CHEN ZHAO

PERSONAL INFORMATION

Title:	Assistant Professor
Affiliation:	Department of Computer Sciences, Baylor University
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Homepage:	`https://charliezhaoyinpeng.github.io/homepage/`
Google Scholar:	`https://scholar.google.com/citations?user=xebNvXQAAAAJ&hl=en`

RESEARCH OF INTERESTS

⋄ Trustworthy Artificial Intelligence; ⋄ Robust Machine Learning; ⋄ Fairness-aware Machine Learning; ⋄ Uncertainty Quantification; ⋄ Domain Generalization / Adaptation; ⋄ Graph Mining; ⋄ Causal Learning. ⋄ Computational Biology

EDUCATION

Ph.D. in Computer Science   *2021*
The University of Texas at Dallas   *Richardson, Texas*
Department of Computer Science
Dissertation: Fairness-Aware Multi-Task and Meta-Learning
Advisor: Feng Chen, Ph.D.

M.S. in Computer Science   *2016*
University at Albany - SUNY   *Albany, New York*
Department of Computer Science

M.S. in Biomedical Science   *2016*
Albany Medical College   *Albany, New York*
Department of Molecular and Cellular Physiology

PROFESSIONAL APPOINTMENTS

Assistant Professor (Tenure-Track)   *2023 – Present*
Baylor University, Waco, Texas
Department of Computer Science

Adjunct Lecturer   *2022 – Present*
University at Albany - SUNY, Albany, New York
Department of Information Sciences and Technology

Senior Research and Development Engineer   *2021 – 2023*
Kitware Inc., Clifton Park, New York
Computer Vision Team

PUBLICATIONS

Peer-Reviewed Publication Summary

Conference Papers (39): ⋄ NeurIPS (1); ⋄ KDD (5); ⋄ IJCAI (4); ⋄ ACL (2); ⋄ AAAI (4); ⋄ CVPR (1); ⋄ ICDE (1); ⋄ WWW (1); ⋄ CIKM (3); ⋄ SDM (1); ⋄ ICDM (2); ⋄ ECAI (1); ⋄ ICASSP (3); ⋄ IEEE BigData (4); ⋄ PAKDD (1); ⋄ ICBC (1); ⋄ ICKG (2); ⋄ IGARSS (1); ⋄ DASFAA (1)

Workshop Papers (19): ⋄ KDD-W (9); ⋄ NeurIPS-W (8); ⋄ CVPR-W (1); ⋄ AAAI-W (1);

Journal Papers (6): ⋄ TKDD (1); ⋄ KBS (1); ⋄ Frontier in Big Data (1); ⋄ DLT (1); ⋄ Development (2);

Peer-Reviewed Conference Publications

[1] **[AAAI'26]** Yang Yan, Matthew W. Chen, Jiayi Lyu, **Chen Zhao**, Hao Gao, Zhong Chen. Fine-tuning Zero-shot Large Language Models for Patient-reported Outcomes. In Proceedings of AAAI Conference on Artificial Intelligence (Student Abstract), 2026.

[2] **[BigData'25]** Karuna Bhaila, Minh-Hao Van, Kennedy Edemacu, **Chen Zhao**, Feng Chen, Xintao Wu. Fair In-Context Learning via Latent Concept Variables. In Proceedings of the IEEE International Conference on Big Data, 2025.

[3] **[NeurIPS'25]** Dong Li, Xujiang Zhao, Linlin Yu, Yanchi Liu, Wei Cheng, Zhengzhang Chen, Zhong Chen, Feng Chen, **Chen Zhao**, Haifeng Chen. SolverLLM: Leveraging Test-Time Scaling for Optimization Problem via LLM-Guided Search. In Proceedings of the 39th Annual Conference on Neural Information Processing Systems, 2025.

[4] **[ACL'25]** Qiwei Zhao*, Dong Li*, Yanchi Liu, Wei Cheng, Yiyou Sun, Mika Oishi, Takao Osaki, Katsushi Matsuda, Huaxiu Yao, **Chen Zhao**, Haifeng Chen, Xujiang Zhao. Uncertainty Propagation on LLM Agent. In Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics, 2025.

[5] **[ACL'25, Findings]** Sadaf MD Halim, **Chen Zhao**, Xintao Wu, Latifur Khan, Christan Grant, Fariha Ishrat Rahman, Feng Chen. Let The Jury Decide: Fair Demonstration Selection for In-Context Learning through Incremental Greedy Evaluation. In Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics, 2025.

[6] **[IJCAI'25]** Yujie Lin*, Dong Li*, Minglai Shao, Guihong Wan, **Chen Zhao**. FADE: Towards Fairness-aware Data Generation for Domain Generalization via Classifier-Guided Score-based Diffusion Models. In Proceedings of the 34th International Joint Conference on Artificial Intelligence, 2025.

[7] **[IJCAI'25]** Zhong Chen, Yi He, Di Wu, **Chen Zhao**, Meikang Qiu. A Novel Sparse Active Online Learning Framework for Streaming Anomaly Detection in Open Feature Spaces. In Proceedings of the 34th International Joint Conference on Artificial Intelligence, 2025.

[8] **[ICDE'25]** Sadaf Md Halim, **Chen Zhao**, Xintao Wu, Latifur Khan, Christan Grant, Feng Chen. Fairness-aware Active Online Learning with Changing Environments. In Proceedings of the IEEE International Conference on Data Engineering, 2025.

[9] **[DASFAA'25]** Xiao Shou, Debarun Bhattacharjya, Yanna Ding, **Chen Zhao**, Rui Li, Jianxi Gao. Less is More: Efficient Weight "Farcasting" with 1-Layer Neural Network. In Proceedings of International Conference on Database Systems for Advanced Applications, 2025.

[10] **[ICASSP'25]** Zhixia He, **Chen Zhao**, Minglai Shao, Yujie Lin, Dong Li, Qin Tian. GDDA: Semantic OOD Detection on Graphs under Covariate Shift via Score-Based Diffusion Models. In Proceedings of the IEEE

International Conference on Acoustics, Speech and Signal Processing, 2025.

[11] **[ICASSP'25]** Xiaoxu Ma, **Chen Zhao**, Minglai Shao, Yujie Lin. Hypergraph-Based Dynamic Graph Node Classification. In Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing, 2025.

[12] **[SDM'25]** Ruomeng Ding, Xujiang Zhao, **Chen Zhao**, Minglai Shao, Zhengzhang Chen, Haifeng Chen. Evidence-Based Out-of-Distribution Detection on Multi-Label Graphs. In Proceedings of the SIAM International Conference on Data Mining, 2025.

[13] **[AAAI'25]** Heng Lian, **Chen Zhao**, Zhong Chen, Xingquan Zhu, My T. Thai, Yi He. Metric-Agnostic Continual Learning for Sustainable Group Fairness. In Proceedings of AAAI Conference on Artificial Intelligence, 2025.

[14] **[AAAI'25]** Guihong Wan, Ninghui Hao, Crystal Maung, Haim Schweitzer, **Chen Zhao**, Kun-Hsing Yu, Yevgeniy Semenov. Multi-View Unsupervised Column Subset Selection via Combinatorial Search. In Proceedings of AAAI Conference on Artificial Intelligence (Student Abstract), 2025.

[15] **[KDD'25]** Qin Tian, **Chen Zhao**, Minglai Shao, Wenjun Wang, Yujie Lin, Dong Li. MLDGG: Meta-Learning for Domain Generalization on Graphs. In Proceedings of the 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2025.

[16] **[BigData'24]** Haoliang Wang, **Chen Zhao**, Feng Chen. Feature-Space Semantic Invariance: Enhanced OOD Detection for Open-Set Domain Generalization. In Proceedings of the IEEE International Conference on Big Data, 2024.

[17] **[BigData'24]** Haoliang Wang, **Chen Zhao**, Feng Chen. MADOD: Generalizing OOD Detection to Unseen Domains via G-Invariance Meta-Learning. In Proceedings of the IEEE International Conference on Big Data, 2024.

[18] **[BigData'24]** Kai Jiang, **Chen Zhao**, Haoliang Wang, Feng Chen. FEED: Fairness-Enhanced Meta-Learning for Domain Generalization. In Proceedings of the IEEE International Conference on Big Data, 2024.

[19] **[CIKM'24]** Dong Li, **Chen Zhao**, Minglai Shao, Wenjun Wang. Learning Fair Invariant Representations under Covariate and Correlation Shifts Simultaneously. In Proceedings of the 33rd ACM International Conference on Information and Knowledge Management, 2024.

[20] **[ECAI'24]** Aneesh Komanduri, **Chen Zhao**, Feng Chen, Xintao Wu. Causal Diffusion Autoencoders: Toward Counterfactual Generation via Diffusion Probabilistic Models. In Proceedings of the 27th European Conference on Artificial Intelligence, 2024.

[21] **[KDD'24] Chen Zhao***, Kai Jiang*, Xintao Wu, Haoliang Wang, Latifur Khan, Christan Grant, Feng Chen. (Equal contribution). Algorithmic Fairness Generalization under Covariate and Dependence Shifts Simultaneously. In Proceedings of the 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2024.

[22] **[IJCAI'24]** Minglai Shao*, Dong Li*, **Chen Zhao***, Xintao Wu, Yujie Lin, Qin Tian. (Equal contribution). Supervised Algorithmic Fairness in Distribution Shifts: A Survey. In Proceedings of the 33rd International Joint Conference on Artificial Intelligence, 2024.

[23] **[IJCAI'24]** Yujie Lin, **Chen Zhao**, Minglai Shao, Baoluo Meng, Xujiang Zhao, Haifeng Chen. Towards Counterfactual Fairness-aware Domain Generalization in Changing Environments. In Proceedings of the 33rd International Joint Conference on Artificial Intelligence, 2024.

[24] **[IGARSS'24]** Dennis Melamed, Cameron Johnson, Isaac D. Gerg, **Chen Zhao**, Russell Blue, Philip Morrone, Anthony Hoogs, Brian Clipp. Uncovering Bias in Building Damage Assessment from Satellite Imagery. In Proceedings of the 44th IEEE International Geoscience and Remote Sensing Symposium, 2024.

[25] **[CIKM'23]** Yujie Lin, **Chen Zhao**, Minglai Shao, Xujiang Zhao, Haifeng Chen. Adaptation Speed Analysis for Fairness-aware Causal Models. In Proceedings of the 32nd ACM International Conference on Information and Knowledge Management, 2023.

[26] **[CIKM'23]** Dong Li, Wenjun Wang, Minglai Shao, **Chen Zhao**. Contrastive Representation Learning Based on Multiple Node-centered Subgraphs. In Proceedings of the 32nd ACM International Conference on Information and Knowledge Management, 2023.

[27] **[KDD'23] Chen Zhao***, Feng Mi*, Xintao Wu, Kai Jiang, Latifur Khan, Christan Earl Grant, Feng Chen. Towards Fair Disentangled Online Learning for Changing Environments. In Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2023.

[28] **[CVPR'23] Chen Zhao**, Dawei Du, Anthony Hoogs, Christopher Funk. Open Set Action Recognition via Multi-Label Evidential Learning. In Proceedings of the 34th IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2023.

[29] **[ICASSP'23]** Xujiang Zhao, Xuchao Zhang, **Chen Zhao**, Jin-Hee Cho, Lance Kaplan, Dong Hyun Jeong, Audun Jøsang, Haifeng Chen, Feng Chen. Multi-Label Temporal Evidential Neural Networks for Early Event Detection. In Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing, 2023.

[30] **[KDD'22] Chen Zhao***, Feng Mi*, Xintao Wu, Kai Jiang, Latifur Khan, Feng Chen. Adaptive Fairness-Aware Online Meta-Learning for Changing Environments. In Proceedings of the 28th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2022.

[31] **[PAKDD'22]** Haoliang Wang, **Chen Zhao**, Xujiang Zhao, Feng Chen. Layer Adaptive Deep Neural Networks for Out-of-distribution Detection. In Proceedings of the 26th Pacific-Asia Conference on Knowledge Discovery and Data Mining, 2022.

[32] **[AAAI'22]** Krishnateja Killamsetty, Changbin Li, **Chen Zhao**, Rishabh Krishnan Iyer, Feng Chen. A Nested Bi-level Optimization Framework for Robust Few-Shot Learning. In Proceedings of AAAI Conference on Artificial Intelligence, 2022.

[33] **[KDD'21] Chen Zhao**, Feng Chen, Bhavani Thuraisingham. Fairness-Aware Online Meta-learning. In Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2021.

[34] **[ICBC'21]** Feng Mi, Zhuoyi Wang, **Chen Zhao**, Jinghui Guo, Fawaz Ahmed, Latifur Khan. VSCL: Automating Vulnerability Detection in Smart Contracts with Deep Learning. In Proceedings of the IEEE International Conference on Blockchain and Cryptocurrency, 2021.

[35] **[WWW'21]** Zhuoyi Wang, Yuqiao Chen, **Chen Zhao**, Hemeng Tao, Yu Lin, Xujiang Zhao, Yigong Wang and Latifur Khan. CLEAR: Contrastive-Prototype Learning with Drift Estimation for Resource Constrained Stream Mining. In Proceedings of the ACM International World Wide Web Conference, 2021.

[36] **[ICDM'20] Chen Zhao**, Feng Chen, Zhuoyi Wang, Latifur Khan. A Primal-Dual Subgradient Approach for Fair Meta Learning. In Proceedings of the IEEE International Conference on Data Mining, 2020.

[37] **[ICKG'20] Chen Zhao**, Changbin Li, Jincheng Li, Feng Chen. Fair Meta-Learning for Few-Shot Classification. In Proceedings of the IEEE International Conference on Knowledge Graph, 2020.

[38] **[ICKG'20] Chen Zhao**, Feng Chen. Unfairness Discovery and Prevention for Few-Shot Regression. In Proceedings of the IEEE International Conference on Knowledge Graph, 2020.

[39] **[ICDM'19] Chen Zhao**, Feng Chen. Rank-Based Multi-task Learning for Fair Regression. In Proceedings of the IEEE International Conference on Data Mining (**ICDM**), 2019.

Peer-Reviewed Workshop Publications

[1] **[NeurIPS'25-W]** Dong Li, Guihong Wan, Xintao Wu, Xinyu Wu, Yi He, Zhong Chen, Ninghui Hao, **Chen Zhao**. A Survey on Computational Pathology Foundation Models: Datasets, Adaptation Strategies, and Evaluation Tasks. NeurIPS Workshop on Imageomics: Discovering Biological Knowledge from Images Using AI, 2025.

[2] **[NeurIPS'25-W]** Yang Yan, Xinglei Shen, Ronald Chen, Hao Gao, **Chen Zhao**, Guihong Wan, Yi He, Zhong Chen. A Comparative Study of Semi-supervised Deep Anomaly Detection and LLMs for Monitoring Patients with Severe Health Status Undergoing Radiotherapy. NeurIPS Workshop on Multi-modal Foundation Models and Large Language Models for Life Sciences, 2025.

[3] **[NeurIPS'25-W]** Dong Li, Guihong Wan, Xintao Wu, Xinyu Wu, Xiaohui Chen, Yi He, Zhong Chen, Ninghui Hao, **Chen Zhao**. Multi-Modal Foundation Models for Computational Pathology: A Survey. NeurIPS Workshop on Multi-modal Foundation Models and Large Language Models for Life Sciences, 2025.

[4] **[NeurIPS'25-W]** Zhong Chen, **Chen Zhao**, Zhenyi Wang, Yi He. Combining Online CUR Decomposition and Matrix Sketching for Data Streams in Open Feature Spaces. NeurIPS Workshop on Constrained Optimization for Machine Learning, 2025.

[5] **[NeurIPS'25-W]** Zhong Chen, **Chen Zhao**, Yi He. A Theoretical Analysis for CUR Decomposition based Active Learning and Feature Selection. NeurIPS Workshop on Optimization for Machine Learning, 2025.

[6] **[NeurIPS'25-W]** An Vuong, Minh-Hao Van, Prateek Verma, **Chen Zhao**, Xintao Wu. Fine-Tuning Vision-Language Models for Multimodal Polymer Property Prediction. NeurIPS Workshop on AI for Accelerated Materials Design, 2025.

[7] **[KDD'25-W]** Zhixia He, **Chen Zhao**, Minglai Shao, Dong Li, Qin Tian. Multi-Modal Out-of-Distribution Detection with Large Language Models. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2025.

[8] **[KDD'25-W]** Haoliang Wang, Dong Li, **Chen Zhao**. Drift-Aware Proxy Uncertainty Estimation for Large Language Models in Temporal Streams. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2025.

[9] **[KDD'24-W]** Zhixia He, **Chen Zhao**, Minglai Shao, Yujie Lin, Dong Li. Semantic OOD Detection under Covariate Shift on Graphs with Diffusion Model. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2024.

[10] **[KDD'24-W]** Qin Tian, Wenjun Wang, Minglai Shao, **Chen Zhao**, Dong Li. IDGG: Invariant Learning for Out-of-Distribution Generalization on Graphs. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2024.

[11] **[KDD'24-W]** Xiaoxu Ma, **Chen Zhao**, Minglai Shao. HyperDG: A Hypergraph-Based Approach for Dynamic Graph Node Classification under Spatio-Temporal Shift. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2024.

[12] **[KDD'24-W]** Tao Yin, **Chen Zhao**, Minglai Shao. Out-of-Distribution Detection for Heterogeneous Graph Neural Networks. KDD Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2024.

[13] **[KDD'24-W]** Yujie Lin, Dong Li, **Chen Zhao**, Minglai Shao. Fair Data Generation via Score-based Diffusion Model. KDD Workshop on Ethical Artificial Intelligence: Methods and Applications, 2024.

[14] **[CVPR'24-W]** Aneesh Komanduri, **Chen Zhao**, Feng Chen, Xintao Wu. Causal Diffusion Autoencoders: Toward Representation-Enabled Counterfactual Generation via Diffusion Probabilistic Models. CVPR Workshop on Generative Models for Computer Vision, 2024.

[15] **[NeurIPS'23-W]** Yujie Lin, **Chen Zhao**, Minglai Shao, Xujiang Zhao, Baoluo Meng, Haifeng Chen. Achieving Counterfactual Fairness in Changing Environments via Sequential Autoencoder. NeurIPS Workshop on

Algorithmic Fairness through the Lens of Time, 2023.

[16] **[KDD'23-W]** Yujie Lin, **Chen Zhao**, Minglai Shao, Xujiang Zhao, Haifeng Chen. Adaptation Speed of Causal Models Concerning Fairness. KDD Workshop on Ethical Artificial Intelligence: Methods and Applications, 2023.

[17] **[KDD'23-W]** Dong Li, **Chen Zhao**, Minglai Shao, Xujiang Zhao. Learning Fair and Domain Generalization Representation. KDD Workshop on Ethical Artificial Intelligence: Methods and Applications, 2023.

[18] **[AAAI'23-W]** Ruomeng Ding, Xujiang Zhao, **Chen Zhao**, Minglai Shao. Detecting Multi-Label Out-of-Distribution Nodes on Graphs. AAAI Workshop on Uncertainty Reasoning and Quantification in Decision Making, 2023.

[19] **[NeurIPS'21-W]** Krishnateja Killamsetty, Changbin Li, **Chen Zhao**, Rishabh Krishnan Iyer, Feng Chen. A Reweighted Meta Learning Framework for Robust Few Shot Learning. NeurIPS Workshop on Meta-Learning, 2021.

Peer-Reviewed Journal Publications

[1] **[KBS]** Yin Tao, **Chen Zhao**, Xiaoyan Liu, Minglai Shao. Out-of-Distribution Detection in Heterogeneous Graphs via Energy Propagation. Knowledge-Based Systems, 2025.

[2] **[DLT]** Feng Mi, **Chen Zhao**, Zhuoyi Wang, Sadaf MD Halim, Xiaodi Li, Zhouxiang Wu, Latifur Khan, Bhavani Thuraisingham. An Automated Vulnerability Detection Framework for Smart Contracts. The ACM Distributed Ledger Technologies: Research and Practice, 2024.

[3] **[Frontier in Big Data]** Haoliang Wang, **Chen Zhao**, Feng Chen. Efficient Out-of-Distribution Detection via Layer-Adaptive Scoring and Early Stopping. Frontiers in Big Data, section Data Mining and Management, 2024.

[4] **[TKDD] Chen Zhao**, Feng Mi, Xintao Wu, Kai Jiang, Latifur Khan, Feng Chen. Dynamic Environment Responsive Online Meta-Learning with Fairness Awareness. The ACM Transactions on Knowledge Discovery from Data, 2024.

[5] **[Development]** Jingjing Li, Lianjie Miao, **Chen Zhao**, Wasay Mohiuddin Shaikh Qureshi, David Shieh, Hua Guo, Yangyang Lu, Saiyang Hu, Alice Huang, Lu Zhang, Chen-leng Cai, Leo Q. Wan, Hongbo Xin, Peter Vincent, Harold A. Singer, Yi Zheng, Ondine Cleaver, Zhen-Chuan Fan, Mingfu Wu. CDC42 is required for epicardial and pro-epicardial development by mediating FGF receptor trafficking to plasma membrane. Development 144.9 (2017): 1635-1647.

[6] **[Development] Chen Zhao**, Hua Guo, Jingjing Li, Thomas Myint, William Pittman, Le Yang, Weimin Zhong, Robert J. Schwartz, John J. Schwarz, Harold A. Singer, Michelle D. Tallquist, Mingfu Wu. Numb family proteins are essential for cardiac morphogenesis and progenitor differentiation. Development 141.2 (2014): 281-295.

Preprints

[1] Xinyu Wu, Xiaohui Chen, Xintao Wu, Dong Li, Zhong Chen, Yi He, **Chen Zhao**. Explainable Image-Centric Forgery Detection: A Survey. TechRxiv preprint, DOI: 10.36227/techrxiv.176101439.91738583/v1, 2025.

[2] Yumeng Lin, Dong Li, Xintao Wu, Minglai Shao, Xujiang Zhao, Zhong Chen, **Chen Zhao**. Face4FairShifts: A Large Image Benchmark for Fairness and Robust Learning across Visual Domains. arXiv preprint, 2509.00658, 2025.

[3] Minh-Hao Van, Prateek Verma, **Chen Zhao**, Xintao Wu. A Survey of AI for Materials Science: Foundation Models, LLM Agents, Datasets, and Tools. arXiv preprint, 2506.20743, 2025.

[4] Dong Li, Guihong Wan, Xintao Wu, Xinyu Wu, Xiaohui Chen, Yi He, Christine G. Lian, Peter K. Sorger, Yevgeniy R. Semenov, **Chen Zhao**. Multi-Modal Foundation Models for Computational Pathology: A Survey. arXiv preprint, 2503.09091, 2025.

[5] Dong Li, Guihong Wan, Xintao Wu, Xinyu Wu, Ajit J. Nirmal, Christine G. Lian, Peter K. Sorger, Yevgeniy R. Semenov, **Chen Zhao**. A Survey on Computational Pathology Foundation Models: Datasets, Adaptation Strategies, and Evaluation Tasks. arXiv preprint, 2501.15724, 2025.

[6] Qin Tian, Wenjun Wang, **Chen Zhao**, Minglai Shao, Wang Zhang, Dong Li. Graphs Generalization under Distribution Shifts. arXiv preprint, 2403.16334, 2024.

[7] Haoliang Wang, **Chen Zhao**, Yunhui Guo, Kai Jiang, Feng Chen. Towards Effective Semantic OOD Detection in Unseen Domains: A Domain Generalization Perspective. arXiv preprint, 2309.10209, 2023.

[8] **Chen Zhao**, Feng Chen, Zhuoyi Wang, Latifur Khan. PDFM: A Primal-Dual Fairness-Aware Framework for Meta-learning. arXiv preprint, 2009.12675v2, 2020.

ACADEMIC SERVICES

Conference PC Member and Reviewer

- 2026:
  - The Web Conference (WWW)
  - IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)
  - The International Conference on Learning Representations (ICLR)
  - International Conference on Artificial Intelligence and Statistics (AISTATS)
  - **[Senior PC]** Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)
  - AAAI Conference on Artificial Intelligence (AAAI)
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track, August cycle

- 2025:
  - IEEE International Conference on Data Mining (ICDM)
  - ACM International Conference on Multimedia (MM)
  - European Conference on Artificial Intelligence (ECAI)
  - IEEE International Conference on Big Data (BigData)
  - ACM International Conference on Information and Knowledge Management (CIKM)
  - The Asian Conference on Machine Learning (ACML)
  - The Conference on Neural Information Processing Systems (NeurIPS)
  - European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)
  - International Joint Conference on Neural Networks (IJCNN)
  - International Conference on Machine Learning (ICML)
  - International Joint Conference on Artificial Intelligence (IJCAI)
  - Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)

- International Conference on Artificial Intelligence and Statistics (AISTATS)

- The Web Conference (WWW)

- The International Conference on Learning Representations (ICLR)

- ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track, August and February cycles

- AAAI Conference on Artificial Intelligence (AAAI)

- IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)

• 2024:

  - The Asian Conference on Machine Learning (ACML)

  - The Conference on Neural Information Processing Systems (NeurIPS)

  - IEEE International Conference on Data Mining (ICDM)

  - ACM International Conference on Information and Knowledge Management (CIKM)

  - European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)

  - IEEE International Conference on Big Data (BigData)

  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track

  - International Conference on Machine Learning (ICML)

  - International Joint Conference on Artificial Intelligence (IJCAI)

  - The Web Conference (WWW)

  - Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)

  - AAAI Conference on Artificial Intelligence (AAAI)

  - IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)

  - The International Conference on Learning Representations (ICLR)

  - International Conference on Artificial Intelligence and Statistics (AISTATS)

  - SIAM International Conference on Data Mining (SDM)

• 2023:

  - The Conference on Neural Information Processing Systems (NeurIPS)

  - European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)

  - International Joint Conference on Artificial Intelligence (IJCAI)

  - IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)

  - ACM International Conference on Information and Knowledge Management (CIKM)

  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track

  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Applied Science Track

  - IEEE International Conference on Big Data (BigData)

- IEEE International Conference on Data Mining (ICDM)
- International Conference on Intelligent Computing (ICIC)
- International Conference on Networks, Communication and Information Technology (NCIT)

- 2022:
  - ACM International Conference on Information and Knowledge Management (CIKM)
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Applied Science Track
  - AAAI Conference on Artificial Intelligence (AAAI)
  - SIAM International Conference on Data Mining (SDM)
  - International Conference on Web Search and Data Mining (WSDM)
  - IEEE International Conference on Big Data (BigData)
  - IEEE International Conference on Data Mining (ICDM)
  - International Congress on Blockchain and Applications (BLOCKCHAIN)
  - International Conference on Automated Machine Learning (AutoML)

- 2021:
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Applied Science Track
  - IEEE International Conference on Big Data (BigData)
  - IEEE International Conference on Data Mining (ICDM)
  - International Conference on Artificial Intelligence and Statistics (AISTATS)

- 2020:
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Research Track
  - ACM Conference on Knowledge Discovery and Data Mining (KDD), Applied Science Track

Journal Reviewer

- 2025:
  - Knowledge-Based Systems
  - Engineering Science and Technology, an International Journal
  - IEEE Transactions on Industrial Informatics
  - Entropy, MDPI
  - IEEE Transactions on Big Data
  - Frontiers in Big Data
  - Frontiers in Artificial Intelligence
  - ACM Transactions on Knowledge Discovery from Data (TKDD)
  - Pattern Recognition

- 2024:
  - Journal of PeerJ Computer Science
  - Journal of Open Innovation: Technology, Market, and Complexity
  - Journal of Advances in Artificial Intelligence and Machine Learning
  - Journal of Frontiers in Big Data
  - ACM Transactions on Knowledge Discovery from Data (TKDD)
- 2023:
  - Journal of Data-centric Machine Learning Research (DMLR)
  - ACM Transactions on Knowledge Discovery from Data (TKDD)
  - Journal of Frontiers in Big Data
- 2022:
  - Journal of Frontiers in Big Data
  - Journal of Knowledge-based Systems (KBS)
  - Journal of IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
  - Journal of Springer Machine Learning (MACH)
  - Journal of IEEE Transactions on Software Engineering (TSE)
  - Environment and Planning B: Urban Analytics and City Science
- 2020:
  - Journal of Big Data Research

Workshop Reviewer

- 2025:
  - IEEE International Workshop on Machine Learning for Signal Processing
- 2023:
  - NeurIPS Workshop on Diffusion Models
  - ICML Workshop on Structured Probabilistic Inference & Generative Modeling (SPIGM)
  - WACV Workshop on Dealing with Novelty in Open Worlds (DNOW)
- 2022:
  - WACV Workshop on Dealing with Novelty in Open Worlds (DNOW)
  - AutoML Workshop Late-Breaking
  - KDD Workshop on Ethical Artificial Intelligence (EAI)
- 2021:
  - NeurIPS Workshop on Meta-Learning

Other Academic Services

- 2025:

- Session Chair, ACM Conference on Knowledge Discovery and Data Mining (KDD 2025)

- Review Panelist, the U.S. Department of Energy (DOE)

- Organizer and Chair, International Workshop on Adaptable, Reliable, and Responsible Learning (ARRL @ ICDM 2025)

- Organizer and Chair, 4th Workshop on Ethical Artificial Intelligence (EAI @ KDD 2025)

- Organizer and Chair, 4th Workshop on Uncertainty Reasoning and Quantification in Decision Making (UDM @ KDD 2025)

- Review Panelist (2 times), National Science Foundation (NSF)

- Workshop Chair, The IEEE International Conference on Big Data (IEEE BigData 2025)

- Session Chair, The Annual AAAI Conference on Artificial Intelligence (AAAI 2025)

- Organizer and Chair, 2nd Workshop on Advances in Robust and Reliable Machine Learning (ARRML @ SDM 2025)

- Tutorial Chair, The IEEE International Conference on Data Mining (ICDM 2025)

- Guest Editor, Frontiers in Big Data (IF=2.4), Frontiers Media SA (since 2024)

- Guest Editor, Mathematics (IF=2.3), MDPI (since 2024)

- Tutorial Chair, The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2025)

- 2024:

  - Organizer and Chair, 1st Workshop on Trustworthy Machine Learning for Healthcare (TrustML4Health @ IEEE BigData 2024)

  - Organizer and Chair, 1st Workshop on Robust Machine Learning for Distribution Shifts (RobustMLDS @ IEEE BigData 2024)

  - Review Panelist (3 times), National Science Foundation (NSF)

  - Organizer and Chair, 3rd Workshop on Ethical Artificial Intelligence (EAI @ KDD 2024)

  - Organizer and Chair, 3rd Workshop on Uncertainty Reasoning and Quantification in Decision Making (UDM @ KDD 2024)

  - Session Chair, IEEE International Conference on Big Data (IEEE BigData 2024).

  - BigData Cup Challenges Chair, IEEE International Conference on Big Data (IEEE BigData 2024)

  - Best Poster Award Committee member, Ph.D. Forum, IEEE International Conference on Big Data

  - Editorial Member, American Journal of Artificial Intelligence

  - Organizer, The 3rd Southwest Data Science Conference

  - Editorial Board Member, American Journal of Data Mining and Knowledge Discovery (AJDMKD)

- 2023:

  - Review Panelist, National Science Foundation (NSF)

  - Session Chair, ACM Conference on Knowledge Discovery and Data Mining (KDD 2023)

  - Organizer and Chair, 2nd Workshop on Ethical Artificial Intelligence (EAI @ KDD 2023)

- Organizer and Chair, 2nd Workshop on Uncertainty Reasoning and Quantification in Decision Making (UDM @ KDD 2023)

  - Organizer and Chair, 1st Workshop on Uncertainty Reasoning and Quantification in Decision Making (UDM @ AAAI 2023)

  - Editorial Board Member, American Journal of Data Mining and Knowledge Discovery (AJDMKD)

- 2022:

  - Organizer and Chair, 1st Workshop on Ethical Artificial Intelligence (EAI @ KDD 2022)

  - Mentor at KDD Undergraduate Consortium, ACM Conference on Knowledge Discovery and Data Mining (KDD 2022)

  - Editorial Board Member, American Journal of Data Mining and Knowledge Discovery (AJDMKD)

TUTORIALS

- AI for Precision Medicine: Integrative Analysis of Histopathology Images and Spatial Omics

  - Ninghui Hao, Boshen Yan, Dong Li, **Chen Zhao**, Guihong Wan. The IEEE International Conference on Data Mining (ICDM), Washington D.C., November 13th, 2025.

- Computational Pathology Foundation Models: Datasets, Adaptation Strategies, and Evaluations

  - Dong Li, Guihong Wan, Xintao Wu, Yevgeniy Semenov, **Chen Zhao**. The Annual AAAI Conference on Artificial Intelligence (AAAI), Singapore, January 21st, 2026.

  - Dong Li, Ninghui Hao, Guihong Wan, Xintao Wu, **Chen Zhao**. The IEEE International Conference on Data Mining (ICDM), Washington D.C., November 13th, 2025.

  - Dong Li, **Chen Zhao**, Guihong Wan, Xintao Wu, Yevgeniy Semenov. The International Joint Conference on Artificial Intelligence (IJCAI), Montreal, Canada, August 16th, 2025.

  - Dong Li, **Chen Zhao**, Guihong Wan, Xintao Wu, Yevgenly Semenov. The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), Sydney, Australia, June 10th, 2025.

- Supervised Algorithmic Fairness in Distribution Shifts

  - Dong Li, **Chen Zhao**, Xintao Wu. The International Joint Conference on Artificial Intelligence (IJCAI), Montreal, Canada, August 16th, 2025.

  - Dong Li, **Chen Zhao**, Xintao Wu. SIAM International Conference on Data Mining (SDM), Alexandria, Virginia, USA, May 1st, 2025.

  - Dong Li, **Chen Zhao**, Xintao Wu. The Annual AAAI Conference on Artificial Intelligence (AAAI), Philadelphia, Pennsylvania, USA, February 25th, 2025.

  - **Chen Zhao**, Xintao Wu. IEEE International Conference on Big Data (BigData), Washington D.C., USA, December 15th, 2024.

INVITED TALKS

- Advancements in Foundation Models for Computational Pathology.

  - **[Keynote Talk]** The workshop on Foundational AI for Pervasive Computing (June 2025, Sydney, Australia, Host: Beiyu Lin)

  - AAAI Bridge between AI and Scientific Knowledge Organization (February 2025, Philadelphia, PA, USA, Host: Azanzi Jiomekong and Sören Auer)

- Advances in Fairness and Robustness in Machine Learning Under Distribution Shifts.

  - Department of Computer Science, Brigham Young University (February 2025, Provo, UT, USA, Host: Porter Jenkins)

  - AI TIME (October 2024, Online, Host: Qing Qi)

  - Graduate Seminar, Baylor University (September 2024, Waco, TX, USA, Host: Eunjee Song)

  - Equifax Inc. (July 2024, Online, Host: Joseph White)

  - Data Science Seminar, Baylor University (October 2023, Waco, TX, USA, Host: Henry Han)

  - Data Science and System Security team, NEC Laboratories America (October 2022, Princeton, NJ, USA, Host: Haifeng Chen)

- Towards Fair Online Learning for Changing Environments.

  - AI TIME (July 2023, Online, Host: Qing Qi)

  - AI TIME (July 2022, Online, Host: Qing Qi)

  - AI TIME (November 2021, Online, Host: Qing Qi)

- Fairness-aware Machine Learning for Multi-task Learning and Domain Generalization.

  - AI TIME (May 2023, Online, Host: Qing Qi)

  - Department of Electronics and Computer Engineering Technology, Indiana State University (April 2023, Terre Haute, IN, USA, Host: Xiaolong Li)

  - Department of Computer Science, SUNY at Albany (April 2023, Albany, NY, USA, Host: Aveek Dutta)

  - Department of Computer Science, Tennessee State University (March 2023, Nashville, TN, USA, Host: Tamara Rogers)

  - Department of Computer Science, Millersville University (March 2023, Millersville, PA, USA, Host: Jingnan Xie)

  - Department of Computer Science, Baylor University (March 2023, Waco, TX, USA, Host: Henry Han)

  - Department of Computer Science and Information Science, University of Mississippi (February 2023, Oxford, MS, USA, Host: ByungHyun Jang)

  - Department of Computer Science, University of Alabama at Birmingham (January 2023, Birmingham, AL, USA, Host: Chengcui Zhang)

  - Department of Computer Science, University of Central Missouri (December 2022, Warrensburg, CO, USA, Host: Belinda Copus)

  - Department of Computer Science, East Carolina University (November 2022, Greenville, NC, USA, Host: Nic Herndon)

- Fairness-aware Machine Learning for Multi-task Learning.

  - Department of Computer Science, The University of Texas at Dallas (November 2022, Richardson, TX, USA, Host: Feng Chen)

- Success to Become a Medical Doctor and Biologist.

  - Shaker High School (April 2015, Latham, NY, USA, Host: Alan Dai)

UNIVERSITY AND DEPARTMENT SERVICES

- Search Committee Member, Department of Computer Science, Baylor University, 2025 - 2026

- Judge for the Outstanding Graduate Student Research Award, Baylor University, 2023 - 2024

- Outreach, Inclusion and Belonging Committee Member, School of Engineering and Computer Science, Baylor University, since 2024

- Engagement Committee, Department of Computer Science, Baylor University, since 2023

  - Engagement Committee Chair, since 2024

  - Engagement Committee Member, 2023 - 2024

- Graduate Committee Member, Department of Computer Science, Baylor University, since 2023

MENTORSHIP

Thesis Committee

- Hunter Buttrum, Ph.D. student, Department of Physics and Astronomy, Baylor University, 2027 (expected)

- Joseph Yu, Ph.D. student, Department of Computer Science, Baylor University, 2026 (expected)

- Kai Jiang, Ph.D. student, Department of Computer Science, The University of Texas at Dallas, 2025 (expected)

- Evan Collins, Ph.D. student, Department of Physics and Astronomy, Baylor University, 2026 (expected)

- Abhishek Raj, Ph.D. student, Department of Chemistry and Biochemistry, Baylor University, 2026, (expected)

- Shaif Chowdhury, Ph.D. student, Department of Computer Science, Baylor University, 2025

- Feng Mi, Ph.D. student, Department of Computer Science, The University of Texas at Dallas, 2025

- Alessandra Rodriguez, M.S., Department of Computer Science, Baylor University, 2023

Teaching Mentoring

- Alibek Zhakubayev, Ph.D. student, Department of Computer Science, Baylor University, Spring 2024

Teaching Assistant Supervised

- Xiaohui Chen, Ph.D. student, Department of Computer Science, Baylor University, Fall 2024, Spring 2025

- Yitong Chen, Ph.D. student, Department of Computer Science, Baylor University, Spring 2024

- Pratik Siwakoti, M.S. student, Department of Computer Science, Baylor University, Fall 2023

Graduate Students Supervised

- Xinyu Wu, Ph.D. student, Department of Computer Science, Baylor University

- Xiaohui Chen, Ph.D. student, Department of Computer Science, Baylor University

- Dong Li, Ph.D. student, Department of Computer Science, Baylor University

- Haoliang Wang, Ph.D. student, Department of Computer Science, The University of Texas at Dallas

- Kai Jiang, Ph.D. student, Department of Computer Science, The University of Texas at Dallas

- Kangshuo Li, Ph.D. student, Department of Computer Science, The University of Texas at Dallas

- Sadaf Md Halim, Ph.D. student, Department of Computer Science, The University of Texas at Dallas

- Qin Tian, Ph.D. student, College of Intelligence and Computing, Tianjin University, China

- Yujie Lin, M.S. student, School of New Media and Communication, Tianjin University, China

- Ruomeng Ding, M.S. student, College of Intelligence and Computing, Tianjin University, China

- Xiaoxu Ma, M.S. student, School of New Media and Communication, Tianjin University, China

- Yumeng Lin, M.S. student, School of New Media and Communication, Tianjin University, China

- Tao Yin, M.S. student, School of New Media and Communication, Tianjin University, China

- Zhixia He, M.S. student, School of New Media and Communication, Tianjin University, China

TEACHING EXPERIENCE

Baylor University

- Fall 2025
  - DSC 3334 - Algorithms and Data Structures
  - CSI 5326 - Advanced Machine Learning
- Spring 2025
  - DSC 3334 - Algorithms and Data Structures
- Fall 2024
  - DSC 3334 - Algorithms and Data Structures
- Spring 2024
  - DSC 4320 - Data Visualization
- Fall 2023
  - DSC 2350 - Discrete Structures for Data Science

University at Albany - SUNY

- Spring 2026
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics
  - INF 624 - Predictive Modeling
- Fall 2025
  - INF 624 - Predictive Modeling
- Spring 2025
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics
  - INF 624 - Predictive Modeling
- Fall 2024
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics
  - INF 624 - Predictive Modeling
- Spring 2024
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics
- Fall 2023

- INF 108 - Programming for Problem Solving (Python)
- Spring 2023
  - INF 108 - Programming for Problem Solving (Python)
- Fall 2022
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics
- Spring 2022
  - INF 108 - Programming for Problem Solving (Python)
  - INF 428/528 - Analysis, Visualization, and Prediction in Analytics

GRANTS

- **Co-PI**. National Science Foundation (**NSF**). "IUCRC Phase I Baylor University: Center for Responsible Artificial Intelligence and Governance (CRAIG)". Duration: 10/2025 - 09/2030. **$510,814**.

- **PI**. Gift Fund. NEC Laboratories America. **$30,000**

- **PI**. Baylor Startup Funds.

- **PI**. University of Texas at Dallas Dissertation Research Award. Duration: 05/2021 - 05/2022. **$1,224**.

AWARDS AND HONORS

- **Outstanding Reviewer**. The 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD2025).

- Student Travel Award. IEEE International Conference on Data Mining (ICDM), U.S. National Science Foundation, 2020.

- First Prize in the 11th "Challenge Cup" National Undergraduate Academic Science and Technology. Tianjin Municipal Education Commission, Top 5% among all works in Tianjin City, 2011.