

Dr. JIANTAO ZHOU

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Research Interest Multimedia Security and Forensics, Privacy Protection in Artificial Intelligence, Intelligent Multimedia Big Data Processing

Education

09/2005 - 06/2009, **PhD Degree**, Electronic and Computer Engineering
Hong Kong University of Science and Technology, Hong Kong
Advisor: Prof. Oscar Au, IEEE Fellow

09/2007 - 08/2008, **Fulbright Junior Scholar**, Electrical and Computer Engineering
University of Illinois at Urbana-Champaign (UIUC), USA
Advisor: Prof. Pierre Moulin, IEEE Fellow

09/2002 - 07/2005, **Master Degree**, Radio Engineering
Southeast University, China
Excellent Master Thesis Award of Jiangsu Province

09/1998 - 07/2002, **Bachelor Degree**, Electronics Engineering
Dalian University of Technology, China

Working Experience

07/2019 - 10/2022, **Interim Head of Centre for AI and Robotics**
Institute of Collaborative Innovation, University of Macau

08/2017 - Present, **Associate Professor**
Department of Computer and Information Science
Faculty of Science and Technology, University of Macau

10/2012 - 8/2017, **Assistant Professor**
Department of Computer and Information Science
Faculty of Science and Technology, University of Macau

08/2010 - 09/2011, **Post-Doctoral Fellow**
Electrical and Computer Engineering
McMaster University, Canada
Host: Prof. Xiaolin Wu, IEEE Fellow

07/2009 - 08/2010, 10/2011 - 10/2012, **Post-Doctoral Fellow**
Electronic and Computer Engineering
Hong Kong University of Science and Technology, Hong Kong
Host: Prof. Oscar Au, IEEE Fellow

Selected Honors and Awards

- FST Research Excellence Award 2022/2023
- UM CCE Best Teaching Award 2020-2022 (18/650+)
- Excellent Alibaba Innovative Research (AIR) Project Award, 2023

- “Developing Key Technologies for Multimedia Forensics and Security over OSNs”, Third Prize of Macao Science and Technology Award, 2022
- Best Paper Runner Up Award, IEEE International Conference on Multimedia and Expo (ICME), 2020
- APSIPA Distinguished Lecturer, 2019-2020
- Incentive Award for Outstanding Academic Staff 2018-2019, 2019-2020
- FST Research Excellence Award 2016/2017
- Best Student Paper Award, IEEE International Conference on Multimedia and Expo (ICME), 2016
- 1000Plan Professorship for Young Talents (第五批中组部青年千人, 优先资助, 2013)
- Best Paper Award, Pacific-Rim Conference on Multimedia, 2007
- Fulbright Hong Kong Junior Scholarship (only five winners in HK), 2007
- Excellent Master Thesis Award of Jiangsu Province, 2006
- Best Paper Award, China Neural Networks Council, 2004

Alumni

- Jiandian Zeng, PhD 2023, first employment: Assistant Professor, Beijing Normal University at Zhuhai
- Jinyu Tian, PhD 2021, first employment: Assistant Professor, Macau University of Science and Technology
- Jia Duan, PhD 2020, first employment: Research Scientist, JD Explore Academy
- Weiwei Sun, PhD 2020, first employment: Research Scientist, Alibaba Group
- Xianwei Zheng, PhD 2018, first employment: Assistant Professor, Foshan University
- Li Dong, PhD 2019, first employment: Assistant Professor, Ningbo University
- Yuanman Li, PhD 2019, first employment: Assistant Professor, Shenzhen University
- Wencheng Zou, Post-Doctoral Fellow 2020-2022, current employment: Professor, Nanjing University of Science and Technology
- Yushu Zhang, Post-Doctoral Fellow 2015-2016, current employment: Professor, Nanjing University of Aeronautics and Astronautics
- Yu Zhang, Research Assistant, 2015-2016, current employment: Lecturer (Assistant professor), Deakin University, Australia.

External Research Projects

- Alibaba Innovative Research Program, **PI**, “Image Origin Identification over Online Social Networks”, Mar. 2023-Mar. 2024. (Total: **300K RMB**)
- Macau Science and Technology Development Fund (FDCT), **PI**, “Research and industrialization of key technologies for multimedia information forensics over online social networks”, FDCT/022/2022/A1, Sept. 2022-Sept. 2025. (Total: **1.50M MOP**)
- Alibaba Innovative Research Program, **PI**, “Generalizable Camera Identification and Classification via Representation Learning”, Dec. 2021-Sept. 2022. (Total: **500K RMB**)
- FDCT-MOST Joint Program, **PI**, “Phenotype based ASD Diagnosis using Artificial Intelligence Technology”, FDCT/0072/2020/AMJ, Oct. 2021-Oct. 2024. (Total: **1.58M MOP**)

- Alibaba Innovative Research Program, **PI**, “Robust Forgery Detection and Localization over Online Social Network Shared Images”, Mar. 2021-Mar. 2022. (Total: **500K RMB**)
- Natural Science Foundation of China, **PI**, “Research on Robust Subspace Learning via Independent and Piecewise Identically Distributed Noise Modeling”, 61402547, Jan. 2020-Dec. 2023 (Total: **650K RMB**)
- Macau Science and Technology Development Fund (FDCT), **PI of sub-project**, “Research on key technologies and platforms for collaborative intelligence driven auto-driving cars”, FDCT/0015/2019/AKP, Jan. 2019-Jan. 2023. (Total: **12M MOP**)
- Macau Science and Technology Development Fund (FDCT), **PI**, “Cross-channel Image Noise Modeling, Fast Algorithms, and Applications”, FDCT/ 077/ 2018/A2, Jan. 2019-Dec. 2020. (Total: **1.059M MOP**)
- Macau Science and Technology Development Fund (FDCT), **PI**, “Privacy-preserving deep learning and its applications in collaborative big data analytics”, FDCT/ 022/ 2017/A1, Aug. 2018-Aug. 2020. (Total: **1.488M MOP**)
- Macau Science and Technology Development Fund (FDCT), **PI**, “Investigation of Passive Techniques for Digital Image Forgery Detection”, FDCT/046/2014/A1, Jan. 2015-Jan. 2018. (UM matching grant: MRG007/ZJT/2015/FST) (Total: **1.412M MOP**)
- Natural Science Foundation of China, **PI**, “加密域图像高性能压缩技术研究”, 61402547, Jan. 2015 - Dec. 2017. (Total: **260K RMB**)
- Natural Science Foundation of China, **Co-PI**, ““不可分” 二维变换的优化设计及其在视频编码和加密中的应用”, 61370148, Jan. 2014 - Dec. 2016. (Total: **790K RMB**)
- Macau Science and Technology Development Fund (FDCT), **PI**, “High-fidelity Image and Video Compression Technology for Resource-constrained Mobile Devices”, FDCT/009/2013/A1, Oct. 2013-Oct. 2016. (UM matching grant: MRG021/ZJT/2013/FST) (Total: **2.409M MOP**)

Services

Internal Committee Works

- Programme Leader (responsible for the HKIE Accreditation of CIS for 2 consecutive terms)
- Committee of Annual Programme Review of CIS Department
- Committee of CIS Curriculum Revision
- BOE Member of CIS Department
- Advisory Committee Member of CIS Department
- Representative of CIS Department for HKIE meeting
- Committee Member for CIS Academic Contract Renewal

External Professional Services

- Associate Editor, **IEEE Trans. Image Processing (IF: 11.041)**, 2018-
- Associate Editor, **IEEE Trans. Multimedia (IF: 8.182)**, 2021-
- **Associate Editor-in-Chief**, APSIPA Newsletters, 2022-
- **TPC Co-Chair**, Int. Conf. on Multimedia and Expo (CCF B), 2023
- **General Co-Chair**, APSIPA Annual Summit and Conference, 2024
- Associate Editor, Journal of Information Security and Applications, 2014-2017
- TPC Co-Chair of IEEE IFTC-16
- Chair, Track 10 (Multimedia Engineering), IEEE TENCON, 2015

Publications

Journal Papers

1. B. B. Song, **J. T. Zhou**, X. Y. Chen, and S. L. Zhang, “Real-Scene Reflection Removal with RAW-RGB Image Pairs”, Accepted in *IEEE Trans. Circuits and Systems for Video Technology*, 2023. (**IF: 5.859, Q1 in Engineering, Electrical and Electronic**)
2. Z. Y. Zha, B. H. Wen, X. Yuan, J. C. Zhang, **J. T. Zhou**, X. D. Jiang, and C. Zhu, “Multiple Complementary Priors for Multispectral Image Compressive Sensing Reconstruction”, Accepted in *IEEE Trans. Cybernetics*, 2023. (**IF: 3.21, Q1 in Computer Science, Artificial Intelligence**)
3. S. R. Qi, Y. S. Zhang, C. Wang, **J. T. Zhou**, and X. C. Cao, “A Principled Design of Image Representation: Towards Forensic Tasks”, Accepted in *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2022. (**IF: 24.314, Q1 in Computer Science**)
4. Y. M. Li, J. X. You, **J. T. Zhou**, W. Wang, X. Liao, and X. Li, “Image Operation Chain Detection with Machine Translation Framework”, Accepted in *IEEE Trans. Multimedia*, 2022. (**IF: 8.182, Q1 in Computer Science**)
5. J. D. Zeng, **J. T. Zhou**, and T. Y. Liu, “Robust Multimodal Sentiment Analysis via Tag Encoding of Uncertain Missing Modalities”, Accepted in *IEEE Trans. Multimedia*, 2022. (**IF: 8.182, Q1 in Computer Science**)
6. Z. Y. Zha, B. H. Wen, X. Yuan, **J. T. Zhou**, C. Zhu, and A. Kot, “Low-Rankness Guided Group Sparse Representation for Image Restoration”, Accepted in *IEEE Trans. Neural Networks and Learning Systems*, 2022. (**IF: 14.255, Q1 in Computer Science**)
7. Y. C. Zhu, X. K. Min, D. D. Zhu, G. T. Zhai, X. K. Yang, W. J. Zhang, K. Gu, and **J. T. Zhou**, “Toward Visual Behavior and Attention Understanding for Augmented 360 Degree Videos”, *ACM Trans. Multimedia Computing, Communications, and Applications*, vol. 19, no. 99, pp. 1-24, 2022. (**IF: 4.094, Q1 in Computer Science**)
8. J. Y. Tian, **J. T. Zhou**, and J. Duan, “Hierarchical Services of Convolutional Neural Networks via Probabilistic Selective Encryption”, *IEEE Trans. Services Computing*, vol. 16, no. 1, pp. 343-355, 2022. (**IF: 11.019, Q1 in Computer Science**)

9. W. C. Zou, **J. T. Zhou**, Y. L. Yang, and Z. R. Xiang, “Fully Distributed Optimal Consensus for A Class of Second-Order Nonlinear Multiagent Systems with Switching Topologies”, *IEEE Systems Journal*, vol. 17, no. 1, pp. 1548-1558, 2022. (**IF: 4.802, Q2 in Computer Science**)
10. Z. Y. Zha, B. H. Wen, X. Yuan, S. Ravishankar, **J. T. Zhou**, and C. Zhu, “Learning Nonlocal Sparse and Low-Rank Models for Image Compressive Sensing”, *IEEE Signal Processing Magazine*, vol. 40, pp. 32-44, 2023. (**IF: 15.204, Q1 in Engineering, Electrical and Electronic**)
11. M. Cheung, W. W. Sun, J. She, and **J. T. Zhou**, “Social Network Analytic-based Online Counterfeit Seller Detection using User Shared Images”, *ACM Trans. Multimedia Computing, Communications, and Applications*, vol. 19, pp. 1-18, 2023. (**IF: 4.094, Q1 in Computer Science**)
12. J. H. Hou, Z. Y. Zhu, J. H. Hou, H. Q. Zeng, J. J. Wu, and **J. T. Zhou**, “Deep Posterior Distribution-based Embedding for Hyperspectral Image Super-resolution”, *IEEE Trans. Image Processing*, vol. 31, pp. 5720-5732, 2022. (**IF: 11.041, Q1 in Computer Science**)
13. B. B. Song, **J. T. Zhou**, and H. W. Wu, “Multi-stage Curvature-guided Network for Progressive Single Image Reflection Removal”, *IEEE Trans. Circuits and Systems for Video Technology*, vol. 32, pp. 6515-6529, 2022. (**IF: 5.859, Q1 in Engineering, Electrical and Electronic**)
14. Y. M. Li, **J. T. Zhou**, J. Y. Chen, J. Y. Tian, L. Dong and X. Li, “Robust Matrix Factorization via Minimum Weighted Error Entropy Criterion”, *IEEE Trans. Computational Social Systems*, vol. 9, pp. 1830-1841, 2022. (**IF: 4.747, Q1 in Computer Science**)
15. Y. C. Su, J. Du, Y. M. Li, X. Li, Z. Y. Hua and **J. T. Zhou**, “Trajectory Forecasting Based on Prior-Aware Directed Graph Convolutional Neural Network”, *IEEE Trans. Intelligent Transportation Systems*, vol. 23, pp. 16773-16785, 2022. (**IF: 9.551, Q1 in Computer Science**)
16. Y. M. Li, **J. T. Zhou**, J. Y. Tian, X. W. Zheng, and Y. Y. Tang, “Weighted Error Entropy-based Information Theoretic Learning for Robust Subspace Representation”, *IEEE Trans. Neural Networks and Learning Systems*, vol. 33, pp. 4228-4242, 2022. (**IF: 14.255, Q1 in Computer Science**)
17. Z. Y. Zha, B. H. Wen, X. Yuan, **J. T. Zhou**, C. Zhu, and A. Kot, “A Hybrid Structural Sparsification Error Model for Image Restoration”, *IEEE Trans. Neural Networks and Learning Systems*, vol. 33, pp. 4451-4465, 2022. (**IF: 14.255, Q1 in Computer Science**)
18. F. C. Xiong, J. Zhou, S. Y. Tao, J. F. Lu, **J. T. Zhou** and Y. T. Qian, “SMDS-Net: Model Guided Spectral-Spatial Network for Hyperspectral Image Denoising”, *IEEE Trans. Image Processing*, vol. 31, pp. 5469-5483, 2022. (**IF: 11.041, Q1 in Computer Science**)
19. H. W. Wu, **J. T. Zhou**, and Y. M. Li, “Deep Generative Model for Image Inpainting with Local Binary Pattern Learning and Spatial Attention”, *IEEE Trans. Multimedia*, vol. 24, pp. 4016-4027, 2022. (**IF: 8.182, Q1 in Computer Science**)
20. S. R. Qi, Y. S. Zhang, C. Wang, **J. T. Zhou**, and X. C. Cao, “A Survey of Orthogonal Moments for Image Representation: Theory, Implementation, and Evaluation”, *ACM Computing Surveys*, vol. 55, no. 1, Article 1, 2022. (**IF: 14.324, Q1 in Computer Science**)

21. H. W. Wu, **J. T. Zhou**, J. Y. Tian, J. Liu, and Y. Qiao, "Robust Image Forgery Detection against Transmission over Online Social Networks", *IEEE Trans. Information Forensics and Security*, vol. 17, pp. 443-456, 2022. **(IF: 7.231, Q1 in Computer Science)**
22. H. Wu and **J. T. Zhou**, "IID-Net: Image Inpainting Detection Network via Neural Architecture Search and Attention", *IEEE Trans. Circuits and Systems for Video Technology*, vol. 32, no. 3, pp. 1172-1185, 2022. **(IF: 5.859, Q1 in Engineering, Electrical and Electronic)**
23. J. D. Zeng, T. Y. Liu, W. J. Jia, and **J. T. Zhou**, "Relation Construction for Aspect-Level Sentiment Classification", *Information Sciences*, vol. 586, pp. 209-223, 2022. **(IF: 8.233, Q1 in Computer Science)**
24. J. Duan, **J. T. Zhou**, Y. M. Li, and C. S. Huang, "Privacy-Preserving and Verifiable Deep Learning Inference Based on Secret Sharing", *Neurocomputing*, vol. 483, pp. 221-234, 2022. **(IF: 5.779, Q1 in Computer Science)**
25. Y. M. Li, R. Q. Liang, W. Wei, W. Wang, **J. T. Zhou**, and X. Li, "Temporal Pyramid Network with Spatial-Temporal Attention for Pedestrian Trajectory Prediction", *IEEE Trans. Network Science and Engineering*, vol. 9, no. 3, pp. 1006-1019, 2022. **(IF: 5.033, Q1 in Engineering, Multidisciplinary)**
26. J. H. Zhang, X. K. Min, Y. C. Zhu, G. T. Zhai, **J. T. Zhou**, X. K. Yang, and W. J. Zhang, "HazDesNet: An End-to-End Network for Haze Density Prediction", *IEEE Trans. Intelligent Transportation Systems*, vol. 23, no. 4, pp. 3087-3102, 2022. **(IF: 9.551, Q1 in Engineering, Civil)**
27. G. T. Zhai, W. Sun, X. K. Min, and **J. T. Zhou**, "Perceptual Quality Assessment of Low-light Image Enhancement", *ACM Trans. Multimedia Computing, Communications, and Applications*, vol. 17, no. 4, Article 130, 2021. **(IF: 4.094, Q1 in Computer Science)**
28. H. W. Wu and **J. T. Zhou**, "Privacy Leakage of SIFT Features via Deep Generative Model based Image Reconstruction", *IEEE Trans. Information Forensics and Security*, vol. 16, pp. 2973-2985, 2021. **(IF: 7.231, Q1 in Computer Science)**
29. W. W. Sun, **J. T. Zhou**, Y. M. Li, M. Cheng, and J. She, "Robust High-Capacity Watermarking Over Online Social Network Shared Images", *IEEE Trans. Circuits and Systems for Video Technology*, vol. 31, no. 3, pp. 1208-1221, 2021. **(IF: 5.859, Q1 in Engineering, Electrical and Electronic)**
30. Z. Y. Zhu, J. H. Hou, J. Chen, H. Q. Zeng, and **J. T. Zhou**, "Hyperspectral Image Super-Resolution via Deep Progressive Zero-Centric Residual Learning", *IEEE Trans. Image Process.*, vol. 30, pp. 1423-1438, 2021. **(IF: 11.041, Q1 in Computer Science)**
31. Z. Zha, B. Wen, X. Yuan, **J. T. Zhou**, J. Zhou and C. Zhu, "Triply Complementary Priors for Image Restoration", *IEEE Trans. Image Process.*, vol. 30, pp. 5819-5834, 2021. **(IF: 11.041, Q1 in Computer Science)**
32. W. W. Sun, **J. T. Zhou**, L. Dong, J. Y. Tian and J. Liu, "Optimal Pre-Filtering for Improving Facebook Shared Images", *IEEE Trans. Image Process.*, vol. 30, pp. 6292-6306, 2021. **(IF: 11.041, Q1 in Computer Science)**
33. J. Duan, **J. T. Zhou**, and Y. M. Li, "Secure and Verifiable Outsourcing of Large-scale Nonnegative Matrix Factorization (NMF)", *IEEE Trans. Services Computing*, vol. 14, no. 6, pp. 1940-1953, 2021. **(IF: 11.019, Q1 in Computer Science)**

34. Y. C. Zhu, G. T. Zhai, X. K. Min, and **J. T. Zhou**, “Learning a Deep Agent to Predict Head Movement in 360-Degree Images”, *ACM Trans. Multimedia Computing, Communications, and Applications*, vol. 16, no. 4, Article 130, pp. 1-23, 2021. (**IF: 4.094, Q1 in Computer Science**)
35. Y. F. Zheng, H. Y. Duan, X. T. Tang, C. Wang, and **J. T. Zhou**, “Denoising in the Dark: Privacy-Preserving Deep Neural Network Based Image Denoising”, *IEEE Trans. Dependable and Secure Computing*, vol. 18, no. 3, pp. 1267-1275, 2021. (**IF: 6.791, Q1 in Computer Science**)
36. Y. S. Zhang, **J. T. Zhou**, Y. Xiang, Y. Zhang, F. Chen, S. N. Pang, and X. F. Liao, “Computation Outsourcing Meets Lossy Channel: Secure Sparse Robustness Decoding Service in Multi-Clouds”, *IEEE Trans. Big Data*, vol. 7, no. 4, pp. 717-728, 2021. (**IF: 4.271, Q1 in Computer Science**)
37. X. W. Zheng, C. M. Zou, L. Dong, and **J. T. Zhou**, “Multi-Windowed Vertex-Frequency Analysis for Signals on Undirected Graphs”, *Computer Communications*, vol. 172, pp. 35-44, 2021. (**IF: 5.047, Q1 in Computer Science**)
38. J. D. Zeng, T. Y. Liu, W. J. Jia, and **J. T. Zhou**, “Fine-grained Question-Answer Sentiment Classification with Hierarchical Graph Attention Network”, *Neurocomputing*, vol. 457, pp. 214-224, 2021. (**IF: 5.779, Q1 in Computer Science**)
39. Z. Y. Zha, X. Yuan, **J. T. Zhou**, C. Zhu, and B. H. Wen, “Image Restoration via Simultaneous Nonlocal Self-Similarity Priors”, *IEEE Trans. Image Process.*, vol. 29, pp. 8561-8576, 2020. (**IF: 11.041, Q1 in Computer Science**)
40. Z. Y. Zha, X. Yuan, B. H. Wen, **J. T. Zhou**, and C. Zhu, “Group Sparsity Residual Constraint With Non-Local Priors for Image Restoration”, *IEEE Trans. Image Process.*, vol. 29, pp. 8960-8975, 2020. (**IF: 11.041, Q1 in Computer Science**)
41. X. K. Min, G. T. Zhai, **J. T. Zhou**, M.C. Q. Farias, and A.C. Bovik, “Study of Subjective and Objective Quality Assessment of Audio-Visual Signals”, *IEEE Trans. Image Process.*, vol. 29, pp. 6054-6068, 2020. (**IF: 11.041, Q1 in Computer Science**)
42. Z. Y. Zha, X. Yuan, B. H. Wen, J. C. Zhang, **J. T. Zhou**, and C. Zhu, “Image Restoration Using Joint Patch-Group Based Sparse Representation”, *IEEE Trans. Image Process.*, vol. 29, pp. 7735-7750, 2020. (**IF: 11.041, Q1 in Computer Science**)
43. S. Y. Zhu, Z. Y. He, X. D. Meng, **J. T. Zhou**, Y. F. Guo, and B. Zeng, “A New Polyphase Down-Sampling-based Multiple Description Image Coding”, *IEEE Trans. Image Process.*, vol. 29, pp. 5596-5611, 2020. (**IF: 11.041, Q1 in Computer Science**)
44. Z. Y. Zha, X. Yuan, B. H. Wen, **J. T. Zhou**, J. C. Zhang, and C. Zhu, “From Rank Estimation to Rank Approximation: Rank Residual Constraint for Image Restoration”, *IEEE Trans. Image Process.*, vol. 29, pp. 3254-3269, 2020. (**IF: 11.041, Q1 in Computer Science**)
45. Z. Y. Zha, X. Yuan, B. H. Wen, **J. T. Zhou**, J. C. Zhang, and C. Zhu, “A Benchmark for Sparse Coding: When Group Sparsity Meets Rank Minimization”, *IEEE Trans. Image Process.*, vol. 29, pp. 5094-5109, 2020. (**IF: 11.041, Q1 in Computer Science**)
46. Y. C. Zhu, G. T. Zhai, X. K. Min, and **J. T. Zhou**, “The Prediction of Saliency Map for Head and Eye Movements in 360 Degree Images”, *IEEE Trans. Multimedia*, vol. 22, no. 9, pp. 2331-2344, 2020. (**IF: 8.182, Q1 in Computer Science**)

47. L. Dong, **J. T. Zhou**, W. W. Sun, D. Q. Yan, and R. D. Wang, "First Steps Toward Concealing the Traces Left by Reversible Image Data Hiding", *IEEE Trans. Circuits and Systems II: Express Briefs*, vol. 67, no. 5, pp. 951-955, 2020. **(IF: 3.691, Q2 in Engineering, Electrical and Electronic)**
48. J. Duan, **J. T. Zhou**, and Y. M. Li, "Privacy-Preserving Distributed Deep Learning Based on Secret Sharing", *Information Sciences*, vol. 527, pp. 108-127, 2020. **(IF: 8.233, Q1 in Computer Science)**
49. X. K. Min, **J. T. Zhou**, G. T. Zhai, P. L. Callet, X. K. Yang, and X. P. Guan, "A Metric for Light Field Reconstruction, Compression, and Display Quality Evaluation", *IEEE Trans. Image Process.*, vol. 29, pp. 3790-3804, 2020. **(IF: 11.041, Q1 in Computer Science)**
50. X. K. Min, G. T. Zhai, **J. T. Zhou**, X. P. Zhang, X. K. Yang, X. P. Guan, "A Multimodal Saliency Model for Videos With High Audio-Visual Correspondence", *IEEE Trans. Image Process.*, vol. 29, pp. 3805-3819, 2020. **(IF: 11.041, Q1 in Computer Science)**
51. L. Dong, **J. T. Zhou**, and Y. Y. Tang, "Content-Adaptive Noise Estimation for Color Images with Cross-Channel Noise Modeling", *IEEE Trans. Image Process.*, vol. 28, no. 8, pp. 4161-4176, 2019. **(IF: 11.041, Q1 in Computer Science)**
52. Y. M. Li and **J. T. Zhou**, "Fast and Effective Image Copy-Move Forgery Detection via Hierarchical Feature Point Matching", *IEEE Trans. Inf. Forensics and Security*, vol. 14, no. 5, pp. 1307-1322, 2019. **(IF: 7.231, Q1 in Computer Science)**
53. M. Cheung, J. She, W.W. Sun, and **J. T. Zhou**, "Detecting Online Counterfeit-goods Seller using Connection Discovery", *ACM Trans. Multimedia Computing, Communications, and Applications*, vol. 15, no. 2, 35:1-35:16, 2019. **(IF: 4.094, Q1 in Computer Science)**
54. X. W. Zheng, Y. Y. Tang, and **J. T. Zhou**, "A Framework of Adaptive Multiscale Wavelet Decomposition for Signals on Undirected Graphs", *IEEE Trans. Signal Processing*, vol. 67, no. 7, pp. 1696-1711, 2019. **(IF: 4.875, Q1 in Engineering, Electrical and Electronic)**
55. X. K. Min, G. T. Zhai, K. Gu, Y. C. Zhu, **J. T. Zhou**, G. D. Guo, X. K. Yang, X. P. Guan, and W. J. Zhang, "Quality Evaluation of Image Dehazing Methods Using Synthetic Hazy Images", *IEEE Trans. Multimedia*, vol. 21, no. 9, pp. 2319-2333, 2019. **(IF: 8.182, Q1 in Computer Science)**
56. Y. S. Zhang, Y. Xiang, Y. Zhang, L.X. Yang, **J. T. Zhou**, "Efficiently and Securely Outsourcing Compressed Sensing Reconstruction to a Cloud", *Inf. Sci.*, vol. 496, pp. 150-160, 2019. **(IF: 8.233, Q1 in Computer Science)**
57. S. Y. Zhu, Z. Y. He, C. Chen, S. C. Liu, **J. T. Zhou**, Y. F. Guo, and B. Zeng, "High-Quality Color Image Compression by Quantization Crossing Color Spaces", *IEEE Trans. Circuits and Syst. for Video Technology*, vol. 29, no. 5, pp.1474-1487, 2019. **(IF: 5.859, Q1 in Engineering, Electrical and Electronic)**
58. X. W. Zheng, Y. Y. Tang, **J. T. Zhou**, J. J. Pan, S. Z. Yang, Y. F. Li and P. Wang, "Multi-level Downsampling of Graph Signals via Improved Maximum Spanning Trees", *Int. J. of Pattern Recognition and Artificial Intelligence*, vol. 33, no. 3, pp. 1958005, 2019. **(IF: 1.261, Q4 in Computer Science)**
59. L. Dong, **J. T. Zhou**, and Y. Y. Tang, "Effective and Fast Estimation for Image Sensor Noise via Constrained Weighted Least Squares", *IEEE Trans. Image Processing*, vol. 27, no. 6, pp. 2715-2730, 2018. **(IF: 11.041, Q1 in Computer Science)**

60. W. W. Sun, **J. T. Zhou**, S. Y. Zhu, and Y. Y. Tang, “Robust Privacy-Preserving Image Sharing over Online Social Networks (OSNs)”, *ACM Trans. Multimedia Computing, Communications, and Applications (TOMM)*, vol. 14, no. 1, pp. 14:1-14:22, 2018. **(IF: 4.094, Q1 in Computer Science)**
61. S. Y. Zhu, Z. Y. He, X. D. Meng, **J. T. Zhou**, and B. Zeng, “Compression-Dependent Transform-Domain Downward Conversion for Block-based Image Coding”, *IEEE Trans. Image Processing*, vol. 27, no. 6, pp. 2635-2649, 2018. **(IF: 11.041, Q1 in Computer Science)**
62. Y. Zhang, Y. S. Liu, C. Wang, **J. T. Zhou**, Y. S. Zhang, and G. R. Chen, “Improved Known-Plaintext Attack to Permutation-Only Multimedia Ciphers”, *Information Sciences*, vol. 430, pp. 228-239, 2018. **(IF: 8.233, Q1 in Computer Science)**
63. L. Dong, **J. T. Zhou**, and Y. Y. Tang, “Noise Level Estimation for Natural Images Based on Scale-Invariant Kurtosis and Piecewise Stationarity”, *IEEE Trans. Image Processing*, vol. 26, no. 2, pp. 1017-1030, 2017. **(IF: 11.041, Q1 in Computer Science)**
64. Y. M. Li, **J. T. Zhou**, and A. Cheng “SIFT Keypoint Removal via Directed Graph Construction for Color Images”, *IEEE Trans. Inf. Forensics and Security*, vol. 12, no. 12, pp. 2971-2985, 2017. **(IF: 7.231, Q1 in Computer Science)**
65. Y. F. Zheng, H. L. Cui, C. Wang, and **J. T. Zhou**, “Privacy-Preserving Image Denoising From External Cloud Databases”, *IEEE Trans. Inf. Forensics and Security*, vol. 12, no.6, pp. 1285-1298, 2017. **(IF: 7.231, Q1 in Computer Science)**
66. X. M. Liu, D. M. Zhai, **J. T. Zhou**, S. Q. Wang, D. B. Zhao, and H.J. Gao, “Sparsity-based Image Error Concealment via Adaptive Dual Dictionary Learning and Regularization”, *IEEE Trans. Image Processing*, vol. 26, no. 2, pp. 782-796, 2017. **(IF: 11.041, Q1 in Computer Science)**
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