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EDUCATION EXPERIENCE

- Sept. 2017– **Doctor of Philosophy**, Xidian University, China
Jun. 2021 Supervisor: Profs. Mengchu Zhou (IEEE/NAI Fellow) & Zhiwu Li (IEEE Fellow)
- Sept. 2014– **Master of Science**, Mathematics, Hohai University, China
Jun. 2017 Supervisor: Prof. Jianbin Yang
- Sept. 2010– **Bachelor of Engineering**, Automation, Hohai University, China
Jun. 2014 Supervisor: Prof. Yuncan Xue
-

RESEARCH EXPERIENCE

- May 2020– **Visiting Ph.D. Student**, Department of Electrical and Computer Engineering,
Nov. 2020 National University of Singapore (NUS), Singapore
Co-advisor: Prof. Shuzhi Sam Ge (IEEE/IFAC Fellow)
- Oct. 2019– **Research Assistant**, School of Computer Science and Engineering,
Apr. 2020 Nanyang Technological University (NTU), Singapore
Co-advisor: Dr. Jun Zhao
- Mar. 2019– **Visiting Ph.D. Student**, Department of Electrical and Computer Engineering,
Jun. 2019 University of Alberta (UA), Canada
Co-advisor: Prof. Witold Pedrycz (IEEE Fellow)
-

PROFESSION EXPERIENCE

- Dec. 2022– **Associate Professor**, School of Artificial Intelligence, OPTics and ElectroNics
Present Northwestern Polytechnical University (NWPUP), China
- Jul. 2021– **Post-doctoral Fellow**, School of Artificial Intelligence, OPTics and ElectroNics
Apr. 2023 Northwestern Polytechnical University (NWPUP), China
Co-advisor: Prof. Xuelong Li (IEEE/ACM/AAAI/IAPR Fellow)
-

RESEARCH INTERESTS

- Information Computation
 - Fuzzy Theory and Its Applications
 - Wavelet Analysis and Its Applications
 - Pattern Recognition and Image Processing
 - 3D Medical Image Analysis
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RESEARCH PROJECTS/PROGRAMS

Jan. 2023– Dec. 2027	Host (1/5) , Grant No. 2022ZD0160604, Amount: 500,000 RMB National Key Research and Development Program of China
May 2023– May 2025	Host (1/1) , Grant No. HZKY20220537, Amount: 50,000 RMB Chunhui Program of Ministry of Education of China
May 2021– Apr. 2023	Host (1/1) , Grant No. BX2021249, Amount: 630,000 RMB China National Postdoctoral Program for Innovative Talents
Jan. 2019– Dec. 2019	Host (1/1) , Grant No. 2018CASTQNJL42, Amount: 50,000 RMB Excellent Chinese and Foreign Youth Exchange Program of the China Association for Science and Technology
Mar. 2022– Dec. 2022	Major Participant (2/4) , Grant No. BYFT-WDZC-22046, Amount: 460,000 RMB Horizontal Projects of Aircraft Strength Research Institute of China
May 2015– Apr. 2016	Major Participant (4/4) , Amount: 10,000 RMB Undergraduate Innovation and Entrepreneurship Training Program of Hohai University

RESEARCH FUNDINGS

Jan. 2024– Dec. 2025	Host (1/4) , Grant No. 12326609, Amount: 1,000,000 RMB National Natural Science Foundation of China, Tianyuan Fund for Mathematics
Jan. 2024– Dec. 2025	Host (1/1) , Grant No. 20230140, Amount: 20,000 RMB Young Talent Fund of Association for Science and Technology in Shaanxi, China
May 2023– Dec. 2024	Host (1/1) , Grant No. 2022-010, Amount: 30,000 RMB Funds for Scientific and Technological Activities of Excellent Overseas Chinese Scholars, Shaanxi Province, China
Apr. 2023– Mar. 2025	Host (1/1) , Grant No. G2023KY0601, Amount: 200,000 RMB Fundamental Research Funds for the Central Universities
Jan. 2023– Dec. 2024	Host (1/1) , Grant No. 62206220, Amount: 200,000 RMB National Natural Science Foundation of China
Oct. 2021– Sept. 2024	Host (1/1) , Grant No. 2021A1515110019, Amount: 100,000 RMB Guangdong Basic and Applied Basic Research Foundation
Nov. 2021– Apr. 2023	Host (1/1) , Grant No. 2021M702678, Amount: 80,000 RMB Fellowship of China Postdoctoral Science Foundation
Jan. 2021– Jun. 2021	Host (1/1) , Amount: 10,000 RMB Funds for the Excellent Dissertations of Top Graduate Students in School of Electro-Mechanical Engineering, Xidian University
Oct. 2019– Nov. 2020	Host (1/1) , Amount: 100,000 RMB Doctoral Students' Short-Term Study Abroad Scholarship Funds, Xidian University

Sept. 2019–
Jul. 2021 **Host (1/1)**, Amount: 100,000 RMB
Excellent Doctoral Dissertations Funds of Xidian University

May 2018–
May 2019 **Host (1/1)**, Amount: 5,000 RMB
Innovation Funds of Xidian University

Oct. 2015–
Oct. 2016 **Host (1/1)**, Grant No. 2015B38014, Amount: 5,000 RMB
Fundamental Research Funds for the Central Universities

Nov. 2011–
Nov. 2012 **Host, (1/1)**, Amount: 400 RMB
Undergraduate Science and Technology Funds of Hohai University

Mar. 2023–
Feb. 2025 **Major Participant (2/5)**, Grant No. 20222058023002, Amount: 200,000 RMB
Aeronautical Science Foundation of China

Jan. 2021–
Dec. 2024 **Major Participant (3/7)**, Grant No. 62076189, Amount: 640,000 RMB
National Natural Science Foundation of China

Jan. 2018–
Dec. 2021 **Major Participant (8/10)**, Grant No. 11771120, Amount: 480,000 RMB
National Natural Science Foundation of China

Jun. 2015–
Jun. 2017 **Major Participant (3/4)**, Grant No. 2015B19514, Amount: 100,000 RMB
Fundamental Research Funds for the Central Universities

EDUCATIONAL PROGRAMS/FUNDINGS

Jan. 2024–
Dec. 2025 **Host (1/4)**, Grant No. Pending, Amount: 15,000 RMB
Education Teaching Reform Project of Northwestern Polytechnical University

Mar. 2023–
Mar. 2025 **Host (1/5)**, Grant No. 2023YMs022, Amount: 10,000 RMB
Degree and Postgraduate Education Research Funds of Northwestern Polytechnical University

Jan. 2023–
Dec. 2023 **Host (1/4)**, Grant No. 23JG0096, Amount: 20,000 RMB
Postgraduate Cultivation Quality Improvement Program of Northwestern Polytechnical University

Jan. 2024–
Dec. 2025 **Major Participant (3/4)**, Grant No. Pending, Amount: 30,000 RMB
Education Teaching Reform Project of Northwestern Polytechnical University

Oct. 2023–
Oct. 2024 **Major Participant (3/4)**, Grant No. Pending, Amount: 50,000 RMB
University-Industry Collaborative Education Program of Ministry of Education

Jan. 2023–
Dec. 2023 **Major Participant (3/3)**, Grant No. 23KC0181, Amount: 20,000 RMB
Postgraduate Cultivation Quality Improvement Program of Northwestern Polytechnical University

Jan 2023–
Dec. 2023 **Instructor**, Grant No. W016801, Amount: 10,000 RMB
“Internet Plus” College Students’ Innovation and Entrepreneurship Seed Program of Northwestern Polytechnical University

PUBLICATIONS (The asterisk * represents the corresponding author)

Textbook

- [1] **Cong Wang**, *Scientific Paper Writing*. Posts & Telecom Press, 2024. (To Be Submitted)

Monographs

- [1] **Cong Wang** and Mengchu Zhou, *Fuzzy Clustering for Image Segmentation: Principles, Techniques, and Implementations*. Springer, 2024. (To Be Submitted)

Book Chapters

- [1] **Cong Wang**, Mengchu Zhou, Witold Pedrycz, and Zhiwu Li, “Noise-estimation-based Fuzzy C-Means clustering for image segmentation,” *Intelligent Image and Video Analytics* (Edited by El-Sayed M. El-Alfy, George Bebis, and Mengchu Zhou), CRC Press, Taylor & Francis Group, Boca Raton, FL, U.S.A., pp. 251–302, 2023. Doi: 10.1201/9781003053262.

Patents

- [1] Yuan Yuan, Mingxin Jin, and **Cong Wang**, “A ground object classification method based on statistical and semantic features for vicinagearth security,” Chinese Invention Patent, Application No. 202311619735.8, Nov. 30, 2023.
- [2] **Cong Wang** and Mingxin Jin, “A remote sensing object classification method based on dual heterogeneous network for vicinagearth security,” Chinese Invention Patent, Application No. 202311623729.X, Nov. 30, 2023.
- [3] Xuelong Li, **Cong Wang**, and Mingyuan Wang, “A feature-preserving-driven scene restoration method for UAV oblique photography,” Chinese Invention Patent, Publication No. CN116309196A, Jun. 23, 2023.
- [4] **Cong Wang** and Xuelong Li, “A multi-strategy processing method for strain anomaly detection of aircraft structures,” Chinese Invention Patent, Publication No. CN116561497A, Aug. 8, 2023.
- [5] **Cong Wang** and Xuelong Li, “A mixed-noise-driven UAV image segmentation method,” Chinese Invention Patent, Publication No. CN116309619A, Jun. 23, 2023.
- [6] **Cong Wang**, Xuelong Li, and Xin Tan, “A segmentation strategy for cardiac MRI image based on mixed noise analysis and its applications,” Chinese Invention Patent, Publication No. CN116309637A, Jun. 23, 2023.

Published Journal Papers

- [1] **Cong Wang**, Mengchu Zhou*, Witold Pedrycz, and Zhiwu Li*, “Comparative study on noise-estimation-based Fuzzy C-Means clustering for image segmentation,” *IEEE Transactions on Cybernetics*, vol. 54, no. 1, pp. 241–253, Jan. 2024. (WOS: 000912825300001, SCI Q1, IF: 19.118, Regular Paper)
- [2] Heng Wang, **Cong Wang**, and Yuan Yuan*, “Asymmetric dual-direction quasi-recursive network for single hyperspectral image super-resolution,” *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 33, no. 11, pp. 6331–6346, Nov. 2023. (WOS: 001093434100010, SCI Q1, IF: 8.4, Regular Paper)
- [3] **Cong Wang**, Witold Pedrycz, Zhiwu Li*, and Mengchu Zhou*, “Kullback-Leibler divergence-based Fuzzy C-Means clustering incorporating morphological reconstruction and wavelet frames for image segmentation,” *IEEE Transactions on Cybernetics*, vol. 52, no. 8, pp. 7612–7623, Aug. 2022. (WOS: 000733503200001, SCI Q1, IF: 19.118, Regular Paper)

- [4] Tailong Jing, **Cong Wang**, Witold Pedrycz, Zhiwu Li*, Giancarlo Succi, and Mengchu Zhou, “Granular models as networks of associations of information granules: A development scheme via augmented principle of justifiable granularity,” *Applied Soft Computing*, vol. 115, p. 108062, Jan. 2022. (WOS: 000736968800002, SCI Q1, IF: 8.263, Regular Paper)
- [5] **Cong Wang**, Witold Pedrycz, Zhiwu Li*, Mengchu Zhou*, and Jun Zhao, “Residual-sparse Fuzzy C-Means clustering incorporating morphological reconstruction and wavelet frame,” *IEEE Transactions on Fuzzy Systems*, vol. 29, no. 12, pp. 3910–3924, Dec. 2021. (WOS: 000724479300032, SCI Q1, IF: 12.253, Full Paper)
- [6] **Cong Wang**, Witold Pedrycz, Zhiwu Li*, Mengchu Zhou*, and Shuzhi Sam Ge, “G-image segmentation: Similarity-preserving Fuzzy C-Means with spatial information constraint in wavelet space,” *IEEE Transactions on Fuzzy Systems*, vol. 29, no. 12, pp. 3887–3898, Dec. 2021. (WOS: 000724479300030, SCI Q1, IF: 12.253, Full Paper)
- [7] **Cong Wang**, Witold Pedrycz, Mengchu Zhou*, and Zhiwu Li*, “Sparse regularization-based Fuzzy C-Means clustering incorporating morphological grayscale reconstruction and wavelet frames,” *IEEE Transactions on Fuzzy Systems*, vol. 29, no. 7, pp. 1826–1840, Jul. 2021. (WOS: 000670553100011, SCI Q1, IF: 12.253, Full Paper)
- [8] **Cong Wang**, Witold Pedrycz, Zhiwu Li*, and Mengchu Zhou*, “Residual-driven Fuzzy C-Means clustering for image segmentation,” *IEEE/CAA Journal of Automatica Sinica*, vol. 8, no. 4, pp. 876–889, Apr. 2021. (WOS: 000628913100012, SCI Q1, IF: 7.847, Regular Paper)
- [9] **Cong Wang**, Ziyue Yan, Witold Pedrycz, Mengchu Zhou*, and Zhiwu Li*, “A weighted fidelity and regularization-based method for mixed or unknown noise removal from images on graphs,” *IEEE Transactions on Image Processing*, vol. 29, no. 1, pp. 5229–5243, Dec. 2020. (WOS: 000522185800001, SCI Q1, IF: 10.856, Regular Paper)
- [10] **Cong Wang**, Witold Pedrycz, Jianbin Yang, Mengchu Zhou*, and Zhiwu Li*, “Wavelet frame-based Fuzzy C-Means clustering for segmenting images on graphs,” *IEEE Transactions on Cybernetics*, vol. 50, no. 9, pp. 3938–3949, Sept. 2020. (WOS: 000562306000010, SCI Q1, IF: 11.448, Regular Paper)
- [11] **Cong Wang***, Jixing Chen, Zhiwu Li, Emad S. Abouel Nasr, and Abdulaziz Mohammed El-Tamimi, “An indicator system for evaluating the development of land-sea coordination systems: A case study of Lianyungang port,” *Ecological Indicators*, vol. 98, pp. 112–120, Mar. 2019. (WOS: 000464891100013, SCI Q1, IF: 4.229, Regular Paper)
- [12] **Cong Wang** and Jianbin Yang*, “Poisson noise removal of images on graphs using tight wavelet frames,” *The Visual Computer*, vol. 34, no. 10, pp. 1357–1369, Oct. 2018. (WOS: 000442204400007, SCI Q3, IF: 1.415, Regular Paper)
- [13] Jianbin Yang* and **Cong Wang**, “A wavelet frame approach for removal of mixed Gaussian and impulse noise on surfaces,” *Inverse Problems and Imaging*, vol. 11, no. 5, pp. 783–798, Oct. 2017. (WOS: 000411945300001, SCI Q1, IF: 1.465, Regular Paper)
- [14] Dongmei Ma and **Cong Wang***, “Removal of mixed Gaussian and impulse noise using data-driven tight frames,” *Journal of Engineering Science and Technology Review*, vol. 11, no. 2, pp. 26–31, 2018. (EI No. 20182405313426)

- [15] **Cong Wang**, Jianbin Yang*, and Ying Deng, “Application of mathematical modeling methods in wind-power prediction,” *Acta Energiæ Solaris Sinica*, vol. 36, no. 5, pp. 1081–1087, May 2015. (EI No. 20153001062255)
- [16] **Cong Wang***, “Data-driven tight frame based image restoration with Poisson noise,” *Information Technology*, vol. 9, pp. 71–75, Sept. 2017.
- [17] Xiaohui Li and **Cong Wang***, “Wavelet frame based nonlocal surface fairing,” *Electronic Design Engineering*, vol. 20, no. 5, pp. 178–181, May 2017.
- [18] Ying Deng and **Cong Wang***, “Applications on maximum power point tracking for photovoltaic off-grid system based on particle swarm optimization algorithm under partial shaded conditions,” *Journal of Nanjing University of Information Science and Technology*, vol. 9, no. 1, pp. 106–112, Jan. 2017.
- [19] Yu Feng and **Cong Wang***, “Research on combination forecasting model in outstanding of deposits forecast,” *Economic Research Guide*, vol. 14, pp. 146–150, Jun. 2018.
- [20] Lijing Fan and **Cong Wang***, “Application of data-driven tight frame in gray image denoising,” *Electronic Design Engineering*, vol. 25, no. 15, pp. 180–183, Aug. 2017.
- [21] Lin Du and **Cong Wang***, “Data-driven tight frame based image restoration,” *Electronic Design Engineering*, vol. 25, no. 22, pp. 178–181, Nov. 2017.

Accepted and To Be Published

- [1] Qing Guo, Hong Song*, **Cong Wang***, Jingfan Fan*, Danni Ai, Yuanjin Gao, Xiaoling Yu*, and Jian Yang, “Segmentation of 3D anatomically diffused tissues in MR images through edge-preserving constrained center-free fuzzy C-means,” *IEEE Transactions on Fuzzy Systems*, **Accepted**, 2024. (SCI Q1, IF: 11.9, Full Paper)
- [2] **Cong Wang**, Xin Tan, Bo Li*, and Mengchu Zhou*, “Noise-estimation-dominated fuzzy segmentation strategy for accurate implantation of implantable cardioverter defibrillators,” *IEEE Transactions on Fuzzy Systems*, **To Be Published**, doi: 10.1109/TFUZZ.2024.3364970. (SCI Q1, IF: 11.9)

Submitted and Under Review

- [1] Heng Wang, **Cong Wang**, and Yuan Yuan*, “Neighbor spectra maintenance and context affinity enhancement for single hyperspectral image super-resolution,” *IEEE Transactions on Geoscience and Remote Sensing*, **Under Review**, 2024. (*Co-first Author*, SCI Q1, IF: 8.2, Regular Paper)
- [2] Heng Wang, **Cong Wang**, and Yuan Yuan*, “Hierarchical context measurement network for single hyperspectral image super-resolution,” *IEEE Transactions on Multimedia*, **Under Review**, 2024. (*Co-first Author*, SCI Q1, IF: 7.3, Regular Paper)
- [3] Mingxin Jin, **Cong Wang**, and Yuan Yuan*, “Dual heterogeneous network for hyperspectral image classification,” *IEEE Transactions on Circuits and Systems for Video Technology*, **Under Review**, 2024. (*Co-first Author*, SCI Q1, IF: 8.4, Regular Paper)
- [4] Mingxin Jin, **Cong Wang**, and Yuan Yuan*, “Statistical texture awareness network for hyperspectral image classification,” *IEEE Transactions on Geoscience and Remote Sensing*, **Under Review**, 2024. (*Co-first Author*, SCI Q1, IF: 8.2, Regular Paper)
- [5] Haoning Li, **Cong Wang**, and Qinghua Huang*, “Employing iterative feature selection in fuzzy rule-based binary classification,” *IEEE Transactions on Fuzzy Systems*, **Under Review**, 2024. (*Co-first Author*, SCI Q1, IF: 11.9, Regular Paper)

- Review**, 2024. (*Co-first Author*, SCI Q1, IF: 11.9, Full Paper)
- [6] Tailong Jing, **Cong Wang***, Witold Pedrycz, Sheng Du, and Zhiwu Li*, “Human-centric fuzzy reinforcement learning policies by particle swarm optimization,” *Expert Systems with Applications*, **Under Review**, 2024. (SCI Q1, IF: 8.5, Regular Paper)
- [7] Jianbin Yang, **Cong Wang***, Hui Hou, Mingyuan Wang, and Xuelong Li, “Feature-driven variational mesh denoising,” *IEEE Transactions on Circuits and Systems for Video Technology*, **Submitted**, 2024. (SCI Q1, IF: 8.4, Regular Paper)
- [8] Ke Li, Di Wang, Haojie Xu, Haodi Zhong, and **Cong Wang***, “Language-guided progressive attention for visual grounding in remote sensing images,” *IEEE Transactions on Geoscience and Remote Sensing*, **Under Review**, 2024. (SCI Q1, IF: 8.2, Regular Paper)
- [9] Jian Yang, **Cong Wang***, and Xiaobin Ren, “Robust image registration via consistent topology sort and vision inspection,” *IEEE Transactions on Systems, Man and Cybernetics: Systems*, **Under Review**, 2024. (SCI Q1, IF: 8.7)
- [10] Qinghua Huang, Hao Xu, Haoning Li, and **Cong Wang***, “Interactive learning between features and classifiers by constructing a nested evolutionary framework,” *IEEE Transactions on Neural Networks and Learning Systems*, **Under Review**, 2024. (SCI Q1, IF: 10.4, Regular Paper)
- [11] Tailong Jing, **Cong Wang***, Witold Pedrycz, Giancarlo Succi, and Zhiwu Li*, “Time series classification based on image transformation and wavelet convolutional neural networks,” *Applied Soft Computing*, **Under Review**, 2024. (SCI Q1, IF: 8.7, Regular Paper)
- [12] **Cong Wang**, Xin Tan, Qinghua Huang*, and Xuelong Li*, “Fast and robust structural health monitoring,” *IEEE Transactions on Instrumentation and Measurement*, **Submitted**, 2024. (SCI Q1, IF: 5.6, Regular Paper)
- [13] **Cong Wang**, Mengchu Zhou*, Witold Pedrycz, Zhiwu Li, and Xuelong Li*, “G-image segmentation: Partition-sparse Fuzzy C-Means clustering incorporating spatial information and Graph wavelet,” *IEEE Transactions on Cybernetics*, **Under Review**, 2023. (SCI Q1, IF: 11.8, Regular Paper)
- [14] **Cong Wang**, Junxi Lin, and Xuelong Li*, “Structural-equation-modeling-based indicator systems for image quality assessment,” *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **Under Review**, 2023. (SCI Q1, IF: 23.6, Regular Paper)
- [15] **Cong Wang**, Guodong Sun, Cailing Wang, Zixuan Gao, and Hongwei Wang*, “Monte Carlo-based restoration of images degraded by atmospheric turbulence,” *IEEE Transactions on Systems, Man and Cybernetics: Systems*, **Under Review**, 2023. (SCI Q1, IF: 8.7)

To Be Submitted

- [1] **Cong Wang**, Mengchu Zhou, Witold Pedrycz, Zhiwu Li, and Xuelong Li*, “G-image segmentation: A noise-estimation-driven Fuzzy C-Means clustering framework,” *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **To Be Submitted**, 2024. (SCI Q1, IF: 23.6, Regular Paper)
- [2] **Cong Wang**, Mengchu Zhou, Witold Pedrycz, Zhiwu Li, and Xuelong Li*, “Graph bilateral filtering,” *IEEE Transactions on Image Processing*, **To Be Submitted**, 2024. (SCI Q1, IF:

10.6, Regular Paper)

- [3] **Cong Wang**, Mengchu Zhou, Witold Pedrycz, and Xuelong Li*, “Residual-driven Fuzzy C-Means clustering for segmenting images with Poisson noise,” *IEEE Transactions on Fuzzy Systems*, **To Be Submitted**, 2024. (SCI Q1, IF: 11.9, Full Paper)
- [4] **Cong Wang**, Mingyuan Wang, and Xuelong Li*, “Information capacity: An indicator for information output assessment,” *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **To Be Submitted**, 2024. (SCI Q1, IF: 8.7, Regular Paper)
- [5] **Cong Wang**, Mengchu Zhou, Witold Pedrycz, Zhiwu Li, and Xuelong Li*, “AFCM: Automatic Fuzzy C-Means clustering for noisy image segmentation,” *IEEE Transactions on Fuzzy Systems*, **To Be Submitted**, 2024. (SCI Q1, IF: 11.9, Full Paper)

International Conference Proceedings Papers

- [1] Xin Tan and **Cong Wang***, “Re-enhancing fuzzy clustering for medical image segmentation,” in *Proceedings of 2023 IEEE International Conference on Information, Communication and Networks*, Xi’an, China, 2023, pp. 1–5. (**Best Student Paper**)
- [2] Xin Tan and **Cong Wang***, “Accurate implantation estimation of implantable cardioverter defibrillators via three-stage segmentation strategy,” in *Proceedings of IEEE International Conference on Networking, Sensing and Control*, Shanghai, China, 2022, pp. 1–6. (EI: 22512662, **Oral Presentation**)
- [3] Jianbin Yang*, Enlin Zhang, and **Cong Wang**, “Color image segmentation via wavelet frames,” in *Proceedings of the 2019 IEEE 4th International Conference on Signal and Image Processing*, Wuxi, China, 2019, pp. 975–979. (EI: 8868564)
- [4] Jianbin Yang* and **Cong Wang**, “A developed Fuzzy C-Means algorithm for mesh segmentation,” in *Proceedings of the 2018 11th International Congress on Image and Signal Processing, BioMedical Engineering and Informatics*, Beijing, China, 2018, pp. 1–5. (EI: 8633099)
- [5] Jianyong Zhang* and **Cong Wang**, “Application of ARMA model in ultra-short term prediction of wind power,” in *Proceedings of 2013 International Conference on Computer Sciences and Applications*, Wuhan, China, 2013, pp. 361–364. (EI No. 20143017964633)

SELECTED HONORS & REWARDS

- **Shaanxi Excellent Doctoral Dissertation Award**, China, Nov. 2023
- **Best Young Scientist**, 2023 IEEE the 11th International Conference on Information, Communication and Networks, Xi’an, China, Aug. 10–13, 2023.
- **Outstanding Contribution Award**, 2023 IEEE the 11th International Conference on Information, Communication and Networks, Xi’an, China, Aug. 10–13, 2023.
- **Best Student Paper**, 2023 IEEE the 11th International Conference on Information, Communication and Networks, Xi’an, China, Aug. 10–13, 2023.
- **Excellent Doctoral Dissertation Award**, Xidian University, China, Apr. 2023
- **Excellent Doctoral Dissertation Award**, China Society of Image and Graphics, Nov. 2022
- **First Prize** in the 1st Teachers’ Teaching Competition, School of Artificial Intelligence, Optics and ElectroNics, Northwestern Polytechnical University, China, Sept. 2022
- **Postgraduate “Presidential Scholarship”**, Xidian University, China, Dec. 2020

- *National Scholarship*, State Education Ministry, China, Dec. 2019
 - *Outstanding Graduates Prize*, Hohai University, China, Jun. 2017
 - *Merit Student*, Jiangsu Province, China, May 2017
 - *National Scholarship*, State Education Ministry, China, Dec. 2016
 - *First Prize* in the 2014's Young Academic Forum, Hohai University, China, Jan. 2015
 - *Second Prize* in the 2011's National Undergraduate Mathematic Modeling Competition, China, Nov. 2011
-

PROFESSIONAL SKILLS

- Hardware Description Languages: VHDL, Verilog
 - High-level Languages: C, C++
 - Algorithm Development Environments: Python, Matlab, Mathematica
 - College English Test Band 6
 - College English Test Band 4
 - Jiangsu Computer Rank Examination 3
 - Jiangsu Computer Rank Examination 2
 - Literature Searching Online
-

PROFESSIONAL AFFILIATIONS

- Member, Institute of Electrical and Electronics Engineers (IEEE)
 - Member, Chinese Society of Image and Graphics (CSIG)
 - Member, China Computer Federation (CCF)
 - Member, Chinese Association for Artificial Intelligence (CAAI)
 - Member, China Society for Industrial and Applied Mathematics (CSIAM)
 - Member, Chinese Association of Automation (CAA)
 - Secretary General of Shaanxi Vicinagearth Security Society, Sept. 2023–Sept. 2027
 - Peer Reviewer of National Natural Science Foundation of China, Feb. 2023–Present
 - Technology Expert in Xi'an, China, May 2022–May 2025
-

PROFESSIONAL ACTIVITIES

Associate Editor

- IEEE Transactions on Fuzzy Systems, Jan. 1, 2024–Dec. 12, 2024.
- 2023 IEEE International Conference on Systems, Man and Cybernetics, Maui, Hawaii, USA, Oct. 1–4, 2023.
- 2022 IEEE International Conference on Systems, Man and Cybernetics, Prague, Czech Republic, Oct. 9–12, 2022.

Editorial Board Member

- Advances in Networks, Mar. 28, 2023–Mar. 28, 2025.
- Optoelectronics Reports, Jun. 15, 2023–Present.
- Computer Science and Technology, May 18, 2023–May 17, 2025.

Section Editor

- Medical Imaging Process & Technology, Apr. 21, 2023–Present.

- Optoelectronics Reports, Jun. 7, 2023–Present.

Program Committee Chair

- 2024 IEEE the 12th International Conference on Information, Communication and Networks, Guilin, China, Aug. 10–13, 2024.
- 2023 IEEE the 11th International Conference on Information, Communication and Networks, Xi'an, China, Aug. 17–20, 2023.

Publication Chair

- 2023 International Conference on Cyber-physical Social Intelligence, Xi'an, China, Oct. 20–23, 2023.

Forum Chair

- 2023 Chinese Conference on Biometric Recognition, Xuzhou, China, Dec. 1–3, 2023.

Technical Committee Member

- 2024 2nd Asia Conference on Artificial Intelligence, Machine Learning and Robotics, Singapore, Sept. 6–8, 2024.
- 2024 The 12th International Conference on Information Technology and Science, Phuket Island, Thailand, Jun. 19–21, 2024.
- 2024 International Conference on Computing, Machine Learning and Data Science, Singapore, Apr. 12–14, 2024.
- The 4th International Conference on Artificial Intelligence Technology, Macau, China, Dec. 13–15, 2023.
- 2022 International Symposium on Computing and Artificial Intelligence, Beijing, China, Dec. 16–18, 2022.

Program Committee Member

- 2024 IEEE International Conference on Blockchain, Copenhagen, Denmark, Aug. 19–22, 2024.
- 2024 International Conference on Advanced Robotics, Automation Engineering and Machine Learning, Hangzhou, China, Jun. 28–30, 2024.
- 2024 International Conference on Optical Communication and Computer Engineering, Beijing, China, Jun. 22–23, 2024.
- The 38th AAAI Conference on Artificial Intelligence, Vancouver, British Columbia, Canada, Feb. 20–27, 2024.
- 2023 IEEE International Conference on Blockchain, Ocean Flower Island, Hainan, China, Dec. 15–18, 2023.
- 2023 IEEE International Conference on Networking, Sensing and Control, Marseille, France, Oct. 25–27, 2023
- 2023 International Conference on Cyber-physical Social Intelligence, Xi'an, China, Oct. 20–23, 2023.
- 2022 IEEE International Conference on Networking, Sensing and Control, Shanghai, China, Dec. 15–18, 2022.
- 2021 International Conference on Artificial Intelligence and Big Data in Digital Era, Ho Chi Minh City, Vietnam, Dec. 18–19, 2021.

Invited Speaker

- The 2nd International Conference on Materials Science and Nanotechnology, Paris, France, Mar. 25–27, 2024.
- 2024 International Conference on Renewable Energy and Sustainable Energy, Paris, France, Mar. 25–27, 2024.
- Aviation experts Forum, Xi'an, China, Dec. 29, 2023.
- Expert lecture series on “Uncertain Artificial Intelligence”, Shenzhen, China, Dec. 16, 2023.
- 2023 Chinese Conference on Biometric Recognition, Xuzhou, China, Dec. 1–3, 2023.
- CSIG Excellent Doctoral Forum, Xi'an, China, Jun. 17, 2023.
- The 3rd International Conference on Computers and Artificial Intelligence Technology, Quzhou, Zhejiang, China, Nov. 4–6, 2022.
- The 2nd Workshop for Sino-UK to Promote Development and Application of Artificial Intelligence, University of Leicester, Dec. 10, 2021.

Journal Reviewer

- ACM Computing Surveys
- ACM Transactions on Internet Technology
- Anais da Academia Brasileira de Ciências
- Applied Mathematical Modelling
- Applied Soft Computing
- Circuits, Systems, and Signal Processing
- Digital Communications and Networks
- Ecological Indicators
- Electronics
- Engineering Applications of Artificial Intelligence
- ETRI Journal
- Expert Systems
- Frontiers in Environmental Science
- Granular Computing
- Heritage Science
- IEEE Access
- IEEE Internet of Things Journal
- IEEE Photonics Journal
- IEEE Systems Journal
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Consumer Electronics
- IEEE Transactions on Cybernetics
- IEEE Transactions on Fuzzy Systems
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Intelligent Transportation Systems
- IEEE Transactions on Knowledge and Data Engineering
- IEEE Transactions on Medical Imaging
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Pattern Analysis and Machine Intelligence

- IEEE Transactions on Power Delivery
- IEEE Transactions on Systems, Man and Cybernetics: Systems
- IEEE/CAA Journal of Automatica Sinica
- IET Image Processing
- Imaging Science Journal
- International Journal of Communication Systems
- Journal of Classification
- Journal of Experimental & Theoretical Artificial Intelligence
- Journal of Infrastructure, Policy and Development
- Journal of Risk and Reliability
- Journal of Shanghai University (Natural Science Edition)
- Mechanical Systems and Signal Processing
- Multimedia Tools and Applications
- Neural Computing and Applications
- Pattern Analysis and Applications

Conference Reviewer

- 2023 the 17th Chinese Conference on Biometric Recognition
- 2023 the 38th AAAI Conference on Artificial Intelligence
- 2019 IEEE the 15th International Conference on Automation Science and Engineering
- 2020 IEEE the 16th International Conference on Automation Science and Engineering
- 2021 IEEE the 17th International Conference on Automation Science and Engineering
- 2023 IEEE International Conference on Blockchain
- 2022 IEEE International Conference on Robotics and Automation
- 2023 IEEE International Conference on Robotics and Automation
- 2020 IEEE International Conference on Systems, Man and Cybernetics
- 2021 IEEE International Conference on Systems, Man and Cybernetics
- 2022 IEEE International Conference on Systems, Man and Cybernetics
- 2023 IEEE International Conference on Systems, Man and Cybernetics
- 2021 International Conference on Artificial Intelligence and Big Data in Digital Era

ACADEMIC ACTIVITIES

- **Conferee:** The 19th CSIG Young Scientists Conference, Guangzhou, China, Dec. 28–31, 2023.
- **Conferee:** The IEEE Leadership Seminar, Xi'an, China, Oct. 27–30, 2023
- **Conferee:** The 6th Chinese Conference on Pattern Recognition and Computer Vision, Xiamen, China, Oct. 13–15, 2023.
- **Conferee:** 2023 Cognitive and Intelligent Computing Summit Forum, Xi'an, China, Oct. 13–15, 2023.
- **Conferee:** The 12th International Conference on Image and Graphics, Nanjing, China, Sept. 22–24, 2023.
- **Conferee:** The 1st Vicinagearth Security Symposium and Advanced Discipline Forum on Artificial Intelligence, Xi'an, China, Aug. 22–23, 2023.

- **Conferee:** 2023 IEEE International Conference on Information, Communication and Networks, Xi'an, China, Aug. 17–20, 2023.
 - **Conferee:** PKU Symposium on Applied Mathematics for Graduate Students, Beijing, China, Jul. 24–Aug. 4, 2023.
 - **Conferee:** The 4th National Big Data and Artificial Intelligence Congress, Guiyang, China, Jul. 7–9, 2023.
 - **Conferee:** 2023 IJCAI Young Elite Symposium, Shanghai, China, Jul. 4–6, 2023.
 - **Conferee:** 2023 Vision and Learning Seminar, Wuxi, China, Jun. 10–12, 2023.
 - **Conferee:** 2023 Beijing Academy of Artificial Intelligence Conference, Beijing, China, Jun. 9–10, 2023.
 - **Conferee:** 2023 Chinese Congress on Image and Graphics, Suzhou, China, May 11–14, 2023.
 - **Conferee:** The 18th CSIG Young Scientists Conference, Changsha, China, Apr. 22–24, 2023.
 - **Conferee:** 2023 Pujiang Innovation Forum, Shanghai, China, Apr. 1–2, 2023.
 - **Conferee:** The 5th Frontier Forum on China National Postdoctoral Program for Innovative Talents, Changsha, China, Mar. 17–19, 2023.
 - **Conferee:** The 4th China National Postdoctoral Forum for Digital Technology Development, Zhijiang Lab, Hangzhou, China, Nov. 23–24, 2022.
 - **Conferee:** XDU Workshop on Brain Computing and Deep Learning of Big Data, Xidian University, Xi'an, China, Oct. 14–16, 2016.
 - **Conferee:** PKU Workshop on Mathematics in Imaging Science and Data Analysis, Peking University, Beijing, China, Aug. 4–5, 2016
 - **Conferee:** NKU Workshop on Wavelet Analysis and Its applications, Nankai University, Tianjin, China, Apr. 22–24, 2016.
 - **Conferee:** Open Class: Supervisory Control of Discrete Event Systems, Xidian University, Speaker: Prof. W. M. Wonham, Apr. 13–May 7, 2015.
 - **Conferee:** 2013 International Conference on Computer Sciences and Applications, Wuhan, China, Dec. 14–15, 2013.
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