# 张强

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#### 个人简历

张强,1995年生,辽宁大连人,大连海事大学信息科学技术学院兴海副教授,硕士生导师,研究方向为遥感信息处理、计算机视觉与机器学习。以第一作者发表论文14篇,其中在IEEE TIP、IEEE TGRS、ISPRS P&RS、ESSD等图像处理/遥感/地学领域的顶级期刊上发表SCI论文10篇,EI会议论文4篇。总引用900余次,单篇一作最高被引260余次,2篇入选为ESI高被引论文。担任2021年国际地学与遥感大会分会场主席,以及RSE、IEEE TIP/TGRS/TCSVT等国际期刊审稿人。先后荣获李小文遥感科学青年奖、武汉大学"研究生学术创新奖"特等奖(校长奖)、王之卓创新人才特等奖等奖项荣誉。

## 研究方向

- 遥感信息处理与应用: 高光谱遥感、多时相遥感、海洋遥感、定量遥感
- → 计算机视觉: 图像复原、图像融合、图像超分、底层视觉信息处理
- 机器学习: 深度学习、张量表达、耦合数据驱动与模型驱动

#### 工作经历

2022.07 - 至今,大连海事大学,信息科学技术学院,兴海副教授

### 教育经历

◆ 2019.09 - 2022.06, 武汉大学,摄影测量与遥感专业,导师:张良培教授、袁强强教授博士

◆ 2017.09 - 2019.06, 武汉大学,摄影测量与遥感专业,导师:袁强强教授硕士

◆ 2013.09 - 2017.06, 武汉大学, 测绘工程专业, 导师: 袁强强教授

# 期刊论文

- [1] **Q. Zhang**, Q. Yuan, M. Song, H. Yu, and L. Zhang, "Cooperated spectral low-rankness prior and deep spatial prior for HSI unsupervised denoising," *IEEE Transactions on Image Processing*, vol. 31, pp. 6356-6368, 2022. (SCI 1区, CCF-A, 图像处理领域Top期刊, IF=11.041)
- [2] **Q. Zhang**, Q. Yuan, T. Jin, M. Song, and F. Sun, "SGD-SM 2.0: an improved seamless global daily soil moisture long-term dataset from 2002 to 2022," *Earth System Science Data*, vol. 14, no. 10, pp. 4473–4488, 2022. (SCI 1区, 地学领域Top期刊, IF=11.815)
- [3] **Q. Zhang**, Q. Yuan, J. Li, Y. Wang, F. Sun, and L. Zhang, "Generating seamless global daily AMSR2 soil moisture (SGD-SM) long-term products for the years 2013-2019," *Earth System Science Data*, vol. 13, no. 3, pp. 1385-1401, 2021. (SCI 1区, 地学领域Top期刊, IF=11.815)
- [4] **Q. Zhang**, Q. Yuan, Z. Li, F. Sun, and L. Zhang, "Combined deep prior with low-rank tensor SVD for thick cloud removal in multitemporal images," *ISPRS Journal of Photogrammetry and Remote Sensing*, vol. 177, pp.

- 161-173, 2021. (SCI 1区, 遥感领域**Top期刊**, IF=11.774)
- [5] **Q. Zhang**, Q. Yuan, J. Li, F. Sun, and L. Zhang, "Deep spatio-spectral Bayesian posterior for hyperspectral image non-i.i.d. noise removal," *ISPRS Journal of Photogrammetry and Remote Sensing*, vol. 164, pp. 125-137, 2020. (SCI 1区, 遥感领域**Top**期刊, IF=11.774)
- [6] **Q. Zhang**, Q. Yuan, J. Li, Z. Li, H. Shen, and L. Zhang, "Thick cloud and cloud shadow removal in multitemporal images using progressively spatio-temporal patch group deep learning," *ISPRS Journal of Photogrammetry and Remote Sensing*, vol. 162, pp. 148-160, 2020. (SCI 1区, 遥感领域Top期刊, IF=11.774)
- [7] **Q. Zhang**, Q. Yuan, J. Li, X. Liu, H. Shen, and L. Zhang, "Hybrid noise removal in hyperspectral imagery with spatial-spectral gradient network," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 10, pp. 7317-7329, 2019. (SCI 1区, 遥感领域Top期刊, IF=8.125)
- [8] **Q. Zhang**, Q. Yuan, C. Zeng, X. Li, and Y. Wei, "Missing data reconstruction in remote sensing image with a unified spatial-temporal-spectral deep network," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 56, no. 8, pp. 4274-4288, 2018. (SCI 1区, 遥感领域Top期刊, IF=8.125, ESI高被引论文)
- [9] **Q. Zhang**, Q. Yuan, J. Li, Z. Yang, and X. Ma, "Learning a dilated residual network for SAR image despeckling," *Remote Sensing*, vol. 10, no. 2, 196, 2018. (SCI 2⊠, IF=5.349)
- [10] Q. Yuan, **Q. Zhang**, J. Li, H. Shen, and L. Zhang, "Hyperspectral image denoising employing a spatial-spectral deep residual convolutional neural network," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 2, pp. 1205-1218, 2019. (SCI 1区, 遥感领域Top期刊, IF=8.125, ESI高被引论文)
- [11] Y. Xiao, Q. Yuan, J. He, **Q. Zhang**, J. Sun, X. Su, J. Wu and L. Zhang, "Space-time super-resolution for satellite video: A joint framework based on multi-scale spatial-temporal transformer," *International Journal of Applied Earth Observation and Geoinformation*, vol. 108, 102731, 2022. (SCI 1区, 遥感领域Top期刊, IF=7.672)
- [12] J. Lin, T. Huang, X. Zhao, Y. Chen, **Q. Zhang**, and Q. Yuan, "Robust thick cloud removal for multi-temporal remote sensing images using coupled tensor factorization," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 60, pp.1-16, 2022. (SCI 1区, 遥感领域Top期刊, IF=8.125)

## 会议论文

- [1] **Q. Zhang**, F. Sun, Q. Yuan, and L. Zhang, "Thick cloud removal for Sentinel-2 time-series images via combining deep prior and low-rank tensor completion," *IGARSS*, in Brussels, Belgium, 2021. (EI, Oral)
- [2] **Q. Zhang**, F. Sun, Q. Yuan, J. Li, H. Shen, and L. Zhang, "Combined the data-driven with model-driven stragegy: A novel framework for mixed noise removal in hyperspectral image," *IGARSS*, in Hawaii, USA, 2020. (EI, Oral)
- [3] **Q. Zhang**, Q. Yuan, J. Li, H. Shen, and L. Zhang, "Cloud and shadow removal for Sentinel-2 by progressively spatiotemporal patch group learning," *IGARSS*, in Yakohama, Japan, 2019. (EI, Oral)
- [4] **Q. Zhang**, Q. Yuan, H. Shen, and L. Zhang, "A unified spatial-temporal-spectral learning framework for reconstructing missing data in remote sensing images," *IGARSS*, in Valencia, Spain, 2018. (EI, Poster)

# 科研项目

● 大连海事大学科研启动经费: 优秀青年引进人才,50万,2022/07-2025/07,主持

# 学术兼职

#### 学会兼职:

• 中国图象图形学学会, 会员

● 电气与电子工程师协会 (IEEE), 会员

#### 会议组织:

• 2021年国际地学与遥感大会 (IGARSS), 分会场主席

#### 期刊审稿人:

- Remote Sensing of Environment (RSE)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Geoscience and Remote Sensing (TGRS)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI)
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (**JSTARS**)
- IEEE Geoscience and Remote Sensing Letters (GRSL)
- IEEE Access
- Climatic Change
- Neurocomputing
- Electronics Letters
- Analytical Methods
- IET Image Processing
- Imaging Science Journal
- Evolutionary Intelligence
- Science of Remote Sensing
- Journal of Applied Remote Sensing
- Wireless Communications and Mobile Computing

### 奖项荣誉

- 2022年,武汉大学十大杰出青年(学生)
- 2022年,武汉大学优秀毕业研究生
- 2021年,李小文遥感科学青年奖
- 2021年,博士研究生国家奖学金
- 2021年,第六届全国成像光谱对地观测学术研讨会优秀报告奖
- 2021年,武汉大学优秀研究生标兵
- 2021年,武汉大学学业奖学金一等奖
- 2020年,武汉大学"研究生学术创新奖"特等奖(校长奖)
- 2020年,中国大学生自强之星
- 2020年,湖北省大学生自强之星标兵
- 2020年,王之卓创新人才特等奖
- 2020年,武汉大学学业奖学金一等奖
- 2020年,武汉大学优秀研究生
- 2019年,武汉大学光华奖学金
- 2019年,武汉大学十大励志之星
- 2018年,硕士研究生国家奖学金

- 2018年,武汉大学乐群学术之星
- 2018年,武汉大学学业奖学金一等奖
- 2017年,武汉大学优秀本科毕业生
- 2015年,国家励志奖学金