

Complete list of publications of Yadong Xu

Complete publications:

A) Publication with peer review process

Journal Articles:

1. **Xu, Y. D.**, Feng, K*, Yan, X. A., Yan, R. Q., Ni, Qi., Sun, B. B.*, Lei, Z. H., Zhang, Y. C., Liu, Z. (2023): CFCNN: A novel convolutional fusion framework for collaborative fault identification of rotating machinery. *Information Fusion*, 95, 1-16.
2. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Zhai, J. H., Liu, Z. (2021): Multireceptive Field Denoising Residual Convolutional Networks for Fault Diagnosis. *IEEE Transactions on Industrial Electronics*, 69(11), 11686-11696.
3. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Liu, Z. (2022): Deep Coupled Visual Perceptual Networks for Motor Fault Diagnosis Under Nonstationary Conditions. *IEEE/ASME Transactions on Mechatronics*, 27(6), 4840-4850.
4. **Xu, Y. D.**, Feng, K*, Yan, X. A., Sheng, X., Sun, B. B.*, Liu, Z., Yan, R. Q. (2024): Cross-Modal Fusion Convolutional Neural Networks with Online Soft-Label Training Strategy for Mechanical Fault Diagnosis. *IEEE Transactions on Industrial Informatics*, 20(1), 73-84.
5. **Xu, Y. D.**, Yan, X. A., Sun, B. B., Feng, K*, Kou, L. L., Chen, Y. J., Li, Y. F., Chen, H. T., Tian, E. G., Ni, Q., Wang, Y. L.* (2024): Online Knowledge Distillation-Based Multiscale Threshold Denoising Networks for Fault Diagnosis of Transmission Systems. *IEEE Transactions on Transportation Electrification*, 10(2), 4421-4431.
6. **Xu, Y. D.**, Chen, Y. J., Zhang, H., Feng, K*, Wang, Y. L.*, Yang, C. S., Ni, Q. (2023): Global contextual feature aggregation networks with multiscale attention mechanism for mechanical fault diagnosis under non-stationary conditions. *Mechanical Systems and Signal Processing*, 203, 110724.
7. **Xu, Y. D.**, Ji, J. C., Ni, Q., Feng, K*, Beer, M., Chen, H. T. (2023): A graph-guided collaborative convolutional neural network for fault diagnosis of electromechanical systems. *Mechanical Systems and Signal Processing*, 200, 110609.
8. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Liu, Z. (2022): Global contextual residual convolutional neural networks for motor fault diagnosis under variable-speed conditions. *Reliability Engineering & System Safety*, 225, 108618.
9. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Liu, Z. (2022): Dually Attentive Multiscale Networks for Health State Recognition of Rotating Machinery. *Reliability Engineering & System Safety*, 225, 108626.
10. **Xu, Y. D.**, Yan, X. A., Feng, K., Sheng, X., Sun, B. B.*, Liu, Z. (2022): Attention-based Multiscale Denoising Residual Convolutional Neural Networks for Fault Diagnosis of Rotating Machinery. *Reliability Engineering & System Safety*, 226, 108714.
11. **Xu, Y. D.**, Yan, X. A., Feng, K*, Zhang, Y. C., Zhao, X. L., Sun, B. B.*, Liu, Z. (2023): Global Contextual Multiscale Fusion Networks for Machine Health State Identification Under Noisy and Imbalanced Conditions. *Reliability Engineering & System Safety*, 231, 108972.
12. **Xu, Y. D.**, Jiang, Q. B., Li, S., Zhao, Z. H.*, Sun, B. B., Huang, G. Q. (2024): Digital

- twin-driven discriminative graph learning networks for cross-domain bearing fault recognition. *Computers & Industrial Engineering*, 193, 110292.
13. **Xu, Y. D.**, Li, S., Yan, X. A., He, J. L., Ni, Q., Sun, B. B., Wang, Y. L.* (2024): Multiattention-Based Feature Aggregation Convolutional Networks with Dual Focal Loss for Fault Diagnosis of Rotating Machinery Under Data Imbalance Conditions. *IEEE Transactions on Instrumentation and Measurement*, 73, 1-11.
 14. **Xu, Y. D.**, Shu, R., Li, S., Feng, K., Yang, X.L., Zhao, Z. H.*, Huang, G. Q. (2024): Imbalanced Learning for Gearbox Fault Detection via Attention-Based Multireceptive Field Convolutional Neural Networks with an Adaptive Label Regulation Loss. *IEEE Transactions on Instrumentation and Measurement*, 73, 1-11.
 15. **Xu, Y. D.**, Li, S., Feng, K., Sun, B. B., Yang, X. L.*, Kou, L. L., Zhao, Z. H.*, Huang, G. Q. (2024): Multiperspective Temporal Pooling Convolutional Neural Networks for Fault Diagnosis of Mechanical Transmission Systems. Accepted for printing in: *IEEE Transactions on Instrumentation and Measurement*. (publisher's declaration of acceptance enclosed)
 16. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Liu, Z. (2022): Hierarchical Multiscale Dense Networks for Intelligent Fault Diagnosis of Electromechanical Systems. *IEEE Transactions on Instrumentation and Measurement*, 71, 1-12.
 17. **Xu, Y. D.**, Yang, C., Sun, B. B.*, Yan X. A., Chen, M. L. (2021): A novel multi-scale fusion framework for detail-preserving low-light image enhancement. *Information Sciences*, 548, 378-397.
 18. **Xu, Y. D.**, Sun, B. B.* (2022): A Novel Variational Model for Detail-Preserving Low-Illumination Image Enhancement. *Signal Processing*, 195, 108468.
 19. **Xu, Y. D.**, Yan, X. A., Sun, B. B.*, Hu, J. Z., Chen, M. L. (2020): Multi-focus Image Fusion using Learning Based Matting with Sum of the Gaussian-based Modified Laplacian. *Digital Signal Processing*, 106, 102821.
 20. Li, S., Jiang, Q. B., **Xu, Y. D.** *, Feng, K., Wang, Y. L., Sun, B. B., Yan, X. A., Sheng, X., Zhang, K., Ni, Q. (2023): Digital twin-driven focal modulation-based convolutional network for intelligent fault diagnosis. *Reliability Engineering & System Safety*, 240, 109590.
 21. Shu, R., **Xu, Y. D.***, He, J. L., Yang, X. L., Zhao, Z. H., Huang, G. Q. (2024): Multi-view Contrastive Learning Framework for Tool Wear Detection with Insufficient Annotated Data. *Advanced Engineering Informatics*, 62, 102666.
 22. Li, S., Jiang, Q. B., **Xu, Y. D.***, Feng, K., Zhao, Z. H., Sun, B. B., Huang, G. Q. (2024): Digital Twin-Assisted Explainable Transfer Learning: A Novel Wavelet Based Framework for Diagnostics of Bearing Faults from Simulated Domain to Real Industrial Damian. *Advanced Engineering Informatics*, 62, 102681.
 23. Li, S., Ji, J.C., Feng, K.*, Zhang, K., Ni, Q., **Xu, Y. D.*** (2024): Cross-Modal Zero-Sample Fuzzy Diagnostic Framework Using Multi-Source Heterogeneous Non-Contact Sensing Data. *IEEE Transactions on Fuzzy Systems*, 1-12.
 24. Li, S., Feng, K. *, **Xu, Y. D.***, Li, Y. B., Ni, Q., Zhang, K., Wang, Y. L., Ding, W. P., (2024): Cross-Modal Zero-Sample Fuzzy Diagnostic Framework Using Multi-Source Heterogeneous Non-Contact Sensing Data. *Information Fusion*, 110, 102453.
 25. Li, S., Ji, J.C., **Xu, Y. D.***, Feng, K.*, Feng, J., Beer, M., Zhang, K., Ni, Q., Wang, Y.

- L. (2024): Dconformer: A Denoising Convolutional Transformer with Joint Learning Strategy for Intelligent Bearing Fault Diagnosis. *Mechanical Systems and Signal Processing*, 210, 111142.
26. Li, S., Ji, J.C., **Xu, Y. D.***, Sun, X. Q., Feng, K.*, Gu, F. S., Zhang, K., Ni, Q. (2023): IFD-MDCN: Multibranch Denoising Convolutional Networks with Improved Flow Direction Strategy for Intelligent Fault Diagnosis of Rolling Bearings Under Noisy Conditions. *Reliability Engineering & System Safety*, 237, 109387.
27. Li, S., **Xu, Y. D.***, Feng, K.*, Wang, Y. L., Sun, B. B., Yan, X. A. Sheng, X., Zhang, K., Zheng, J.D., Ni, Q. (2023): Joint Threshold Learning Convolutional Networks for Intelligent Diagnosis of Bearing Faults Under Nonstationary Conditions. *IEEE Transactions on Instrumentation and Measurement*, 72, 1-11.
28. Feng, K., **Xu, Y. D.***, Wang, Y. L. *, Li, S., Jiang, Q. B., Sun, B. B., Zheng, J. D.*, Ni, Q. (2023): Digital Twin Enabled Domain Adversarial Graph Networks for Bearing Fault Diagnosis. *IEEE Transactions on Industrial Cyber-Physical Systems*, 1, 113-122.
29. Li, S., He, J. L., Shu, R., Jiang, Q. B., Sun, B. B., **Xu, Y. D.*** (2023): Digital twin-driven attention-guided convolutional networks for intelligent fault diagnosis across different domains. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 09544054241266000.
30. **Xu, Y. D.**, Hu, J. Z. *, (2019): Weak fault detection of rolling bearing using a DS-based adaptive spectrum reconstruction method. *Journal of Instrumentation*, 14(03), P03022.

Conference Proceedings:

31. **Xu, Y. D.**, Feng, K., Yan, X. A., Sun, B. B.* (2023): A Multi-dilated Fusion Convolutional Neural Network for Fault Diagnosis of Rolling Bearings. 13th International Conference on Power, Energy and Electrical Engineering, 322-325.
32. **Xu, Y. D.**, Sun, B. B.* (2021): Multiscale Dense Convolutional Networks for Intelligent Fault Diagnosis of Rolling Bearing. Accepted for printing in: 8th International Conference on Dependable Systems and Their Applications, 114-119.

B) Submitted publication with peer review process

33. **Xu, Y. D.**, Li, S., Feng, K., Huang, R. Y., Sun, B. B., Yang, X. L., Zhao, Z. H.*, Huang, G. Q. (2024): Domain Constrained Cascadic Multireceptive Learning Networks for Machine Health Monitoring in Complex Manufacturing Systems. *Journal of Manufacturing systems*, Under Review. (publisher's acknowledgement of receipt enclosed)
34. Wang, Z. C., **Xu, Y. D.***, Li, S., Sun, B. B., Yang, X. L. (2024): Multiview Contrastive Shapelet Learning: A Novel Semisupervised Approach for Explainable Machine Fault Diagnosis with Insufficient Annotated Data. *IEEE Transactions on Industrial Informatics*, Awaiting Review Scores. (publisher's acknowledgement of receipt enclosed)

C) Patents

1. Hu, J. Z, **Xu, Y. D.**, Xu, F. Y., Jia, M. P., Peng, Y. A rolling bearing fault diagnosis method based on DS adaptive spectrum reconstruction. Chinese Patent (Patent No ZL 2019 1 0281748.6.)
2. Hu, J. Z, **Xu, Y. D.**, A low-light image enhancement method based on scale perception

and detail enhancement model. Chinese Patent (Patent No ZL 2019 1 0836624.X.)

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The following above mentioned publications evolved from my doctoral dissertation: A2, A3, A8, A11, A16