

Yu-Bang Zheng (郑玉棒)

Personal information

Name(s): Yu-Bang Zheng

Research interests: Sparse and low-rank modeling for high-dimensional

image processing problems

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Institutions: University of Electronic Science and Technology of China (UESTC)

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Education and training

09/2019- Current University of Electronic Science and Technology of China (UESTC)

Ph. D. student in Applied Mathematics (Supervisor: Prof. Ting-Zhu Huang)

Special postgraduate scholarship of science

09/2017-06/2019 University of Electronic Science and Technology of China (UESTC)

Master student in Applied Mathematics (Supervisor: Prof. Ting-Zhu Huang)

Postgraduate scholarship (twice)

09/2013-06/2017 Anhui University of Finance and Economics (AUFE)

Bachelor student in Information and Computing Science

Pacemaker to Merit Student

Publications

1. Yu-Bang Zheng, Ting-Zhu Huang*, Xi-Le Zhao*, Tai-Xiang Jiang, Teng-Yu Ji, Tian-Hui Ma, Tensor N-tubal rank and its convex relaxation for low-rank tensor recovery, *Information Sciences*, 2020, 532:170-189.

2. Yu-Bang Zheng, Ting-Zhu Huang*, Xi-Le Zhao*, Yong Chen, Wei He, Double Factor-Regularized Low-Rank Tensor Factorization for Mixed Noise Removal in Hyperspectral Image, IEEE Transactions on Geoscience and Remote Sensing, 2020, doi: 10.1109/TGRS.2020.2987954

3. Yu-Bang Zheng, Ting-Zhu Huang*, Xi-Le Zhao*, Tai-Xiang Jiang, Tian-Hui Ma, Teng-Yu Ji, Mixed noise removal in hyperspectral image via low-fibered-rank regularization, *IEEE Transactions on Geoscience and Remote Sensing*, 2020, 58(1): 734-749.

4. Yu-Bang Zheng, Ting-Zhu Huang*, Teng-Yu Ji, Xi-Le Zhao*, Tai-Xiang Jiang, Tian-Hui Ma, Low-rank tensor completion via smooth matrix factorization, *Applied Mathematical Modelling*, 2019, 70: 677-695.



- **5. Yu-Bang Zheng**, Ting-Zhu Huang*, Xi-Le Zhao*, Tai-Xiang Jiang, Jie Huang, Hyperspectral Image Denoising via Convex Low-Fibered-Rank Regularization," in *IGARSS*, 2019, 222-225. **(Oral)**
- **6.** Xiao-Tong Li, Xi-Le Zhao*, Tai-Xiang Jiang, **Yu-Bang Zheng**, Teng-Yu Ji, Ting-Zhu Huang, Low-Rank Tensor Completion via Combined Non-local Self-Similarity and Low-Rank Regularization, *Neurocomputing*, 2019, 367: 1-12.
- 7. Jian-Li Wang, Ting-Zhu Huang*, Xi-Le Zhao*, Jie Huang, Tian-Hui Ma, Yu-Bang Zheng, Reweighted Block Sparsity Regularization for Remote Sensing Images Destriping, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 12, no. 12, pp. 4951-4963, 2019.
- 8. Xin Li, Ting-Zhu Huang*, Xi-Le Zhao*, Teng-Yu Ji, **Yu-Bang Zheng**, Liang-Jian Deng, Adaptive Total Variation and Second-Order Total Variation-Based Model for Low-Rank Tensor Completion, *Numerical Algorithms*, accepted, doi: 10.1007/s11075-020-00876-y, 2020.
- 9. Tian Lu, Xi-Le Zhao*, Yu-Bang Zheng, Meng Ding, and Xiao-Tong Li, Tensor Completion via Global Low-Tubal-Rankness and Nonlocal Self-Similarity, *IEEE Global Conference on Signal and Information Processing (GlobalSIP)*, pp. 1-5, 2019. (Oral)

Scientific project

The tensor optimization models and high-performance algorithms for hyperspectral images restoration, 2019-2022, NSFC, 61876203.