Curriculum Vitae



Zhaoliang Chen 陈赵亮

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Research Interests

Graph Neural Network and its applications Multimodal Learning Differentiable/Explainable Neural Network Low-rank Optimization Matrix Completion Machine Learning

Education

Ph.D. Candidate in Computer Science and Technology

College of Computer and Data Science,

(Master-doctor combined program without a master degree)

09/2019 -- 06/2024: Fujian Provincial Key Laboratory of Network Computing and Intelligent

Information Processing, Fuzhou University, China.

Supervisor: Prof. Wenzhong Guo (郭文忠) and Prof. Shiping Wang (王石平)

Visiting Scholar funded by China Scholarship Council (CSC)

Faculty of Computer Science,

10/2022 -- 10/2023: Research Group Data Mining and Machine Learning,

University of Vienna, Austria. Supervisor: *Prof. Claudia Plant*

B.E. in Software Engineering

09/2015 -- 06/2019: College of Mathematics and Computer Sciences,

Fuzhou University, China.

Supervisor: *Prof. Fei Chen (陈飞)*

Professional Skills

Programming/Software: Python, MATLAB, LaTex, etc.

Deep Learning Toolkit: Pytorch, Tensorflow, etc.

Selected Publications

I have authored **24 publications** in the field computer science, please refer to my homepage for a full list.

X Advisor as the first author † Master students I advised

- **Zhaoliang Chen**, Zhihao Wu, Shiping Wang, Wenzhong Guo. Dual Low-Rank Graph Autoencoder for Semantic and Topological Networks. *The Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI)*, 2023, 37 (4): 4191-4198 (CCF Rank A, Acceptance rate = 19.6%)
- Zhaoliang Chen, Zhihao Wu, Zhenghong Lin, Shiping Wang, Claudia Plant and Wenzhong Guo. AGNN: Alternating Graph-Regularized Neural Networks to Alleviate Over-Smoothing. IEEE Transactions on Neural Network and Learning Systems (TNNLS), 2023. (SCI Q1, CCF Rank B)
- 3. Zhaoliang Chen, Lele Fu, Jie Yao, Wenzhong Guo, Claudia Plant, Shiping Wang. Learnable Graph Convolutional Network and Feature Fusion for Multi-view Learning. *Information Fusion*, 2023, 95: 109-119 (SCI Q1, CCF Rank B, ESI Highly Cited Paper)
- **4. Zhaoliang Chen**, Zhihao Wu, Claudia Plant, Shiping Wang, Wenzhong Guo. Attributed Multiorder Graph Convolutional Network for Heterogeneous Graphs. *Neural Networks*, 2024 (SCI Q1, CCF Rank B)
- Shiping Wang*, **Zhaoliang Chen***, Shide Du, Zhouchen Lin. Learning Deep Sparse Regularizers with Applications to Multi-View Clustering and Semi-Supervised Classification. *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2022, 44 (9): 5042-5055 (SCI O1, CCF Rank A)
- **Channel Graph Convolutional Network with Differentiable Node Selection.** *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 2024, 18(1): 1-21 (CCF Rank B, SCI Q1)
- 7. **Zhaoliang Chen**, Jie Yao, Guobao Xiao, Shiping Wang. Efficient and Differentiable Low-rank Matrix Completion with Back Propagation. *IEEE Transactions on Multimedia (TMM)*, 2023, 25: 228-242 (SCI Q1, CCF Rank B)
- **8. Zhaoliang Chen**, Shiping Wang. A Review on Matrix Completion for Recommender Systems. *Knowledge and Information Systems (KAIS)*, 2022, 64 (1): 1-34 (CCF Rank B)
- **2. Zhaoliang Chen**, Wei Zhao, Shiping Wang. Kernel Meets Recommender Systems: A Multi-kernel Interpolation for Matrix Completion. *Expert Systems with Applications*, 2021, 168: 114436 (SCI Q1).
- 20. Zhihao Wu[†], **Zhaoliang Chen**, Shide Du, Sujia Huang, Shiping Wang. Graph Convolutional Network with Elastic Topology. *Pattern Recognition (PR)*, 2024 (SCI Q1, CCF Rank B).
 - Jielong Lu, Zhihao Wu, Luying Zhong, **Zhaoliang Chen**, Hong Zhao, Shiping Wang.
- **11.** Generative Essential Graph Convolutional Network for Multi-view Semi-supervised Classification, *IEEE Transactions on Multimedia (TMM)*, 2024 (SCI Q1, CCF Rank B).

- Luying Zhong[†], **Zhaoliang Chen**, Zhihao Wu, Shide Du, Zheyi Chen, Shiping Wang. Learnable Graph Convolutional Network with Semi-supervised Graph Information Bottleneck. *IEEE Transactions on Neural Network and Learning Systems (TNNLS)*, 2023. (SCI Q1, CCF Rank B)
- 13. Luying Zhong[†], Jielong Lu, **Zhaoliang Chen**, Na Song, Shiping Wang. Adaptive Multichannel Contrastive Graph Convolutional Network with Graph and Feature Fusion. *Information Sciences*, 2024, 658: 120012. (SCI Q1, CCF Rank B)
- **14.** Yuhong Chen[†], Zhihao Wu[†], **Zhaoliang Chen**, Mianxiong Dong, Shiping Wang. Joint Learning of Feature and Topology for Multi-view Graph Convolutional Network, *Neural Networks*, 2023, 168: 161-170. (SCI Q1, CCF Rank B)
- **15.** Shunxin Xiao, Shide Du, **Zhaoliang Chen**, Yunhe Zhang, Shiping Wang. Dual Fusion-Propagation Graph Neural Network for Multi-View Clustering. *IEEE Transactions on Multimedia (TMM)*, 2023 (SCI O1, CCF Rank B)
- **16.** Zhihao Wu[†], Xincan Lin, Zhenghong Lin, **Zhaoliang Chen**, Shiping Wang. Interpretable Graph Convolutional Network for Multi-view Semi-supervised Learning. *IEEE Transactions on Multimedia (TMM)*, 2023, 25: 8593-8606 (SCI Q1, CCF Rank B)
- 17. Luying Zhong[†], Jinbin Yang, **Zhaoliang Chen**, and Shiping Wang. Contrastive Graph Convolutional Networks with Generative Adjacency Matrix. *IEEE Transactions on Signal Processing (TSP)*, 2023, 71: 772-785 (SCI Q1)
- **18.** Lele Fu, **Zhaoliang Chen**, Yongyong Chen, and Shiping Wang. Unified Low-Rank Tensor Learning and Spectral Embedding for Multi-View Subspace Clustering. *IEEE Transactions on Multimedia (TMM)*, 2023, 25: 4972-4985 (SCI Q1, CCF Rank B)
- **19.** Shiping Wang*, **Zhaoliang Chen***, William Zhu, Fei-Yue Wang. Deep Random Walk of Unitary Invariance for Large-scale Data Representation. *Information Sciences*, 2021, 554: 1-14 (SCI Q1, CCF Rank B)
- **20.** Lele Fu, **Zhaoliang Chen**, S Huang, S Huang, Shiping Wang. Multi-View Learning via Low-Rank Tensor Optimization. *IEEE International Conference on Multimedia and Expo (ICME)*, 2021, 1-6 (CCF Rank B, Acceptance rate = 30%)
- **21.** Shide Du, Zhanghui Liu, **Zhaoliang Chen**, Wenyuan Yang, Shiping Wang. Differentiable Bisparse Multi-view Co-clustering. *IEEE Transactions on Signal Processing (TSP)*, 2021, 69: 4623 4636 (SCI Q1)

Selected Preprints

Equal contribution

- 1. Zhaoliang Chen, Zhihao Wu, Ylli Sadikaj, Claudia Plant, Hong-Ning Dai, Shiping Wang, Wenzhong Guo. ADEdgeDrop: Adversarial Edge Dropping for Robust Graph Neural Networks.
- 2. Zhihao Wu#, **Zhaoliang Chen**#, Jielong Lu, Yueyang Pi, Jiajun Yu, Hong-Ning Dai. Advancing Multi-view Learning with Graph Neural Networks: A Generalized Framework.

Academic Services

Reviewer: IEEE Transactions on Image Processing

IEEE Transactions on Neural Networks and Learning Systems

IEEE Transactions on Multimedia

IEEE Transactions on Intelligent Transportation Systems

IEEE Transactions on Systems, Man, and Cybernetics: Systems

IEEE Transactions on Signal Processing

IEEE Signal Processing Letters

Artificial Intelligence Review

Neural Processing Letters

PC Member: ACM MM 2024

ECCV 2024 NeurIPS 2024

Awards & Honors

China National Scholarship for Postgraduates

2022: China Scholarship Council Funding

Silver Award of the 8th Fujian International College Students 'Internet+' Innovation and

Entrepreneurship Competition

2021: Special Prize of Outstanding Freshman Scholarship for Ph.D. Student

Second Prize of Excellent Academic Scholarship of Master Student

Special Prize of **Outstanding Freshman Scholarship** for Master Student

Excellent Undergraduate Thesis for Undergraduates in Fuzhou University

Third Prize of "China Software Cup" Software Design Competition for College Student

First Prize Scholarship in Fuzhou University

2017: Second Prize of the 'Ding Dian' Scholarship in Fuzhou University

Research Projects

Research on Cross-media Multi-view Metric Learning based on Differentiable Neural

2023.01-2026.12 Networks, National Natural Science Foundation of China under Grant No.

61672159.

Intelligent Mining of Cross-strait Hot Events across Social Networks and Media,

2022.01-2025.12 Strait Joint Key Fund of the National Natural Science Foundation of China under

Grant No. U21A20472.

Social Multimedia Big Data Collaborative Perception and Computing for Hot Events

2018.01-2021.12 across the Strait, Strait Joint Key Fund of the National Natural Science Foundation

of China under Grant No. U1705262.

Research on Key Technology of Multi-view Semi-supervised Feature Fusion and

2020.08-2023.07 Data Classification, Natural Science Foundation of Fujian Province under Grant

No. 2020J01130193.