姓 名: 熊凤超 性别: 男

学 历: 博士研究生 技术职称: 讲师

电 话: 17816856687 Email:fcxiong@njust.edu.cn

工作单位: 南京理工大学计算机学院 个人主页: www.xiongfuli.com/cv

通讯地址: 江苏省南京市玄武区南京理工大学鼎新楼 4026 室.



工作经历

2019 年 10 月-, 南京理工大学, 计算机科学与工程学院 2021 年 12 月-2023 年 12 月, 澳门大学, 科技学院 讲师 澳门青年学者

教育经历

2014.9-2019.9, 浙江大学, 计算机科学与技术学院, 导师: 钱沄涛教授 博士研究生 2017.11-2018.12, 格里菲斯大学, 信息与通讯学院, 导师: Dr. Zhou Jun 国家公派联合培养 2010.9-2014.7, 山东大学, 软件学院 本科生 2011.9-2012.7, 武汉大学, 国际软件学院 交流生

研究方向

- 遥感影像处理
- 模式识别
- 计算机视觉
- 机器学习

科研项目

基于模型驱动深度学习的高光谱去噪算法研究 2020 年 07 月 – 至今 江苏省自然科学基金青年项目, 20 万 主持 高光谱目标跟踪中的张量时空谱表观建模方法研究 2021 年 01 月 – 至今 国家自然科学基金青年项目, 24 万 主持

论文

- 1. Yuntao Qian, **Fengchao Xiong**, Shan Zeng, Jun Zhou, Yuan Yan Tang. "Matrix-Vector Nonnegative Tensor Factorization for Blind Unmixing of Hyperspectral Imagery", *IEEE Transactions on Geoscience and Remote Sensing (TGRS)*, vol. 55, no. 3, pp. 1776-1792, 2017.
- 2. **Fengchao Xiong**, Jingzhou Chen, Jun Zhou, Yuntao Qian. "Superpixel-Based Nonnegative Tensor Factorization for Hyperspectral Unmixing", *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2018.
- 3. **Fengchao Xiong**, Jun Zhou, Yuntao Qian. "Hyperspectral Imagery Denoising via Reweighed Sparse Low-Rank Nonnegative Tensor Factorization", *IEEE International Conference on Image Processing (ICIP)*, 2018.
- 4. Kun Qian, Jun Zhou, **Fengchao Xiong**, Huixin Zhou, Juan Du. "Object Tracking in Hyperspectral Videos with Convolutional Features and Kernelized Correlation Filter", *International Conference on Smart Multimedia (ICSM)*, 2018.
- 5. **Fengchao Xiong**, Yuntao Qian, Jun Zhou, Yuan Yan Tang. "Hyperspectral Unmixing via Total Variation Regularized Nonnegative Tensor Factorization", *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 4, pp. 2341-2357, 2019.

- 6. **Fengchao Xiong**, Jun Zhou, Yuntao Qian. "Hyperspectral Restoration via L_0 Gradient Regularized Low-Rank Tensor Factorization", *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 12, pp. 10410-10425, 2019.
- 7. **Fengchao Xiong**, Jun Zhou, Yuntao Qian, Jocelyn Chanussot. "Dynamic Material-Aware Object Tracking in Hyperspectral Videos", *IEEE Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS*), 2019.
- 8. Qipeng Qian, Fengchao Xiong, Jun Zhou. "Deep Unfolded Iterative Shrinkage-Thresholding Model for Hyperspectral Unmixing", *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2019.
- 9. **Fengchao Xiong**, Jun Zhou, Yuntao Qian. "Material Based Object Tracking in Hyperspectral Videos", *IEEE Transactions on Image Processing*, vol. 29, no. 1, pp. 3719-3733, 2020.
- 10. Yuntao Qian, **Fengchao Xiong**, Qipeng Qian, Jun Zhou. "Spectral Mixture Model Inspired Network Architectures for Hyperspectral Unmixing", *IEEE Transactions on Geoscience and Remote Sensing*, vol. 58, no. 10, pp. 7418-7434, 2020.
- 11. **Fengchao Xiong**, Kun Qian, Jianfeng Lu, Jun Zhou, Yuntao Qian. "Nonlocal Low-rank Nonnegative Tensor Factorization for Hyperspectral Unmixing", *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2020.
- 12. Xinhai Ye, **Fengchao Xiong***, Jianfeng Lu, Haifeng Zhao, Jun Zhou. "M2-Net: A Multi-scale Multi-level Feature Enhanced Network for Object Detection in Optical Remote Sensing Images", *International Conference on Digital Image Computing: Techniques and Applications(DICTA)*, 2020. (Best Student Paper)
- 13. Zhuanfeng Li, **Fengchao Xiong***, Jun Zhou, Jing Wang, Jianfeng Lu, Yuntao Qian. "BAE-Net: A Band Attention Aware Ensemble Network for Hyperspectral Object Tracking", *IEEE International Conference on Image Processing (ICIP)*, 2020.
- 14. **Fengchao Xiong**, Jun Zhou, Jianfeng Lu, Yuntao Qian. "Non-convex Non-separable Sparse Nonnegative Matrix Factorization for Hyperspectral Unmixing", *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS)*, 2020.
- 15. Xinhai Ye, **Fengchao Xiong***, Jun Zhou, Jianfeng Lu, Yuntao Qian." \mathcal{F}^3 -Net: Feature Fusion and Filtration Network for Object Detection in Optical Remote Sensing Images", *Remote Sensing*, 2020.
- 16. Jianxi Wang, Minchao Ye, **Fengchao Xiong**, Yuntao Qian. "Cross-scene hyperspectral feature selection via hybrid whale optimization algorithm with simulated annealing", *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (*JSTARS*), 2021.
- 17. **Fengchao Xiong**, Jun Zhou, Minchao Ye, Jianfeng Lu, Yuntao Qian. "NMF-SAE: An interpretable sparse autoencoder for hyperspectral unmixing", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2021.
- 18. Zhuanfeng Li, Xinhai Ye, **Fengchao Xiong***, Jianfeng Lu, Jun Zhou, Yuntao Qian. "Spectral-Spatial-Temporal Attention Network for Hyperspectral Tracking", *IEEE Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS)*, 2021.
- 19. Yiman Fuguan, **Fengchao Xiong***, Shuyin Tao, Jianfeng Lu, Jun Zhou, Yuntao Qian,. "Learning a model-based deep hyperspectral denoiser from a single noisy hyperspectral image", *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, 2021.
- 20. **Fengchao Xiong**, Jun Zhou, Shuyin Tao, Jianfeng Lu, Yuntao Qian. "SNMF-Net: Learning a Deep Alternating Neural Network for Hyperspectral Unmixing", *IEEE Transactions on Geoscience and Remote Sensing*, 2021.
- 21. **Fengchao Xiong**, Jun Zhou, Shuyin Tao, Jianfeng Lu, Jiantao Zhou, Yuntao Qian. "SMDS-Net: Model Guided Spectral-Spatial Network for Hyperspectral Image De-

- noising", IEEE Transactions on Image Processing (小修), 2021.
- 22. **Fengchao Xiong**, Jun Zhou, Qinling Zhao, Jianfeng Lu, Yuntao Qian. "MAC-Net: Model Aided Nonlocal Neural Network for Hyperspectral Imagery Denoising", *IEEE Transactions on Geoscience and Remote Sensing* (录用), 2021.
- 23. Minchao Ye, Junbin Chen, **Fengchao Xiong**, Yuntao Qian. Learning a deep structural subspace across hyperspectral scenes with cross-domain VAE", *IEEE Transactions on Geoscience and Remote Sensing* (录用), 2021.
- 24. Zhuangeng Li, **Fengchao Xiong**, Jun Zhou, Jianfeng Lu, Yuntao Qian. "Learning a Deep Ensemble Network for Hyperspectral Object Tracking", *IEEE Transactions on Image Processing* (在投), 2021.
- 25. Shide Zou, Fengchao Xiong, Haonan Luo, Jianfeng Lu, Yuntao Qian. "Learning a Deep Ensemble Network for Hyperspectral Object Tracking", *International Conference on Digital Image Computing: Techniques and Applications(DICTA)*, 2021.

社会、学会及学术兼职

审稿人:

- 1. IEEE Transactions on Image Processing (TIP)
- 2. IEEE Transactions on Multimedia (TMM)
- 3. IEEE Transactions on Geoscience and Remote Sensing (TGRS)
- 4. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS)
- 5. IEEE Journal of Selected Topics in Signal Processing (JSTSP)
- 6. Pattern Recognition (PR)
- 7. IEEE Geoscience and Remote Sensing Society Letters
- 8. Geo-spatial Information Science
- 9. Remote Sensing
- 10. Sensors
- 11. Knowledge Based System
- 12. Neural Processing Letters
- 13. International Journal of Remote Sensing
- 14. IET Computer Vision
- 15. IET Image Processing
- 16. IEEE International Conference on Multimedia and Expo (ICME), 2021
- 17. International Conference on Digital Image Computing: Techniques and Applications(DICTA), 2020, 2021
- 18. AAAI Conference on Artificial Intelligence 2021
- 19. 中国图形图象学报
- 20. 信号处理学报

学会:

- 1. IEEE 会员
- 2. 中国电子学会会员
- 3. 江苏省人工智能学会会员

荣誉奖项

关于 DIGIX 大赛江苏赛区亚军 (指导教师)	2021.9
澳门青年学者	2021.8
高光谱目标跟踪挑战赛第二名(指导教师)	2021.3

DICTA 2020 最佳学生论文 (指导教师)	2020.11
浙江大学优秀博士奖学金	2018.11
浙江大学优秀研究生	2017.9
山东大学第二校园奖学金	2012.9
山东大学优秀学生奖学金	2012.9
国家励志奖学金	2011.9
山东大学优秀学生奖学金	2011.9