichao Lu, Kay Chen Tan, "Design Principle Transfer in Neural Architecture Search via Large Language Models," in *Proceedings of the 34th* ***AAAI Conference on Artificial Intelligence*** *(****AAAI'25****, Oral)*, Philadelphia, Pennsylvania, USA, Feb 2025.

[17] Xingyu Wu, Yan Zhong, Bingbing Jiang, Jibin Wu, Kay Chen Tan "Large Language Model-Enhanced Algorithm Selection: Towards Comprehensive Algorithm Representation," in *Proceedings of the 33rd* ***International Joint Conference on Artificial Intelligence (IJCAI'24****, Long Oral)*, New York, USA, Jul 2024.

[18] Xingyu Wu, Yan Zhong, Zhaolong Ling, Jie Yang, Li Li, Weiguo Sheng, Bingbing Jiang, "Nonlinear Learning Methods for Local Causal Structures," ***Information Sciences***, vol. 654, no. 1, pp. 119789, Jan 2024.

[19] Xingyu Wu, Bingbing Jiang, Yan Zhong, Huanhuan Chen, "Multi-target Markov Boundary Discovery: Theory, Algorithm, and Application," ***IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)***, vol. 45, no. 4, pp. 4964–4980, Apr 2023.

[20] Xingyu Wu, Bingbing Jiang, Xiangyu Wang, Taiyu Ban, Huanhuan Chen, "Feature Selection in the Data Stream Based on Incremental Markov Boundary Learning," ***IEEE Transactions on Neural Networks and Learning Systems (TNNLS)***, vol. 34, no. 10, pp. 6740–6754, Oct 2023.

[21] Bingbing Jiang, Chenglong Zhang, Yan Zhong, Yi Liu, Yingwei Zhang, Xingyu Wu*, Weiguo Sheng*, "Adaptive Collaborative Fusion for Multi-view Semi-supervised Classification," ***Information Fusion***, vol. 96, no. 8, pp. 37–50, Aug 2023.

[22] Xingyu Wu, Bingbing Jiang, Tianhao Wu, Huanhuan Chen, "Practical Markov Boundary Learning without Strong Assumptions," in *Proceedings of the 37th* ***AAAI Conference on Artificial Intelligence*** *(****AAAI'23****, Oral)*, Washington, DC, USA, Feb 2023.

[23] Xingyu Wu, Zhenchao Tao, Bingbing Jiang, Tianhao Wu, Xin Wang, Huanhuan Chen, "Domain Knowledge-enhanced Variable Selection for Biomedical Data Analysis," ***Information Sciences***, vol. 606, no. 8, pp. 469–488, 2022.

[24] Xingyu Wu, Bingbing Jiang, Shengfei Lyu, Xiangyu Wang, Qiuju Chen, Huanhuan Chen, "A Survey on Causal Feature Selection Based on Markov Boundary Discovery," ***Pattern Recognition and Artificial Intelligence***, vol. 35, no. 5, pp. 422–438, 2022.

[25] Xingyu Wu, Bingbing Jiang, Kui Yu, Huanhuan Chen, "Separation and Recovery Markov Boundary Discovery and Its Application in EEG-based Emotion Recognition," ***Information Sciences***, vol. 571, no. 9, pp. 262–278, 2021.

[26] Bingbing Jiang, Junhao Xiang, Xingyu Wu*, Wenda He, Libin Hong, Weiguo Sheng*, "Robust Adaptive-weighting Multi-view Classification," in *Proceedings of the 30th* ***ACM International Conference on Information and Knowledge Management*** *(****CIKM'21****, Oral)*, Gold Coast, Australia, Nov 2021.

[27] Xingyu Wu, Bingbing Jiang, Kui Yu, Huanhuan Chen, Chunyan Miao, "Multi-label Causal Feature Selection," in *Proceedings of the 34th* ***AAAI Conference on Artificial Intelligence*** *(****AAAI'20****, Poster)*, New York, USA, Feb 2020.

[28] Xingyu Wu, Bingbing Jiang, Yan Zhong, Huanhuan Chen, "Tolerant Markov Boundary Discovery for Feature Selection," in *Proceedings of the 29th* ***ACM International Conference on Information and Knowledge Management*** *(****CIKM'20****, Oral)*, Virtual Event, Ireland, Oct 2020.

[29] Xingyu Wu, Bingbing Jiang, Kui Yu, Chunyan Miao, Huanhuan Chen, "Accurate Markov Boundary Discovery for Causal Feature Selection," ***IEEE Transactions on Cybernetics (TCYB)***, vol. 50, no. 12, pp. 4983–4996, 2020.

PUBLICATIONS

(COLLABORATION LIST)

[1] Yan Zhong, Xingyu Wu, Xinping Zhao, Li Zhang, Xinyuan Song, Lei Shi, Bingbing Jiang, "Semi-supervised multi-label feature selection with consistent sparse graph learning," *Neural Networks*, vol. 204, no. 12, art. 109265, Dec 2026.

[2] Hengyi Sim, Junjia Liu, Donatien Delehelle, Xingyu Wu, Darwin Caldwell, Fei Chen, "Learning Robot Dynamic Cloth Manipulation Based on Differentiable Dynamics Optimization and Motion Transfer," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. 10, no. 2, pp. 1641–1653, 2026.

[3] Jian Yao, Ran Cheng, Xingyu Wu, Jibin Wu, Kay Chen Tan, "Diversity-Aware Policy Optimization for Large Language Model Reasoning," in *Proceedings of the 39th Annual Conference on Neural Information Processing Systems (NeurIPS'25)*, California, United States, Dec 2025.

[4] Zhaolong Ling, Honghui Peng, Yiwen Zhang, Debo Cheng, Xingyu Wu, Peng Zhou, Kui Yu, "Hybrid Local Causal Discovery," in *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI'25)*, Montreal, Canada, Aug 2025.

[5] Sheng-Hao Wu, Yuxiao Huang, Xingyu Wu, Liang Feng, Zhi-Hui Zhan, Kay Chen Tan, "Learning to Transfer for Evolutionary Multitasking," *IEEE Transactions on Cybernetics*, 2025.

[6] Zhaolong Ling, Mengxiang Guo, Jingxuan Wu, Yiwen Zhang, Peng Zhou, Xingyu Wu, Kui Yu, Xindong Wu, "Label-aware Causal Feature Selection," *IEEE Transactions on Knowledge and Data Engineering*, vol. 37, no. 3, pp. 1268–1281, 2025.

[7] Bingbing Jiang, Chenglong Zhang, Xinyan Liang, Peng Zhou, Jie Yang, Xingyu Wu, Junyi Guan, Weiping Ding, Weiguo Sheng, "Collaborative Similarity Fusion and Consistency Recovery for Incomplete Multi-view Clustering," in *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI'25)*, Philadelphia, Pennsylvania, USA, Feb 2025.

[8] Zhaolong Ling, Jiale Yu, Yiwen Zhang, Debo Cheng, Peng Zhou, Xingyu Wu, Bingbing Jiang, Kui Yu, "Local Causal Discovery without Causal Sufficiency," in *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI'25)*, Philadelphia, Pennsylvania, USA, Feb 2025.

[9] Yuxiao Huang, Wenjie Zhang, Liang Feng, Xingyu Wu, Kay Chen Tan, "How multimodal integration boost the performance of LLM for optimization: Case study on capacitated vehicle routing problems," in *Proceedings of the 2025 IEEE Symposium for Multidisciplinary Computational Intelligence Incubators (MCII'25 in SSCI'25)*, Trondheim, Norway, Feb 2025.

[10] Zhangling Duan, Tianci Li, Zhaolong Ling, Xingyu Wu, Jingye Yang, Zhaohong Jia, "Fair Streaming Feature Selection," *Neurocomputing*, vol. 624, no. 4, pp. 129394, 2025.

[11] Zhaolong Ling, Bo Li, Yiwen Zhang, Peng Zhou, Xingyu Wu, Kui Yu, Xindong Wu, "Causal Discovery Using Weight-Based Conditional Independence Test," *ACM Transactions on Knowledge Discovery from Data*, vol. 19, no. 1, pp. 1-24, 2024.

[12] Chenglong Zhang, Xinyan Liang, Peng Zhou, Zhaolong Ling, Yingwei Zhang, Xingyu Wu, Weiguo Sheng, Bingbing Jiang, "Scalable Multi-view Unsupervised Feature Selection with Structure Learning and Fusion," in *Proceedings of the 32nd ACM International Conference on Multimedia (MM'24)*, Melbourne, Australia, Oct 2024.

[13] Li Zhang, Zean Han, Yan Zhong, Qiaojun Yu, Xingyu Wu, Xue Wang, Rujing Wang, "VoCAPTER: Voting-based Pose Tracking for Category-level Articulated Object via Inter-frame Priors," in *Proceedings of the 32nd ACM International Conference on Multimedia (MM'24)*, Melbourne, Australia, Oct 2024.

[14] Yan Zhong, Xingyu Wu, Li Zhang, Chenxi Yang, Tingting Jiang, "Causal-IQA: Towards the Generalization of Image Quality Assessment Based on Causal Inference," in *Proceedings of the 41st International Conference on Machine Learning (ICML'24)*, Vienna, Austria, Jul 2024.

[15] Chenglong Zhang, Yang Fang, Xinyan Liang, Han Zhang, Peng Zhou, Xingyu Wu, Jie Yang, Bingbing Jiang, Weiguo Sheng, "Efficient Multi-view Unsupervised Feature Selection with Adaptive Structure Learning and Inference," in *Proceedings of the 33rd International Joint Conference on Artificial Intelligence (IJCAI'24)*, Jeju, South Korea, Aug 2024.

[16] Bingbing Jiang, Xingyu Wu, Xiren Zhou, Anthony Cohn, Yi Liu, Weiguo Sheng, Huanhuan Chen, "Semi-Supervised Multi-View Feature Selection with Adaptive Graph Learning," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 35, no. 3, pp. 3615–3629, 2024.

[17] Shengfei Lyu, Xingyu Wu, Jinlong Li, Qiuju Chen, Huanhuan Chen, "Do Models Learn the Directionality of Relations? A New Evaluation: Relation Direction Recognition," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. 6, no. 4, pp. 883–892, 2022.

[18] Kui Yu, Mingzhu Cai, Xingyu Wu, Lin Liu, Jiuyong Li, "Multi-Label Feature Selection: a Local Causal Structure Learning Approach," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 34, no. 6, pp. 3044–3057, 2023.

[19] Jiarun Zhu, Xingyu Wu, Muhammad Usman, Xiangyu Wang, Huanhuan Chen, "Link Prediction in Continuous-Time Dynamic Heterogeneous Graphs with Causality of Event Types," *International Journal of Crowd Science*, vol. 6, no. 2, pp. 80–91, 2022.

[20] Bingbing Jiang, Junhao Xiang, Xingyu Wu, Yadi Wang, Huanhuan Chen, Yi Liu, Weiwei Cao, Weiguo Sheng, "Robust Multi-view Learning via Adaptive Regression," *Information Sciences*, vol. 610, no. 9, pp. 916–937, 2022.

[21] Gangqiang Hu, Shengfei Lyu, Xingyu Wu, Jinlong Li, Huanhuan Chen, "Contextual-Aware Information Extractor with Adaptive Objective for Chinese Medical Dialogues," *ACM Transactions on Asian and Low-Resource Language Information Processing*, vol. 21, no. 5, pp. 1–21, 2022.

[22] Shengfei Lyu, Jin Cheng, Xingyu Wu, Lizhen Cui, Huanhuan Chen, Chunyan Miao, "Auxiliary Learning for Relation Extraction," *IEEE Transactions on Emerging Topics in Computational Intelligence*, vol. 6, no. 1, pp. 182–191, 2022.

[23] Xiangyu Wang, Taiyu Ban, Lyuzhou Chen, Xingyu Wu, Derui Lyu, Huanhuan Chen, "Knowledge Verification from Data," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 35, no. 3, pp. 4324–4338, 2024.

[24] Taiyu Ban, Xiangyu Wang, Lyuzhou Chen, Xingyu Wu, Qiuju Chen, Huanhuan Chen, "Quality Evaluation of Triples in Knowledge Graph by Incorporating Internal with External Consistency," *IEEE Transactions on Neural Networks and Learning Systems*, vol. 35, no. 2, pp. 1980–1992, 2024.

[25] Xin Wang, Shengfei Lyu, Xiangyu Wang, Xingyu Wu, Huanhuan Chen, "Temporal knowledge graph embedding via sparse transfer matrix," *Information Sciences*, vol. 623, no. 4, pp. 56–69, 2023.

[26] Xiangyu Wang, Lyuzhou Chen, Taiyu Ban, Derui Lyu, Yifeng Guan, Xingyu Wu, Xiren Zhou, Huanhuan Chen, "Accurate Label Refinement from Multi-Annotator of Remote Sensing Data," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 61, pp. 4700413, Feb 2023.

[27] Shengfei Lyu, Xiren Zhou, Xingyu Wu, Qiuju Chen, Huanhuan Chen, "Self-Attention Over Tree for Relation Extraction With Data-Efficiency and Computational Efficiency," *IEEE Transactions on Emerging Topics in Computational Intelligence*, accepted/in press, Jun 2023.

[28] Chenglong Zhang, Bingbing Jiang, Zidong Wang, Jie Yang, Yangfeng Lu, Xingyu Wu, Weiguo Sheng, "Efficient multi-view semi-supervised feature selection," *Information Sciences*, vol. 649, no. 11, pp. 119675, Nov 2023.

[29] Bingbing Jiang, Wenda He, Xingyu Wu, Junhao Xiang, Libin Hong, Weiguo Sheng, "Semi-Supervised Feature Selection with Adaptive Graph Learning," *ACTA Electronica Sinica*, vol. 50, no. 7, pp. 1643–1652, May 2022.

[30] Xin Wang, Shengfei Lyu, Xingyu Wu, Tianhao Wu, Huanhuan Chen, "Generalization Bounds for Estimating Causal Effects of Continuous Treatments," in *Proceedings of the The 36th Conference on Neural Information Processing Systems (NeurIPS'22)*, New Orleans, Louisiana, USA, Nov 2022.

[31] Tianhao Wu, Xingyu Wu, Xin Wang, Shikang Liu, Huanhuan Chen, "Nonlinear Causal Discovery in Time Series," in *Proceedings of the 31st ACM International Conference on Information and Knowledge Management (CIKM'22)*, Atlanta, Georgia, USA, Oct 2022.

[32] Yan Zhong, Xingyu Wu, Bingbing Jiang, Huanhuan Chen, "Multi-label Local-to-Global Feature Selection," in *Proceedings of the International Joint Conference on Neural Networks (IJCNN'21)*, Virtual Event, Shenzhen, China, Jul 2021.

[33] Bingbing Jiang, Xingyu Wu, Kui Yu, Huanhuan Chen, "Joint Semi-supervised Feature Selection and Classification through Bayesian Approach," in *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI'19)*, Honolulu, Hawaii, USA, Jan 2019.

[*CV compiled on 2026-11-03*]