

Zhenyu Lei

CONTACT INFORMATION	Thornton Hall 351 McCormick Rd Charlottesville, VA 22904, USA	Phone: +1(434)987-7068 Email: vjd5zr@virginia.edu Homepage: https://lzyfischer.github.io/
RESEARCH INTERESTS	Artificial Intelligence, Data Mining, Machine Learning • Large Language Models: Reasoning; Model Distillation; Agent; Reinforcement Learning • Trustworthy Machine Learning: Model Editing; Fairness; Interpretation • Data Mining: Time Series Forecasting; Graph Neural Networks • AI/ML+X: Healthcare; Biology; Urban Science	
INDUSTRIAL EXPERIENCES	Applied Scientist Intern @ Bedminister, AT&T May 2025 - Aug 2025 Project: Improving LLM Reasoning with Model Editing and Mechanistic Interpretability Host: Dr. Qiong Wu, Senior Inventive Scientist at AT&T Labs Research	
EDUCATION	University of Virginia , Charlottesville, Virginia, USA Ph.D., Electrical and Computer Engineering Aug 2023 - Present • Advisor: Dr. Jundong Li, IEEE Senior Member, SIGKDD Rising Star • GPA: 3.89/4.0 Xi'an Jiaotong University , Xi'an, Shaanxi, China B.S., Physics (Honor Graduation) Aug 2019 - Jul 2023	
HONORS AND AWARDS	• Capital One Fellow 2026 • WSDM Student Travel Award 2026 • UVA Thriving Youth in a Digital Environment (TYDE) Student Training Award 2026 • UVA Presidential Fellowship in Collaborative Neuroscience 2025 (One of <i>six</i> recipients university-wide) • UVA Precision Health Initiative Trainee Travel Stipend 2025 • UVA Engineering Academic Commitment to Excellence (ACE) Fellowship 2024	
CITATION STATISTICS	Google Scholar (as of Feb 24, 2026) • Citations: 475 citations • h-index: 9 • i10-index: 9 • Link: https://scholar.google.com/citations?user=y4uMsEIAAAAJ&hl=en	
PUBLICATIONS	• Published: 19 Conference Papers, 1 Journal Paper, and 1 Tutorial. • * denotes equal contribution. Conference Publications [C1] Zhenyu Lei , Qiong Wu, Jianxiong Dong, Yinhan He, Emily Dodwell, Yushun Dong, Jundong Li. “Reforming the Mechanism: Editing Reasoning Patterns in LLMs with Circuit Reshaping”, International Conference on Learning Representations, (ICLR), 2026. (acceptance rate: around 26.9% out of 19,000 submissions)	

- [C2] **Zhenyu Lei**, Patrick Soga, Yaochen Zhu, Yinhan He, Yushun Dong, Jundong Li. “MolEdit: Knowledge Editing for Multimodal Molecule Language Models”, ACM International Conference on Web Search and Data Mining, (**WSDM**), 2026. (**Oral Presentation**) (acceptance rate: around 9.8% out of 613 submissions)
- [C3] **Zhenyu Lei**, Aiyang Zhang, Song Wang, Han Fan, Jundong Li. “BrainTAP: Brain Disorder Prediction with Adaptive Distill and Selective Prior Integration”, IEEE International Symposium on Biomedical Imaging, (**ISBI**), 2026. (acceptance rate: around 40%)
- [C4] **Zhenyu Lei**, Zhen Tan, Song Wang, Yaochen Zhu, Zihan Chen, Yushun Dong, Jundong Li. “Learning from Diverse Reasoning Paths with Routing and Collaboration”, Conference on Empirical Methods in Natural Language Processing, (**EMNLP**), 2025. (acceptance rate: around 22.1% out of 8,174 submissions)
- [C5] **Zhenyu Lei**, Yushun Dong, Weiyu Li, Rong Ding, Qi Wang, Jundong Li. “Harnessing Large Language Models for Disaster Management: A Survey”, Findings of the Association for Computational Linguistics, (**ACL**), 2025. (acceptance rate: around 36.9% out of 8,300 submissions)
- [C6] Song Wang*, **Zhenyu Lei***, Zhen Tan, Jiaqi Ding, Xinyu Zhao, Yushun Dong, Guorong Wu, Tianlong Chen, Chen Chen, Aiyang Zhang, Jundong Li. “BrainMAP: Learning Multiple Activation Pathways in Brain Networks”, AAAI Conference on Artificial Intelligence, (**AAAI**), 2025. (**Oral Presentation**) (acceptance rate: around 4.6% out of 12,957 submissions)
- [C7] **Zhenyu Lei**, Yushun Dong, Jundong Li, Chen Chen. “ST-FiT: Inductive Spatial-Temporal Forecasting with Limited Training Data”, AAAI Conference on Artificial Intelligence, (**AAAI**), 2025. (**Oral Presentation**) (acceptance rate: around 4.6% out of 12,957 submissions)
- [C8] **Zhenyu Lei***, Herun Wan*, Wenqian Zhang, Shangbin Feng, Jundong Li, Qinghua Zheng, Minnan Luo. “BIC: Twitter Bot Detection with Text-Graph Interaction and Semantic Consistency”, Annual Meeting of the Association for Computational Linguistics, (**ACL**), 2023. (acceptance rate: around 23.5% out of 4,864 submission)
- [C9] Xingbo Fu, **Zhenyu Lei**, Zihan Chen, Binchi Zhang, Chuxu Zhang, Jundong Li. “GraphTOP: Graph Topology-Oriented Prompting for Graph Neural Networks”, Annual Conference on Neural Information Processing Systems, (**NeurIPS**), 2025. (acceptance rate: around 24.5%)
- [C10] Zihan Chen, Song Wang, Xingbo Fu, Chengshuai Shi, **Zhenyu Lei**, Cong Shen, Jundong Li. “From Cross-Task Examples to In-Task Prompts: A Graph-Based Pseudo-Labeling Framework for In-context Learning”, Findings of the Association for Computational Linguistics: EMNLP, (**EMNLP Findings**), 2025. (acceptance rate: around 39.5%)
- [C11] Yushun Dong, Song Wang, **Zhenyu Lei**, Zaiyi Zheng, Jing Ma, Chen Chen, Jundong Li. “Fairness-Aware Graph Learning: A Benchmark”, ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD**), 2025. (acceptance rate: around 18.4%)
- [C12] Patrick Soga, **Zhenyu Lei**, Yinhan He, Camille Bilodeau, Jundong Li. “Energy-Based Models for Predicting Mutational Effects on Proteins”, ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD**), 2025. (acceptance rate: around 18.4%)
- [C13] Patrick Soga, **Zhenyu Lei**, Camille Bilodeau, Jundong Li. “Deep Interactions for Multimodal Molecular Property Prediction”, Pacific-Asia Conference on Knowledge Discovery and Data Mining, (**PAKDD**), 2025. (acceptance rate: around 24%)

- [C14] Yushun Dong, Binchi Zhang, **Zhenyu Lei**, Na Zou, Jundong Li. “IDEA: A Flexible Framework of Certified Unlearning for Graph Neural Networks”, ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD**), 2024. (acceptance rate: around 20.1%)
- [C15] Yushun Dong, **Zhenyu Lei**, Zaiyi Zheng, Song Wang, Jing Ma, Alex Jing Huang, Chen Chen, Jundong Li. “PyGDebias: A Python Library for Debiasing in Graph Learning”, ACM Web Conference, (**WWW**), 2024. (acceptance rate: around 20.1%)
- [C16] Zijian Cai, Zhaoxuan Tan, **Zhenyu Lei**, Hongrui Wang, Zifeng Zhu, Qinghua Zheng, Minnan Luo. “LMBot: Distilling Graph Knowledge into Language Model for Graph-less Deployment in Twitter Bot Detection”, ACM International Conference on Web Search and Data Mining, (**WSDM**), 2024. (acceptance rate: around 17.7%)
- [C17] Shangbin Feng, Zhaoxuan Tan, Herun Wan, Ningnan Wang, Zilong Chen, Binchi Zhang, Qinghua Zheng, Wenqian Zhang, **Zhenyu Lei**, Shujie Yang, Xinshun Feng, Qingyue Zhang, Hongrui Wang, Yuhan Liu, Yuyang Bai, Heng Wang, Zijian Cai, Yanbo Wang, Lijing Zheng, Zihan Ma, Jundong Li, Minnan Luo. “TwiBot-22: Towards Graph-Based Twitter Bot Detection”, Annual Conference on Neural Information Processing Systems, (**NeurIPS**), 2023. (acceptance rate: around 26.0%)
- [C18] Shangbin Feng, Zhaoxuan Tan, Wenqian Zhang, **Zhenyu Lei**, Yulia Tsvetkov. “KALM: Knowledge-Aware Integration of Local, Document, and Global Contexts for Long Document Understanding”, Annual Meeting of the Association for Computational Linguistics, (**ACL**), 2023. (acceptance rate: around 22.0%)
- [C19] Wenqian Zhang, Shangbin Feng, Zilong Chen, **Zhenyu Lei**, Jundong Li, Minnan Luo. “KCD: Knowledge Walks and Textual Cues Enhanced Political Perspective Detection in News Media”, Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics, (**NAACL**), 2022. (acceptance rate: around 23.2%)

Journal Publications

- [J1] Rong Ding, Weiyu Li, **Zhenyu Lei**, Yushun Dong, Jundong Li, Qi Wang. “Spatiotemporal Modeling of Social Capital’s Role in Mobility Resilience During Hurricane Harvey”, (**Natural Hazards Review**), 2026.

Tutorials

- [T1] Xingbo Fu, Zehong Wang, Zihan Chen, Jiazheng Li, Yaochen Zhu, **Zhenyu Lei**, Cong Shen, Yanfang Ye, Chuxu Zhang, Jundong Li. “Graph Prompting for Graph Learning Models: Recent Advances and Future Directions”, ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD**), 2025.

PRESENTATIONS

1. “**MolEdit: Knowledge Editing for Multimodal Molecule Language Models**”
 - Oral Presentation at ACM International Conference on Web Search and Data Mining (WSDM), 2026
2. “**ST-FiT: Inductive Spatial-Temporal Forecasting with Limited Training Data**”
 - Oral Presentation at AAAI Conference on Artificial Intelligence (AAAI), 2025
3. “**BrainMAP: Learning Multiple Activation Pathways in Brain Networks**”
 - Oral Presentation at AAAI Conference on Artificial Intelligence (AAAI), 2025

PROFESSIONAL
SERVICES

Program Committee:

- Neural Information Processing Systems (NeurIPS), from 2023
- International Conference on Learning Representations (ICLR), 2025, 2026
- International Conference on Machine Learning (ICML), 2026
- Conference on Language Modeling (COLM), from 2024
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), from 2024
- ACM International Conference on Information and Knowledge Management (CIKM), 2025
- ACL Rolling Review, from December 2023

(Last updated on Feb, 2026)