李嘉鑫

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个人简介

2025 年 9 月以"文峰副教授"身份入职重庆邮电大学,计算机科学与技术学院,博后导师为<mark>韩军伟教授</mark>(长江学者、IEEE Fellow)。

2025 年 6 月博士毕业于中国科学院大学,空天信息创新研究院,地图学与地理信息系统专业,导师为<mark>高连如研究员</mark>(国家杰青、IET Fellow),研究方向为高光谱遥感超分辨率重建。

2020年6月本科毕业于重庆大学,土木工程学院,测绘工程专业。专业第一推免直博。

目前,我共发表 27 篇学术论文,以第一作者身份发表论文 10 篇,包括中科院 1 区 TOP 期刊 5 篇,中科院 3 区期刊 2 篇,其中7 篇人选 ESI 高被引,1 篇荣获国际会议最佳论文,引用量合计 1523 次,单篇最高引用 524 次,6 篇文章引用破百。相关成果获得美国科学院院士、中国科学院院士、学会 Fellow 等国内外知名学者的引用和积极评价。受邀担任 30 多个国际知名期刊独立审稿人。

教育经历

中国科学院大学, 空天信息创新研究院

 $2020.09\hbox{-}2025.07$

地图学与地理信息系统

导师: 高连如 (国家杰青、IET Fellow)

毕业论文: 基于无监督深度学习的高光谱图像超分辨率重建研究

重庆大学, 土木工程学院

 $2016.09\hbox{-}2020.07$

测绘工程

毕业论文:基于深度学习的高光谱图像超分辨率重建方法研究

GPA 排名 1/26

工作经历

重庆邮电大学, 计算机科学与技术学院

2025.09-至今

文峰副教授

博后导师: **韩军伟** (长江学者、IEEE Fellow)

代表作

- 1. 李嘉鑫, 洪丹枫, 高连如, 姚靖, 郑珂, 张兵, Jocelyn Chanussot. Deep learning in multimodal remote sensing data fusion: A comprehensive review[J]. International Journal of Applied Earth Observation and Geoinformation, 2022, 112: 102926. [Paper link] [ESI Highly Cited Papers, 521 citations]
- 2. <u>李嘉鑫</u>, 郑珂, 高连如, 韩竹, 李智, Jocelyn Chanussot. Enhanced Deep Image Prior for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 02025, 63, 1-18. [Paper link] [Code] [ESI Highly Cited Papers, 79 citations]
- 3. <u>李嘉鑫</u>, 郑珂, 高连如, 倪丽, 黄臣, Jocelyn Chanussot. Model-informed Multistage Unsupervised Network for Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62, 1-17. [Paper link] [Code] [ESI Highly Cited Papers, 150citations]
- 4. <u>李嘉鑫</u>, 郑珂, 李智, 高连如, 贾秀萍. X-shaped Interactive Autoencoders with Cross-Modality Mutual Learning for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2023, 61, 1-17. [Paper link] [Code] [ESI Highly Cited Papers, 141 citations]
- 5. 高连如, 李嘉鑫, 郑珂, 贾秀萍. Enhanced Autoencoders with Attention-embedded Degradation Learning for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2023, 61, 1-17. [Paper link] [Code] [ESI Highly Cited Papers, 148 citations]
- 6. <u>李嘉鑫</u>, 郑珂, 刘文谷, 李智, 于浩洋, 倪丽. Model-Guided Coarse-to-Fine Fusion Network for Unsupervised Hyperspectral Image Super-Resolution[J]. IEEE Geoscience and Remote Sensing Letters, 2023, 20:1-5. [Paper link] [Code] [ESI Highly Cited Papers, 135 citations]
- 7. 李嘉鑫, 郑珂, 姚靖, 高连如, 洪丹枫. Deep unsupervised blind hyperspectral and multispectral data fusion[J]. IEEE Geoscience and Remote Sensing Letters, 2022, 19: 1-5. [Paper link] [Code] [ESI Highly Cited Papers, 181 citations]



期刊

2025

- 1. Jin Xu, Yuanchao Su, Xu Sun, <u>Jiaxin Li</u>, Haiwei Li, Jianjian Gao. FusGAT: Graph Attention-Based Fusion Network for Unsupervised Hyperspectral Image Super-Resolution[J]. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2025, 18, 11610-11622. [Paper link]
- 2. Jia Jia, Haoyang Yu, Chengjun Wang, Ke Zheng, <u>Jiaxin Li</u>, Jiaochan Hu. Spectral-Spatial Collaborative Pretraining Framework With Multiconstraint Cooperation for Hyperspectral–Multispectral Image Fusion[J]. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2025, 18, 11610-11622. [Paper link]
- 3. Qiuhui Wang, Qiong Ran, Ke Zheng, <u>Jiaxin Li</u>. Spatiotemporal Fusion Algorithm Based on Multikernal Adaptive Network[J]. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2025, 18, 11941-11952. [Paper link]
- 4. Xiaotong Qi, Yang Xu, Ke Zheng, <u>Jiaxin Li</u>, Le Yu, Yuhang Zhao. A Multistage Semi-Supervised Network for Hyperspectral Super-Resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2025, 63, 1-17. [Paper link]
- 5. <u>Jiaxin Li</u>, Ke Zheng, Lianru Gao, Zhu Han, Zhi Li, Jocelyn Chanussot. Enhanced Deep Image Prior for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 02025, 63, 1-18. [Paper link] [Code] [ESI Highly Cited Papers]
- 6. Ke Zheng, Aiyu Chen, Haoyang Yu, <u>Jiaxin Li</u>, Bing Zhang. Unsupervised Pretraining Framework Guided Hyperspectral and Multispectral Image Fusion[J]. IEEE Geoscience and Remote Sensing Letters, 2025, 22, 1-5. [Paper link]
- 7. Sheng Li, Yuanchao Su, Xu Sun, <u>Jiaxin Li</u>, Boyan Li, Jianjian Gao. DMSN: A Deep Multistream Network for Hyperspectral Image Super-Resolution[J]. IEEE Geoscience and Remote Sensing Letters, 2025, 22: 1-5. [Paper link] [Code]
- 8. Dong Chen, Junping Zhang, <u>Jiaxin Li</u>. UNMamba: Cascaded Spatial—Spectral Mamba for Blind Hyperspectral Unmixing[J]. IEEE Geoscience and Remote Sensing Letters, 2025, 22: 1-5. [Paper link] [Code] 2024
- 1. <u>Jiaxin Li</u>, Ke Zheng, Lianru Gao, Li Ni, Min Huang, Jocelyn Chanussot. Model-informed Multi-stage Unsupervised Network for Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62, 1-17. [Paper link] [Code] [ESI Highly Cited Papers]
- 2. Zhi Li, Ke Zheng, **Jiaxin Li**, Chengrui Li, Lianru Gao. Cross-Semantic Heterogeneous Modeling Network for Hyperspectral Image Classification[J]. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62: 1-16. [Paper link]
- 3. Wenjuan Zhang, Ruiqi Sun, Zhen Li, Lianru Gao, <u>Jiaxin Li</u>, Bin Zhao, Bing Zhang. Non-local Similarity Based Attentive Graph Convolution Network for Remote Sensing Image Super-Resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62: 1-16. [Paper link] [Code]
- 4. Qiong Ran, Qiuhui Wang, Ke Zheng, <u>Jiaxin Li</u>. Multiscale Attention Spatiotemporal Fusion Model Based on Pyramidal Network Constraints[J]. IEEE Geoscience and Remote Sensing Letters, 2024, 21:1-5. [Paper link]
- 5. Haoyang Yu, Zhixin Ling, Ke Zheng, Lianru Gao, <u>Jiaxin Li</u>, Jocelyn Chanussot. Unsupervised Hyperspectral and Multispectral Image Fusion With Deep Spectral-Spatial Collaborative Constraint[J]. IEEE Transactions on Geoscience and Remote Sensing, 2024, 62: 1-16. [Paper link] [Paper link]

2023

- 1. <u>Jiaxin Li</u>, Ke Zheng, Zhi Li, Lianru Gao, Xiuping Jia. X-shaped Interactive Autoencoders with Cross-Modality Mutual Learning for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2023, 61, 1-17. [Paper link] [Code] [ESI Highly Cited Papers]
- 2. Lianru Gao, <u>Jiaxin Li</u>, Ke Zheng, Xiuping Jia. Enhanced Autoencoders with Attention-embedded Degradation Learning for Unsupervised Hyperspectral Image Super-resolution[J]. IEEE Transactions on Geoscience and Remote Sensing, 2023, 61, 1-17. [Paper link] [Code] [ESI Highly Cited Papers]
- 3. <u>Jiaxin Li</u>, Ke Zheng, Wengu Liu, Zhi Li, Haoyang Yu, Li Ni. Model-Guided Coarse-to-Fine Fusion Network for Unsupervised Hyperspectral Image Super-Resolution[J]. IEEE Geoscience and Remote Sensing Letters, 2023, 20:1-5. [Paper link] [Code] [ESI Highly Cited Papers]

- 4. Bing Zhang, Lianru Gao, <u>Jiaxin Li</u>, Danfeng Hong, Ke Zheng. Advances and prospects in hyperspectral and multispectral remote sensing image super-resolution fusion[J]. Acta Geodaetica et Cartographica Sinica, 2023, 52(7), 1074-1089. [Paper link]
- 5. Minghua Wang, Danfeng Hong, Zhu Han, <u>Jiaxin Li</u>, Jing Yao, Lianru Gao, Bing Zhang, Jocelyn Chanussot. Tensor decompositions for hyperspectral data processing in remote sensing: A comprehensive review[J]. IEEE Geoscience and Remote Sensing Magazine, 2023. [Paper link] [ESI Highly Cited Papers]
- 6. Chunyu Zhu, Shangqi Deng, <u>Jiaxin Li</u>, Ying Zhang, Liwei Gong, Liangbo Gao, Na Ta, Shengbo Chen, Qiong Wu. Hyperspectral and multispectral remote sensing image fusion using SwinGAN with joint adaptive spatial-spectral gradient loss function[J]. International Journal of Digital Earth, 2023, 16(1): 3580-3600. [Paper link]

2022

- 1. <u>Jiaxin Li</u>, Danfeng Hong, Lianru Gao, Jing Yao, Ke Zheng, Bing Zhang, Jocelyn Chanussot. Deep learning in multimodal remote sensing data fusion: A comprehensive review[J]. International Journal of Applied Earth Observation and Geoinformation, 2022, 112: 102926. [Paper link] [ESI Highly Cited Papers]
- 2. <u>Jiaxin Li</u>, Ke Zheng, Jing Yao, Lianru Gao, Danfeng Hong. Deep unsupervised blind hyperspectral and multispectral data fusion[J]. IEEE Geoscience and Remote Sensing Letters, 2022, 19: 1-5. [Paper link] [Code] [ESI Highly Cited Papers]

会议

2023

- 1. <u>Jiaxin Li</u>, Ke Zheng, Ni L, Lianru Gao. A New Unsupervised Network for Hyperspectral and Multispectral Image Fusion[C]. 2023 13th Workshop on Hyperspectral Imaging and Signal Processing: Evolution in Remote Sensing (WHISPERS). IEEE, 2023: 1-5. [Paper link]
- 2. <u>Jiaxin Li</u>, Ke Zheng, Lianru Gao, Li Ni. Interactive Autoencoders With Degradation Constraint For Hyperspectral Super-Resolution[C]. IGARSS 2023-2023 IEEE International Geoscience and Remote Sensing Symposium. IEEE, 2023: 7447-7450. [Paper link]
- 3. <u>Jiaxin Li</u>, Ke Zheng, Ni L, Lianru Gao. Dual U-Nets autoencoders for unsupervised hyperspectral image super-resolution[C]. International Conference on Remote Sensing, Mapping, and Geographic Systems (RSMG 2023). SPIE, 2023, 12815: 132-137. [Excellent PAPERS Award] [Paper link]
- 4. Minghua Wang, Bing Zhang, <u>Jiaxin Li</u>, Longfei Ren, Jocelyn Chanussot. A Feature Fusion-Based Transformer Network for Hyperspectral Super-Resolution[C]. 2023 13th Workshop on Hyperspectral Imaging and Signal Processing: Evolution in Remote Sensing (WHISPERS). IEEE, 2023: 1-5. [Paper link]
- 5. Haoyang Yu, Zhixin Ling, Ke Zheng, <u>Jiaxin Li</u>, Siqi Liang, Lianru Gao. Unsupervised Dynamic Convolutional Neural Network Model for Hyperspectral and Multispectral Image Fusion[C]//IGARSS 2023-2023 IEEE International Geoscience and Remote Sensing Symposium. IEEE, 2023: 6270-6273. [Paper link]

编委工作

副主编

American Journal of Remote Sensing, 2025.07-2027.07

青年编委

GIScience, 2025.08-2028.08

客座编委: Recent Advances in Hyperspectral Remote Sensing

Remote Sensing, 2024.06-2025.01

学术活动

分论坛主席: Hyperspectral Image Processing

 ${\bf ICCVIT~2025,\,Baoding,\,China,\,2025.10.31\text{--}2025.11.02}$

分论坛主席: Workshop on Remote Sensing Image Processing

MVIPIT 2025, Shenyang, China, 2025.9.27-2025.9.29

审稿人

担任 30 多个期刊的独立审稿人,包括但不限于:

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Geoscience and Remote Sensing (TGRS)
- IEEE Transactions on Cybernetics (TCYB)

- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- Engineering Applications of Artificial Intelligence (EAAI)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Instrumentation & Measurement (TIM)
- Information Fusion (IF)
- International Journal of Computer Vision (IJCV)
- IEEE Signal Processing Letters (SPL)
- Knowledge-Based Systems (KBS)
- Transactions on Audio, Speech and Language Processing (TASL)

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荣誉获奖

北京市普通高等学校优秀毕业生(当年空天院博士共 17 位)	2025.06
朱李月华奖学金(当年空天院博士共6位)	2024.12
中国科学院院长优秀奖(当年空天院博士共9位)	2024.07
博士研究生国家奖学金(当年空天院博士共 18 位)	2023.12
空天院企业冠名奖学金	2022.12
优秀共青团员	2023, 2024, 2025
三好学生	2022, 2023
重庆市普通高校优秀本科毕业生	2020.06
本科生国家奖学金	2019.11
本科生国家奖学金	2018.11
本科生国家奖学金	2017.11