王金宝

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个人简介

王金宝，1989 年 11 月 12 日出生，河北石家庄人。2019 年博士毕业于中国科学院大学，导师为吕科教授，获得国家奖学金、中科院院长奖学金，分别于 2016 年和 2019 年获得北京市优秀毕业生称号。目前在**深圳大学大数据系统计算技术国家工程实验室**，担任**助理教授**，主要研究领域涉及计算机视觉和机器学习，长期专注于图像异常检测、图表征学习、图像多样化生成和快速检索。我们致力于将视觉技术应用于真实工业场景和虚拟现实的人机交互环境。

目前主持国自然青年基金项目，参与国自然重点国际（地区）合作与交流项目，获得腾讯“犀牛鸟”-深圳大学青年教师科研基金项目奖。在 IEEE TIP、IEEE TCSVT、Neurocomputing、ICCV、ACM MM、NeurIPS 和 ICLR 等重要国际期刊和会议上发表论文 **50+**，谷歌学术引用次数 **1700**+，ESI 高引用论文 **1** 篇，最佳学生论文奖 **1** 项；担任国际期刊和会议的审稿人，如 IEEE TIP、IEEE TCSVT、ACM MM、NeurIPS、AAAI、IJCAI、ICML；目前作为 IEEE、ACM 等顶级人工智能会议程序委员会的成员。

项目情况

1. 2024.12-2027.11, 国家重点研发计划，“失能失智老年人居住环境及康复辅助器具检测与评价关键技术研究”，课题三 “失能失智老年人居住环境智能检测与集成技术”，项目号 2024YFF0618403，子课题负责人
2. 2024.1-2028.12，国家自然科学基金 (NSFC)-重点国际 (地区) 合作与交流项目，“高保真数字人建模与驱动关键技术研究”，项目号 62320106007，**60 万/216 万**，中方合作者，课题负责人 **（当年全国仅 74 项通过）**
3. 2023.1-2025.12，国家自然科学基金 (NSFC)-青年科学基金项目，“面向工业视觉的高效能三维异常检测算法研究”，项目号 62206122，**30 万**，项目负责人
4. 2023.1-2025.12，深圳市博士后留深科研资助，**30 万**，项目负责人
5. 2024.1-2026.11，深圳大学青年教师科研启动经费项目，**20 万**，项目负责人
6. 2024.6-2026.5，腾讯“犀牛鸟”-深圳大学青年教师科研基金项目，“基于视觉语言模型的工业图像异常检测研究”，**5 万**，项目负责人
7. 2024.6-2026.5，深圳大学大数据系统计算技术国家工程实验室内部课题，“基于多模态对齐的视觉异常检测研究”，项目号 SZU-BDSC-IF2024-08，**2 万**，项目负责人

工作经历

深圳大学 深圳, 中国

助理教授 *2023.12 - 现在*

- 主要研究方向为数字人建模与驱动、图像异常检测、计算机视觉、机器学习

南方科技大学 深圳, 中国

研究助理教授 *2021.11 - 2023.11*

- 主要研究方向为图像异常检测、计算机视觉、机器学习

南方科技大学 深圳, 中国

博士后研究员 *2019.10 - 2021.10*

- 主要研究方向图表征学习、快速检索、计算机视觉

教育经历

中国科学院大学 (UCAS) 北京, 中国

工学博士学位，计算机应用技术专业 *2016.9 - 2019.7*

- 毕业论文: 多视点视频序列目标三维重建算法研究
- 导师: 吕科教授、薛健教授

北京联合大学 (BUU) 北京, 中国

工学硕士学位，软件工程专业 *2013.9 - 2016.7*

- 毕业论文: 数字图像去雾方法研究
- 导师: 何宁教授

河北大学 (HBU) 河北, 中国

理学学士学位，电子信息科学与技术专业 *2009.9 - 2013.7*

荣誉 & 奖项

2024 **腾讯“犀牛鸟”-深圳大学青年教师科研基金项目奖,** 深圳大学 深圳, 中国

2019 **北京市优秀毕业生,** 中国科学院大学 北京，中国

2019 **中国科学院大学院长奖学金,** 中国科学院大学 北京，中国

2016 **北京市优秀毕业生,** 北京联合大学 北京，中国

2015 **国奖奖学金,** 北京联合大学 北京，中国

程序委员会

2025 **审稿人,** CVPR, ICLR, NeurIPS, ICASSP, ICME, IJCAI

2024 **审稿人,** ACM MM, ICLR, IJCAI, NeurIPS, IEEE TASE

2023 **审稿人,** IEEE TIP, IEEE TCSVT, NeurIPS, Patterns, IJCAI, ACM MM, ICLR, PR

论文列表

一作：14；通讯：9；文章总数：51

标记：* 共同一作, † 通讯/共同通讯

CCF-A 类 (一作：1；通讯：7)

1. Hanzhe Liang, Guoyang Xie, Chengbin Hou, Bingshu Wang, Can Gao†, and **Jinbao Wang**†. “Look Inside for More: Internal Spatial Modality Perception for 3D Anomaly Detection.” The 39th AAAI Conference on Artificial Intelligence (AAAI). 2025.
2. Linchao Pan, Can Gao, Jie Zhou, and **Jinbao Wang**. “Learning with Open-world Noisy Data via Class-independent Margin in Dual Representation Space.” The 39th AAAI Conference on Artificial Intelligence (AAAI). 2025.
3. Tao Dai, Yang Lin, Hang Guo, **Jinbao Wang**, and Zexuan Zhu. “DCSF-KD: Dynamic Channel-wise Spatial Feature Knowledge Distillation for Object Detection.” The 39th AAAI Conference on Artificial Intelligence (AAAI). 2025.
4. Yu Zeng, Yang Zhang, Linlin Shen, Jiachen Liu, Kaijun Deng, Weizhao He, and **Jinbao Wang**. “HairDiffusion: Vivid Multi-Colored Hair Editing via Latent Diffusion.” The 38th Conference on Neural Information Processing Systems (NeurIPS). 2024.
5. Hongze Zhu, Guoyang Xie, Chengbin Hou, Tao Dai, Can Gao, **Jinbao Wang**†, and Linlin Shen. “Towards High-resolution 3D Anomaly Detection via Group-Level Feature Contrastive Learning.” The 32th ACM International Conference on Multimedia (ACM MM). 2024.

6. Xinpeng Li, Teng Wang, Shuyi Mao, **Jinbao Wang**, Jian Zhao, Xiaojiang Peng, Feng Zheng, and Xuelong Li. “Two in One Go: Single-stage Emotion Recognition with Decoupled Subject-context Transformer.” The 32th ACM International Conference on Multimedia (ACM MM), 2024.
7. Tao Dai, Jianping Wang, Hang Guo, Jinmin Li, **Jinbao Wang**†, and Zexuan Zhu†. “FreqFormer: Frequency-aware Transformer for Lightweight Image Super-resolution.” The 33rd International Joint Conference on Artificial Intelligence (IJCAI). 2024.
8. Jiaqi Liu, Kai Wu, Qiang Nie, Ying Chen, Bin-Bin Gao, Yong Liu, **Jinbao Wang**, Chengjie Wang, and Feng Zheng. “Unsupervised Continual Anomaly Detection with Contrastively-learned Prompt.” The 38th AAAI Conference on Artificial Intelligence (AAAI). 2024.
9. Jiaqi Liu, Guoyang Xie, Ruitao Chen, Xinpeng Li, **Jinbao Wang**†, Yong Liu, Chengjie Wang, and Feng Zheng†. “Real3D-AD: A Dataset of Point Cloud Anomaly Detection.” The 37th Conference on Neural Information Processing Systems (NeurIPS) Track on Datasets and Benchmarks. 2023.
10. Ruitao Chen, Guoyang Xie, Jiaqi Liu, **Jinbao Wang**†,Ziqi Luo, Jinfan Wang, and Feng Zheng†. “EasyNet: An Easy Network for 3D Industrial Anomaly Detection.” The 31st ACM International Conference on Multimedia (ACM MM). 2023.
11. Wujin Li, Jiawei Zhan, **Jinbao Wang**†, Bizhong Xia, Bin-Bin Gao, Jun Liu, Chengjie Wang, and Feng Zheng†. “Towards Continual Adaptation in Industrial Anomaly Detection.” The 30th ACM International Conference on Multimedia (ACM MM). 2022.
12. Xi Jiang, Jianlin Liu, **Jinbao Wang**†, Qiang Nie, Kai Wu, Yong Liu, Chengjie Wang, and Feng Zheng†. “SoftPatch: Unsupervised Anomaly Detection with Noisy Data.” The 36th Conference on Neural Information Processing Systems (NeurIPS). 2022.
13. **Jinbao Wang***, Guoyang Xie*, Yawen Huang*, Yefeng Zheng, Yaochu Jin, and Feng Zheng. “FedMed-ATL: Misaligned Unpaired Cross-Modality Neuroimage Synthesis via Affine Transform Loss.” The 30th ACM International Conference on Multimedia (ACM MM). 2022.
14. Hongjun Chen, **Jinbao Wang**, Hong Cai Chen, Xiantong Zhen, Feng Zheng, Rongrong Ji, and Ling Shao. “Seminar learning for click-level weakly supervised semantic segmentation.” The IEEE/CVF International Conference on Computer Vision (ICCV). 2021.

中科院 1 区 (一作：4；通讯：1)

1. Jiayi Lyu, Xing Lan, Guohong Hu, Hanyu Jiang, Wei Gan, **Jinbao Wang**, and Jian Xue. “Multimodal Emotional Talking Face Generation Based on Action Units.” IEEE Transactions on Circuits and Systems for Video Technology (`IEEE TCSVT`). 2024.
2. Zehai Niu, Ke Lu, Jian Xue, Xiaoyu Qin, **Jinbao Wang**, and Ling Shao. “From Methods to Applications: A Review of Deep 3D Human Motion Capture.” IEEE Transactions on Circuits and Systems for Video Technology (`IEEE TCSVT`) 34(11) 2024: 11340-11359.
3. Guoyang Xie*, **Jinbao Wang***, Jiaqi Liu*, Jiayi Lyu, Yong Liu, Chengjie Wang, Feng Zheng, and Yaochu Jin. “IM-IAD: Industrial Image Anomaly Detection Benchmark in Manufacturing.” IEEE Transactions on Cybernetics (`IEEE TCYB`) 54(5) 2024: 2720-2733.
4. Wujin Li, Bin-Bin Gao, Bizhong Xia, **Jinbao Wang**, Jun Liu, Yong Liu, Chengjie Wang, and Feng Zheng. “Cross-Modal Alternating Learning with Task-Aware Representations for Continual Learning.” IEEE Transactions on Multimedia (`IEEE TMM`) 26 (2023): 5911-5924.
5. Guoyang Xie*, Yawen Huang*, **Jinbao Wang**†, Jiayi Lyu, Feng Zheng†, Yefeng Zheng, and Yaochu Jin. “Cross-Modality Neuroimage Synthesis: A Survey.” ACM Computing Surveys 56 (2023): 1-28.
6. Hao Zheng*, **Jinbao Wang***, Xiantong Zhen, Jingkuan Song, Feng Zheng, Ke Lu, and Guo-Jun Qi. “Continuous Cross-modal Hashing.” Pattern Recognition (PR) 142 (2023): 109662.
7. **Jinbao Wang**, Shuo Xu, Feng Zheng, Ke Lu, Jingkuan Song, and Ling Shao. “Learning Efficient Hash Codes for Fast Graph-based Data Similarity Retrieval.” IEEE Transactions on Image Processing (`IEEE TIP`) 30 (2021): 6321-6334. **(CCF-A)**
8. **Jinbao Wang**, Ke Lu, Jian Xue, Ning He, and Ling Shao. “Single Image Dehazing Based on the Physical Model and MSRCR Algorithm.” IEEE Transactions on Circuits and Systems for Video Technology (`IEEE TCSVT`) 28(9) 2017: 2190-2199.

其他文章 (一作：10；通讯：1)

1. **Jinbao Wang**, Jiayi Cheng, Can Gao, Jie Zhou, and Linlin Shen.“Enhanced Fabric Defect Detection with Feature Contrast Interference Suppression.” IEEE Transactions on Instrumentation and Measurement (`IEEE TIM`). 2025.
2. Can Gao, Xiujian Chen, Jie Zhou, **Jinbao Wang**, and Linlin Shen. “Open-Set Fabric Defect Detection with Defect Generation and Transfer.” IEEE Transactions on Instrumentation and Measurement (`IEEE TIM`) 74 (2025):1-13.

3. Kaijun Deng, Dezhi Zheng, Jindong Xie, **Jinbao Wang**, Weicheng Xie, Linlin Shen, and Siyang Song. "DEGSTalk: Decomposed Per-Embedding Gaussian Fields for Hair-Preserving Talking Face Synthesis." IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP). 2025.

4. Jindong Xie, Jiachen Liu, Yupei Lin, **Jinbao Wang**, Xianxu Hou, and Linlin Shen. "High-Fidelity Editable Portrait Synthesis with 3D GAN Inversion." IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP). 2025.

5. Dezhi Zheng, Kaijun Deng, **Jinbao Wang**, and Linlin Shen. "Dual Encoders for Diffusion-based Image Inpainting." IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP). 2025.

6. Biqiao Xin, Qiang Li, Qianchen Mao, **Jinbao Wang**, and Bingshu Wang. "FBI-Net: Frequency Band Integration Network for Infrared Small Target Segmentation." IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP). 2025.

7. Bingshu Wang, Haosu Zhang, Qiang Li, Qianchen Mao, **Jinbao Wang**, C.L. Philip Chen, Aihong Shangguan, and Haosu Zhang. "A Survey on Vision-Based Anti Unmanned Aerial Vehicles Methods." Drones 8(9) 2024: 518.

8. Teng Yang, Pengcheng Gao, Chengbin Hou, **Jinbao Wang**, and Yongliang Tang. "Self-supervised Models are Strong Industrial Few-shot Defect Classification Learners." The 2nd workshop on Vision-based InduStrial InspectiON (ECCVW). 2024.

9. Qingyuan Liu, Ke Lv, Zehai Niu, Kun Dong, **Jinbao Wang**, Jian Xue, and Xiaoyu Qin. "FlexControl: Flexible and Efficient Full-Body Controllable Text-to-Motion Generation." Towards a Complete Analysis of People: Fine-grained Understanding for Real-World Applications (ECCVW). 2024.

10. Qingyuan Liu, Zehai Niu, Ke Lu, Kun Dong, Jian Xue, Xiaoyu Qin, and **Jinbao Wang**. "AdaptControl: Adaptive Human Motion Control and Generation via User Prompt and Spatial Trajectory Guidance." The 5th International Workshop on Human-centric Multimedia Analysis (ACM MMW). 2024. **(Best Student Paper Reward)**

11. Zehai Niu, Ke Lu, Jian Xue, and **Jinbao Wang**. "Skeleton Cluster Tracking for Robust Multi-view Multi-person 3D Human Pose Estimation." Computer Vision and Image Understanding (CVIU) 246 (2024): 104059.

12. Lian Chen, Zehai Niu, Qingyuan Liu„ **Jinbao Wang**, Jian Xue, and Ke Lu. "Anatomically-informed Vector Quantization Variational Auto-encoder for Text to Motion Generation." IEEE International Conference on Multimedia and Expo, Workshop (ICMEW). 2024.

13. Qiang Li, Qianchen Mao, Wenjie Liu, **Jinbao Wang**, Wenming Wang, and Binshu Wang. "Local Information Guided Global Integration For Infrared Small Target Detection." IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP). 2024.

14. Jiaqi Liu*, Guoyang Xie*, **Jinbao Wang***, Shangnian Li, Chengjie Wang, Feng Zheng, and Yaochu Jin. "Deep Industrial Image Anomaly Detection: A Survey." Machine Intelligence Research (MIR) 21(1) 2024: 104-135.

15. Lingrui Zhang, Shuheng Zhang, Guoyang Xie, Jiaqi Liu, Hua Yan, **Jinbao Wang**†, Feng Zheng†, and Yaochu Jin. "What Makes a Good Data Augmentation for Few-shot Unsupervised Image Anomaly Detection?" The IEEE/CVF Conference on Computer Vision and Pattern Recognition Vision Workshop (CVPRW). 2023.

16. Guoyang Xie*, **Jingbao Wang***†, Jiaqi Liu*, Feng Zheng†, and Yaochu Jin. "Pushing the Limits of Fewshot Anomaly Detection in Industry Vision: Graphcore." The 11th International Conference on Learning Representations (ICLR). 2023.

17. Guoyang Xie*, **Jinbao Wang***, Guo Yu, Feng Zheng, and Yaochu Jin. "Tiny Adversarial Mulit-objective Oneshot Neural Architecture Search." Complex & Intelligent Systems (CIS) 6 (2023): 107-109.

18. **Jinbao Wang***, Guoyang Xie*, Yawen Huang*, Jiayi Lyu, Feng Zheng, Yefeng Zheng, and Yaochu Jin."FedMed-GAN: Federated Domain Translation on Unsupervised Cross-modality Brain Image Synthesis." Neurocomputing 546 (2023): 126282.

19. **Jinbao Wang***, Shujie Tan*, Xiantong Zhen, Shuo Xu, Feng Zheng, Zhenyu He, and Ling Shao. "Deep 3D Human Pose Estimation: A Review." Computer Vision and Image Understanding (CVIU) 210 (2021): 103225.

20. Lian Chen, Ke Lu, Pengcheng Gao, Jian Xue, and **Jinbao Wang**. "A Novel Multi-feature Skeleton Representation for 3D Action Recognition." International Conference on Pattern Recognition (ICPR). 2021.

21. **Jinbao Wang**, Ke Lu, Jian Xue, and Yutong Kou. "Relative Depth Estimation Prior for Single Image Dehazing." IEEE International Conference on Multimedia & Expo Workshops (ICMEW). 2019.

22. **Jinbao Wang**, Ke Lu, Jian Xue, Pengcheng Gao, and Yanfu Yan. "A Markerless Body Motion Capture System for Character Animation Based on Multi-view Cameras." IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). 2019.

23. Ning He, **Jinbao Wang**, Lu-Lu Zhang, Guang-Mei Xu, and Ke Lu. "Non-local Sparse Regularization Model with Application to Image Denoising." Multimedia Tools and Applications 75(5) 2016: 2579-2594.
24. Ning He, **Jinbao Wang**, Lu-Lu Zhang, and Ke Lu. "Convex Optimization Based Low-rank Matrix Decomposition for Image Restoration." Neurocomputing 172 (2016): 253-261.
25. **Jinbao Wang**, Ning He, Lu-Lu Zhang, and Ke Lu. "Single Image Dehazing with a Physical Model and Dark Channel Prior." Neurocomputing 149 (2015): 718-728. **(ESI Highly-Cited Paper)**
26. **Jinbao Wang**, Ning He, and Ke Lu. "A New Single Image Dehazing Method with MSRCR Algorithm." The 7th International Conference on Internet Multimedia Computing and Service (ICIMCS). 2015.
27. Ning He, **Jinbao Wang**, Lu-Lu Zhang, and Ke Lu. "An Improved Fractional-order Differentiation Model for Image Denoising." Signal Processing 112 (2015): 180-188.
28. Ning He, Ke Lu, and **Jinbao Wang**. "Image Denoising Using Fractional-order Non-local TV Model." International Conference on Internet Multimedia Computing and Service (ICIMCS). 2014.
29. Ning He, Ke Lu, Bing-Kun Bao, Lu-Lu Zhang, and **Jinbao Wang**. "Single-image Motion Deblurring Using an Adaptive Image Prior." Information Sciences 281 (2014): 736-749.