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 Q1, 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.

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.