Jing, Yu
Ph.D., Associate Professor
Gender: Female
Affiliation: School of Information Engineering,
Minzu University of China
Mailing Address: No. 27, Zhongguancun South Road,
Haidian District, Beijing, China
Cell: +86-15810064651
E-mail: jing.yu@muc.edu.cn

Professional Profile

Jing Yu received her Ph.D. in Computer Science from the University of Chinese Academy of Sciences, Beijing, China. She is now an associate professor at School of Information Engineering, Minzu Univerisity, Beijing, China. She has published **over 70 academic papers** in artificial intelligence (AI) Security and Cross-modal AI, with more than 30 of these papers featured in top journals/conferences. She has received 4 paper awards at top international conferences. Her notable academic roles include serving as a general chair of the 7th International Conference on Application Intelligence and Blochchain Security (AIBlock 2025), a program chair of the 6th and 7th ACM International Symposium on Blockchain and Secure Critical Infrastructure (BSCI 2023, BSCI 2024), an associate editor of top journal Blockchains and journal Cyber Security and Data Governance, an academic committee member for CCF Young Computer Scientists Engineers Forum (YOCSEF, 2022-2025) and several other prestigious academic and professional associations. Jing Yu has been recognized with significant awards in her field, including the Major Scientific and Technological Progress Award from the Chinese Academy of Sciences in 2016. She has substantially contributed to AI security and cross-modal AI, focusing on large model security, cross-modal analysis, and network behavior detection. Her work experience includes significant roles at the Institute of Information Engineering, Chinese Academy of Sciences, where she has progressed from an Intern Research Fellow to an Associate Research Fellow. She has several years working experience at global technology companies, e.g., Intel, Microsoft, and Samsung. Jing Yu's research interests are deeply rooted in AI, i.e., cybersecurity and cross-modal AI. Her expertise extends to leading and participating in major national projects, showcasing her contributions in cutting-edge technology research and development.

Recent Grants, Honors Awards

2025	**Beijing Science and Technology New Star:** Supported by Beijing Nova Program.
2025	**Best Paper Award:** Awarded by the 21th EAI International Conference on Security and Privacy in Communication Networks (SecureComm 2025).
2025	**Best Student Paper Award:** Awarded by the 19th International Conference on Wireless Artificial Intelligent Computing Systems and Applications (WASA 2025).
2025	**Best Paper Award:** Awarded by the 11th IEEE International Conference on Big Data Security on Cloud (BigDataSecurity 2025).
2024	**Best Paper Award:** Awarded by the 17th International Conference on Knowledge Science, Engineering and Management (KSEM 2024).
2023	**Early Career Award:** Awarded by the IEEE Computer Society Smart Computing Special Technical Community (SCSTC).
2022	**CCF Distinguished Keynote Speaker Award:** Ranked 50 out of 1346 candidates offered by CCF (China Computer Federation) in 2022.

2022	**CCF Technology Public Welfare Annual Case Award.**
2021	**VALSE 2021 Best Paper Award:** Recognized at the Vision and Learning Young Scholars Seminar (VALSE 2021).
2021	**First Prize in Speech Contest:** Celebrating the 100th Anniversary of the Founding of the Communist Party at the Institute of Information Engineering, Chinese Academy of Sciences.
2020	**Outstanding Course Award at UCAS:** Awarded by the University of Chinese Academy of Sciences for excellence in cybersecurity education.
2019	**Outstanding Employee Award:** Institute of Information Engineering.
2017	**Major Scientific and Technological Progress Award:** Institute of Information Engineering, Chinese Academy of Sciences.
2017	**Outstanding Communist Party Member Award:** Institute of Information Engineering, Chinese Academy of Sciences.
2017	**Special Prize in Speech Contest:** Commemorating the 96th Anniversary of the Founding of the Communist Party.
2016	**Outstanding Employee Award:** Institute of Information Engineering, Chinese Academy of Sciences.
2015	**Team Building Award:** Institute of Information Engineering.
2014	**Team Building Award:** Institute of Information Engineering.
2012-2013	**Excellence in Science and Innovation Project:** Awarded by Beihang University.
2011	**Outstanding Graduate of Beijing Award:** A provincial level award for recognizing top graduates.
2009	**Champion and Best Debater:** Beijing University Debate Competition.
2007-2011	**Multiple Scholarships:** Received First-Class Scholarships thrice and National Inspirational Scholarship once at Central University for Nationalities.
2007-2011	**Multiple Honors:** Recognized as an "Outstanding Cadre" and "Meritorious Student" at Minzu University.

Work Experience

2024-current	School of Information Engineering, Minzu University of China, Associate Professor
2021-2024	Institute of Information Engineering, Chinese Academy of Sciences, Associate Professor
2016-2021	Institute of Information Engineering, Chinese Academy of Sciences, Assistant Professor
2014-2016	Institute of Information Engineering, Chinese Academy of Sciences, Lecturer
2013	Intel China Research Institute, Multimedia Group, Research Fellow (part-time)
2012-2013	Microsoft Asia Research Institute, Media Computing Group, Research Fellow (part-time)
2012	Samsung China Communication Research Institute, Multimedia Group, Research Fellow (part-time)

Education

2016-2019	PH.D. in Computer Science, University of Chinese Academy of Sciences, China (supervised by Dr. Yue Hu)
2011-2014	MASTER of Science, Beihang University, Beijing, China (supervised by Dr. Zengchang Qin)
2007-2011	BACHELOR of Engineering in Information Engineering, Minzu University of China, Beijing, China

Publications

Books

2024 [B2] K. Gai, J. Yu, and L. Zhu. *Introduction to Cybersecurity in Internet of Things (1st edition)*, CRC Press, 2024, ISBN-10: 1032690399.

2015 [B1] J. Yu, Z. Qin, and T. Wan. "Topic Correlations of Cross-Modal Multimedia Information Retrieval" in *Multimedia Retrieval - Perspectives and Challenges*, Sciencegate Publisher, 2015. DOI: 10.15579/gcsr.vol4.ch3.

PARTIAL LIST OF CONFERENCE PAPERS

2025 [C51] Yuanmin Tang, **Jing Yu*** (Corresponding Author), Keke Gai, Jiamin Zhuang, Gang Xiong, Gaopeng Gou, Qi Wu. "Missing Target-Relevant Information Prediction for Accurate Zero-Shot Composed Image Retrieval." The 42th IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025 (CCF-A).

[C50] Keke Gai, Dongjue Wang, **Jing Yu*** (Corresponding Author), Mohan Wang, Liehuang Zhu, Qi Wu. "MFL-Owner: Ownership Protection for Multi-modal Federated Learning via Orthogonal Transform Watermark." The 39th AAAI Conference on Artificial Intelligence (AAAI), 2025 (CCF-A).

[C49] Lei Liangqi, Keke Gai, **Jing Yu*** (Corresponding Author), Liehuang Zhu, Qi Wu. "Secure and Efficient Watermarking for Latent Diffusion Models in Model Distribution Scenarios." The 34th International Joint Conference on Artificial Intelligence (IJCAI), 2025 (CCF-A).

[C48] Yuanmin Tang, Jue Zhang, Xiaoting Qin, **Jing Yu**, Gaopeng Gou, Gang Xiong, Qingwei Lin, Saravan Rajmohan, Dongmei Zhang, Qi Wu. "Reason-before-Retrieve: One-Stage Reflective Chain-of-Thoughts for Training-Free Zero-Shot Composed Image Retrieval." The 42th IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025 (CCF-A).

[C47] Xiangyan Qu, Gaopeng Gou, Jiamin Zhuang, **Jing Yu**, Kun Song, Qihao Wang, Yili Li, Gang Xiong. "ProAPO: Progressively Automatic Prompt Optimization for Visual Classification." The 42th IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2025 (CCF-A).

[C46] Dongjue Wang, Keke Gai, **Jing Yu*** (Corresponding Author), An Wang, Zhijing Cao, Liehuang Zhu. PPCM-Fed: Privacy-Preserving Cross-Modal Federated Learning in IoT. The 21th EAI International Conference on Security and Privacy in Communication Networks (SecureComm), 2025 (Best Paper Award, CCF-C).

[C45] Jing Qi, An Wang, Keke Gai, **Jing Yu*** (Corresponding Author), Liehuang Zhu. "Intelligent Re-encryption and Commitment-Driven Dynamic Data Sharing." The 19th International Conference on Wireless Artificial Intelligent Computing Systems and Applications (WASA), 2025 (Best Student Paper Award, CCF-C).

[C44] Yuqing Zhang, Keke Gai, **Jing Yu*** (Corresponding Author) and Kai Ding. "Relationship Sharing-based Trustworthy Verifiable Multi-Party Verification in Decentralized Identity." The 11th IEEE International Conference on Big Data Security on Cloud (IEEE BigDataSecurity), 2025 (Best Paper Award).

[C43] Jiamin Zhuang, **Jing Yu*** (Corresponding Author), Xiangyan Qu, Yuanmin Tang, Gaopeng Gou, Gang Xiong, Qi Wu. "Soft Multi-view Representation Learning for Disambiguating Text-Based Person Retrieval." The 19th International Conference on Wireless Artificial Intelligent Computing Systems and Applications (WASA), 2025 (CCF-C).

[C42] Mohan Wang, Keke Gai, **Jing Yu**, Shuo Wang, Zhengkang Fang, Jianbo Gao. "Differentially Private Vertical Federated Learning with Dual-Sparsification." The 19th Inter-

national Conference on Wireless Artificial Intelligent Computing Systems and Applications (WASA), 2025 (CCF-C).

2024   [C41] Shuo Wang, **Jing Yu*** (Co-first Author), Keke Gai, Liehuang Zhu. "ReVFed: Representation-Based Privacy-Preserving Vertical Federated Learning with Heterogeneous Models." International Conference on Knowledge Science, Engineering and Management (KSEM 2024) (Best Paper Award, CCF-C).

[C40] Xiangyan Qu, **Jing Yu*** (Corresponding Author), Keke Gai, Jiamin Zhuang, Yuanmin Tang, Gang Xiong, Gaopeng Gou, Qi Wu. "Visual-Semantic Decomposition and Partial Alignment for Document-based Zero-Shot Learning." the 32nd ACM Multimedia Conference (ACM MM), 2024 (CCF-A).

[C39] Yili Li, **Jing Yu*** (Corresponding Author), Keke Gai, Bang Liu, Gang Xiong, Qi Wu. "T2VIndexer: A Generative Video Indexer for Efficient Text-Video Retrieval." The 32nd ACM Multimedia Conference (ACM MM), 2024 (CCF-A).

[C38] Yuanmin Tang, **Jing Yu*** (Corresponding Author), Keke Gai, Jamin Zhuang, Gang Xiong, Yue Hu, Qi Wu. "Context-I2W: Mapping Images to Context-dependent Words for Accurate Zero-Shot Composed Image Retrieval." The Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI), 2024 (CCF-A).

[C37] Yili Li, **Jing Yu*** (Corresponding Author), Keke Gai, Gang Xiong. "IIU: Independent Inference Units for Knowledge-Based Visual Question Answering." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C36] Shufen Fang, Keke Gai, **Jing Yu*** (Corresponding Author). "A Joint Client-Server Watermarking Framework for Federated Learning." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C35] Haochen Liang, Yunwei Guo, **Jing Yu*** (Corresponding Author), Hao Dong, Keke Gai. "KDTSS: A Blockchain-Based Scheme for Knowledge Data Traceability and Secure Sharing." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C34] Mengjie Guo, Keke Gai, **Jing Yu*** (Corresponding Author). "Adversarial Examples for Preventing Diffusion Models from Malicious Image Edition." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C33] Zhengkang Fang, Keke Gai, **Jing Yu*** (Corresponding Author), Yihang Wei, Zhentao Wei, Weilin Chan. "KEEN: Knowledge Graph-Enabled Governance System for Biological Assets." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C32] Hao Dong, Haochen Liang, **Jing Yu*** (Corresponding Author), Keke Gai. "DICES: Diffusion-Based Contrastive Learning with Knowledge Graphs for Recommendation." International Conference on Knowledge Science, Engineering and Management (KSEM), 2024 (CCF-C).

[C31] Zhitong Zhu, **Jing Yu*** (Corresponding Author), Keke Gai, Jiamin Zhuang, Gaopeng Gou, Gang Xiong. "Flexible Semantic Watermarking for Robust Diffusion Model Detection and Tracing." The 6th ACM International Conference on Multimedia in Asia (MMAsia), 2024 (CCF-C).

[C30] Zhengkang Fang,**Jing Yu*** (Corresponding Author), Shufen Fang, Shuo Wang, Weilin Chan, Zexin Gao, Keke Gai. "A Trustworthy Biological Assets Governance System Using Decentralized Identity." The 11th IEEE International Conference on Cyber Security and Cloud Computing (CSCloud), 2024.

[C29] Yaming Yang, Defu Cao, Ming Zeng, **Jing Yu**, Xiang Ren, Yunhai Tong, Yujing Wang. "Collaborative Multi-Task Representation for Natural Language Understanding." International Joint Conference on Neural Networks (IJCNN), 2024 (CCF-C).

2023   [C28] Zhiqi Lei, Keke Gai, **Jing Yu**, Liehuang Zhu, Kim-Kwang Raymond Choo. "Efficiency-Enhanced Blockchain-Based Client Selection in Heterogeneous Federated Learning." The

Sixth IEEE International Conference on Blockchain, 2023.

[C27] Shuo Wang, Keke Gai, **Jing Yu**, Liehuang Zhu. "BDVFL: Blockchain-based Decentralized Vertical Federated Learning." The 23rd IEEE Internationa Conference on Data Mining (ICDM), 2023 (CCF-B).

2022   [C26] Yang Ding, **Jing Yu*** (Corresponding Author), Bang Liu, Yue Hu, Mingxin Cui, Qi Wu. "MuKEA: Multimodal Knowledge Extraction and Accumulation for Knowledge-based Visual Question Answering." IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR), 2022 (CCF-A).

2022   [C25] Xinjie Lin, Gang Xiong, Gaopeng Gou, Junzheng Shi, **Jing Yu*** (Corresponding Author). "ET-BERT: A Contextualized Datagram Representation with Pre-training Transformers for Encrypted Traffic Classification." ACM Web Conference (WWW), 2022 (CCF-A).

[C24] Yongxiu Xu, Chuan Zhou, Heyan Huang, **Jing Yu**, Yue Hu. "WLinker: Modeling Relational Triplet Extraction as Word Linking." IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022 (CCF-B).

2021   [C23] **Jing Yu*** (Corresponding Author), Yuan, Chai, Yujing Wang, Yue Hu, Qi Wu. "CogTree: Cognition Tree Loss for Unbiased Scene Graph Generation." International Joint Conferences on Artificial Intelligence (IJCAI), 2021 (CCF-A).

[C22] Yujing Wang, Yaming Yang, Jianggang Bai, Mingliang Zhang, Jing Bai, **Jing Yu**, Gao Huang. "Evolving Attention with Residual Convolutions." ICML, 2021 (CCF-A).

[C21] Yajing Sun, Yue Hu, **Jing Yu**, Yuqiang Xie. "History-adaption knowledge incorporation mechanism for multi-turn dialogue system." the Thirty-fifth AAAI Conference on Artificial Intelligence (AAAI), 2021 (CCF-A).

[C20] Wei Peng, Yue Hu, **Jing Yu**, Luxi Xing, Yuqiang Xie. "MCR-NET: A Multi-Step Co-Interactive Relation Network for Unanswerable Questions on Machine Reading Comprehension." IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2021 (CCF-B).

[C19] Jiangang Bai, Yujing Wang, Yiren Chen, Yaming Yang, Jing Bai, **Jing Yu**, Yunhai Tong. "Syntax-BERT: Improving Pre-trained Transformers with Syntax Trees." EACL, 2021 (CCF-C).

2020   [C18] Zihao Zhu, **Jing Yu*** (Equal Contribution, Corresponding Author), Yujing Wang, Yue Hu, Qi Wu, et al. "Mucko: Multi-Layer Cross-Modal Knowledge Reasoning for Fact-based Visual Question Answering." International Joint Conferences on Artificial Intelligence (IJCAI), 2020 (CCF-A).

[C17] Xiaoze Jiang*, **Jing Yu*** (Equal Contribution, Corresponding Author), Xingxing Zhang, Yue Hu, Qi Wu, et al. "DAM: Deliberation, Abandon, and Memory Networks for Generating Detailed and Non-repetitive Responses in Visual Dialogue." International Joint Conferences on Artificial Intelligence (IJCAI), 2020 (CCF-A).

[C16] Xiaoze Jiang, **Jing Yu*** (Corresponding Author), Zengchang Qin, Yingying Zhuang, Xingxing Zhang, Qi Wu. "Deep Visual Understanding Like Humans: An Adaptive Dual Encoding Model for Visual Dialogue." the Thirty-forth AAAI Conference on Artificial Intelligence (AAAI), 2020 (CCF-A).

[C15] Xiaoze Jiang, Siyi Du, Zengchang Qin, Yajing Sun, **Jing Yu**. "KBGN: Knowledge-Bridge Graph Network for Adaptive Vision-Text Reasoning in Visual Dialogue." ACM MM, 2020 (CCF-A).

[C14] Yajing Sun, Yong Shan, Chengguang Tang, Yue Hu, Yinpeng Dai, **Jing Yu**, Jian Sun. "Unsupervised Learning of Deterministic Dialogue Structure with Edge-Enhanced Graph Auto-Encoder." the Thirty-forth AAAI Conference on Artificial Intelligence (AAAI), 2020 (CCF-A).

[C13] Luxi Xing, Yue Hu, **Jing Yu**, Yuqiang Xie, Wei Peng. "Coarse-to-Careful: Seeking Semantic-Related Knowledge for Open-Domain Commonsense Question Answering." IEEE

International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2020 (CCF-B).

[C12] Wei Peng, Yue Hu, Luxi Xing, Yuqiang Xie, **Jing Yu**, Yajing Sun. "Bi-directional Cognitive Thinking Network for Machine Reading Comprehension." International Conference on Computational Linguistics (COLING), 2020 (CCF-B).

[C11] Zhuoqian Yang, Zengchang Qin, **Jing Yu**, Tao Wan. "Prior Visual Relationship For Visual Question Answering." IEEE International Conference on Image Processing (ICIP), 2020 (CCF-C).

2019   [C10] Jingjing Guo, **Jing Yu*** (Corresponding Author), Yuhang Lu, Yue Hu, Yanbing Liu. "2D-Convolution based Feature Fusion for Cross-Modal Correlation Learning." International Conference on Computational Science (ICCS), 2019.

[C9] **Jing Yu**, Chenghao Yang, Zengchang Qin, Zhuoqian Yang, Yue Hu. "Semantic Modeling of Textual Relationships in Cross-modal Retrieval." International Conference on Knowledge Science, Engineering and Management (KSEM), 2019 (CCF-C).

[C8] Yiming Xu, **Jing Yu*** (Corresponding Author), Jingjing Guo, Yue Hu, Jianlong Tan. "Fine-Grained Label Learning via Siamese Network for Cross-modal Information Retrieval." International Conference on Computational Science. (ICCS), 2019.

2018   [C7] **Jing Yu**, Yuhang Lu, Zengchang Qin, Weifeng Zhang. "Modeling Text with Graph Convolutional Network for Cross-Modal Information Retrieval." Pacific Rim Conference on Multimedia (PCM), 2018 (CCF-C).

[C6] Yuhang Lu, **Jing Yu*** (Corresponding Author), Yanbing Liu, Jianlong Tan, Li Guo, Weifeng Zhang. "Fine-grained Correlation Learning with Stacked Co-attention Networks for Cross-modal Information Retrieval." International Conference on Knowledge Science, Engineering and Management (KSEM), 2018 (CCF-C).

2016   [C5] Meizi Zhou, **Jing Yu*** (Corresponding Author), Yanbing Liu, Li Guo. "Pattern-TreeISO: A Pattern Graph Correlation Framework for Accelerating Subgraph Isomorphism over Large Graphs." ACM International Conference on Information and Knowledge Management (CIKM), 2016 (CCF-B).

2015   [C4] Yu Zhang, Yanbing Liu, **Jing Yu**, Ping Liu, and Li Guo. "VSEP: A distributed algorithm for graph edge partitioning." International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), 2015 (CCF-C).

2012   [C3] **Jing Yu**, Yonghui Cong, Zengchang Qin, Tao Wan. "Cross-modal topic correlations for multimedia retrieval." IEEE International Conference on Pattern Recognition (ICPR), 2012 (CCF-C).

[C2] Yonghui Cong, Zengchang Qin, **Jing Yu**, Tao Wan. "Cross-modal information retrieval-a case study on Chinese Wikipedia." International Conference on Advanced Data Mining and Applications (ADMA) 2012, LNCS 7713 (CCF-C).

2011   [C1] Xiaoli Yuan, **Jing Yu**, Zengchang Qin, Tao Wan. "A bag-of-features model with integrated SIFT-LBP features for content-based image retrieval." IEEE International Conference on Image Processing (ICIP), 2011 (CCF-C).

Partial List of Journal Papers

2025   [J26] Keke Gai, Dongjue Wang, **Jing Yu*** (Corresponding Author), Liehuang Zhu, Weizhi Meng. "FedAMM:Federated Learning Against Majority MaliciousClients Using Robust Aggregation." IEEE Transactions on Information Forensics and Security (TIFS), 2025. (CCF-A, Top Journal, Impact Factor: 6.3)

[J25] Keke Gai, Zijun Wang, **Jing Yu*** (Corresponding Author), Liehuang Zhu. "MUFTI: Multi-Domain Distillation-based Heterogeneous Federated Continuous Learning." IEEE Transactions on Information Forensics and Security (TIFS), 2025. (CCF-A, Top Journal,

Impact Factor: 6.3)

[J24] Keke Gai, Yunwei Guo, **Jing Yu*** (Corresponding Author), Weilin Chan, Liehuang Zhu, Yinqian Zhang, Weizhi Meng. CAPE: Commitment-based Privacy-Preserving Payment Channel Scheme in Blockchain. IEEE Transactions on Dependable and Secure Computing (TDSC), 2025. (CCF-A, Top Journal, Impact Factor: 7.0)

[J23] Shuo Wang, Keke Gai, **Jing Yu*** (Corresponding Author), Zijian Zhang, Liehuang Zhu. "PraVFed: Practical Heterogeneous Vertical Federated Learning via Representation Learning." IEEE Transactions on Information Forensics and Security (TIFS), 2025. (CCF-A, Top Journal, Impact Factor: 6.3)

[J22] Keke Gai, Dongjue Wang, **Jing Yu*** (Corresponding Author), Liehuang Zhu, Weizhi Meng. "A Scheme of Robust Privacy-Preserving Multi-Party Computation Via Public Verification." IEEE Transactions on Dependable and Secure Computing (TDSC), 2025. (CCF-A, Top Journal, Impact Factor: 7.0)

[J21] Xinjie Lin, Gang Xiong, Gaopeng Gou, Wenqi Dong, **Jing Yu*** (Corresponding Author), Zhen Li, Wei Xia. Respond to Change with Constancy-Instruction-Tuning with LLM for Non-I.I.D. Network Traffic Classification. IEEE Transactions on Information Forensics and Security (TIFS), 2025. (CCF-A, Top Journal, Impact Factor: 6.3)

[J20] Wenqi Dong, **Jing Yu**, Xinjie Lin, Gaopeng Gou, Gang Xiong. "Deep learning and pre-training technology for encrypted traffic classification: A comprehensive review." Neurocomputing, 2025. (Top Journal, Impact Factor: 6.5)

[J19] Kai Ding, Tianxiu Xie, Keke Gai, Chennan Guo, Liangqi Lei, Dongjue Wang, **Jing Yu**, Liehuang Zhu, Weizhi Meng. "Verifiable decentralized identity-based meta-computing in Industrial Internet of Things (IIoT)." Journal of Systems Architecture, 2025. (Impact Factor: 4.1)

[J18] Weilin Chan, Keke Gai, **Jing Yu*** (Corresponding Author) and Liehuang Zhu. "Blockchain-assisted self-sovereign identities on education: a survey." Blockchains, 2025.

2024 [J17] Yihang Wei, Keke Gai, **Jing Yu*** (Corresponding Author), Liehuang Zhu, Kim-Kwang Raymond Choo. Trustworthy Access Control for Multiaccess Edge Computing in Blockchain-Assisted 6G Systems. IEEE Transactions on Industrial Informatics (TII), 2024. (Top Journal, Impact Factor: 11.7)

[J16] Ying Miao, Keke Gai, **Jing Yu**, Yu-an Tan, Liehuang Zhu, Weizhi Meng."Blockchain-Empowered Keyword Searchable Provable Data Possession for Large Similar Data." IEEE Transactions on Information Forensics and Security (TIFS), 2024. (CCF-A, Top Journal, Impact Factor: 6.3)

[J15] Xinjie Lin, Longtao He, Gaopeng Gou, **Jing Yu**, Zhong Guan, Xiang Li, Juncheng Guo, Gang Xiong. "CETP: A novel semi-supervised framework based on contrastive pre-training for imbalanced encrypted traffic classification." Computers Security. (Top Journal, Impact Factor: 5.4)

[J14] Yitian Tao, Liyan Ma, **Jing Yu**, Han Zhang. "Memory-Based Cross-Modal Semantic Alignment Network for Radiology Report Generation." IEEE Journal of Biomedical and Health Informatics, 2024. (Top Journal, Impact Factor: 6.8)

2023 [J13] Yujing Wang, Yaming Yang, Xiangtai Li, **Jing Yu**, Ce Zhang, Gao Huang, Yunhai Tong, "Convolutional-Enhanced Evolving Attention Networks", IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 1-17, 2023. (CCF-A, Top Journal, Impact Factor: 24.314)

[J12] Jiamin Zhuang, **Jing Yu*** (Corresponding Author), Yang Ding, Xiangyan Qu, Yue Hu, "Towards Fast and Accurate Image-Text Retrieval with Self-Supervised Fine-Grained Alignment", IEEE Transactions on Multimedia (TMM), 22(12):3196-3209, 2020. (CCF-B, Top Journal, Impact Factor: 8.182)

2021 [J11] Wei Peng, Yue Hu, **Jing Yu**, Luxi Xing, Yuqiang Xie, "AdaPtive Evidence-driven Reasoning Network for Machine Reading Comprehension with Unanswerable Questions",

Knowledge-Based Systems (KBS), 229:107364, 2021. (Top Journal, Impact Factor: 8.138)

[J10] Weifeng Zhang, **Jing Yu**, Wenhong Zhao, Chuan Ran, "DMRFNet: Deep Multimodal Reasoning and Fusion for Visual Question Answering and Explanation Generation", Information Fusion, 72:70-79, 2021. (Top Journal, Impact Factor: 17.564)

2020 [J9] Weifeng Zhang, **Jing Yu**, Hua Hu, Haiyang Hu, "Multimodal Feature Fusion by Relational Reasoning and Attention for Visual Question Answering", Information Fusion, 55:116-126, 2020. (Top Journal, Impact Factor: 17.564)

[J8] **Jing Yu**, Weifeng Zhang, Zhuoqian Yang, Zengchang Qin, Yue Hu, "Cross-modal Learning with Prior Visual Relation Knowledge", Knowledge-Based Systems (KBS), 203, 2020. (Top Journal, Impact Factor: 8.138)

[J7] **Jing Yu**, Yuhang Lu, Weifeng Zhang, Zengchang Qin, Yanbing Liu, Yue Hu, "Learning Cross-modal Correlations by Exploring Inter-word Semantics and Stacked Co-attention", Pattern Recognition Letters (PRL), 130:189-198, 2020. (Chinese Academy of Sciences Tier 2, Impact Factor: 4.757)

[J6] **Jing Yu**, Weifeng Zhang, Yuhang Lu, Zengchang Qin, Yue Hu, Qi Wu, "Reasoning on the Relation: Enhancing Visual Representation for Visual Question Answering and Cross-modal Retrieval", IEEE Transactions on Multimedia (TMM), 22(12):3196-3209, 2020. (CCF-B, Top Journal, Impact Factor: 8.182)

[J5] **Jing Yu**, Zihao Zhu, Yujing Wang, Yue Hu, Jianlong Tan, "Cross-modal Knowledge Reasoning for Knowledge-based Visual Question Answering", Pattern Recognition (PR), 108:107563, 2020. (CCF-B, Top Journal, Impact Factor: 8.518)

[J4] **Jing Yu**, Xiaoze Jiang, Zengchang Qin, Yue Hu, Qi Wu, "Learning Dual Encoding Model for Adaptive Visual Understanding in Visual Dialogue", IEEE Transactions on Image Processing (TIP), 30(1):220-233, 2020. (CCF-A, Top Journal, Impact Factor: 11.041)

2016 [J3] Zengchang Qin, **Jing Yu*** (Corresponding Author), Yonghui Cong, Tao Wan, "Topic Correlation Model for Cross-modal Multimedia Information Retrieval", Pattern Analysis and Applications (PAA), 19:1007-1022, 2016. (Impact Factor: 3.1)

2015 [J2] **Jing Yu**, Yanbing Liu, Yu Zhang, Mengya Liu, Jianlong Tan, Li Guo, "Survey on Large-Scale Graph Pattern Matching", Journal of Computer Research and Development, 52(2):391-409, 2015. (CCF Chinese-A Category)

2013 [J1] **Jing Yu**, Zengchang Qin, Tao Wan, Xi Zhang, "Feature Integration Analysis of Bag-of-Features Model for Image Retrieval", Neurocomputing, 120(23):355-364, 2013. (Chinese Academy of Sciences Tier 2, Impact Factor: 5.779)

PATENTS (PARTIAL)

[P15] A scheme of parallel acceleration for cross-modal multi-graph matching, CN109614520B (in Chinese)

[P14] A weak structure correlation-based cross-modal graph searching method, CN109783696B (in Chinese)

[P13] A force-directed algorithm-based layout method for graphic data, CN107818149B (in Chinese)

[P12] A resource-aware large-scale pre-training-based encrypted traffics detection method for multiple tasks, CN202210871377.9 (in Chinese)

[P11] A cross-modal structure consistence and pretraining-based method for vision and language alignment, CN202311326846.X (in Chinese)

[P10] A pretraining-based method for multiple object detection and summary generation in videos, CN 202311326840.2 (in Chinese)

[P9] A cross-modal pretraining-based retrieval method for few-shot image classification, CN 202311123147.5 (in Chinese)

[P8] A local and global semantic contrast learning-based method for cross-modal retrieval, CN 202311123143.7 (in Chinese)

[P7] A self-supervised contrast learning-based concept alignment method for cross-modal retrieval, CN 202311123142.2 (in Chinese)

[P6] A circle detection-based efficient and robust method for stamp detection and text recognition, CN 202311140736.4 (in Chinese)

[P5] A VLP input fine-grained alignment-based method for cross-modal advertisement searching, CN 202311151092.9, (in Chinese)

[P4] A hierarchy-based method for unbiased scene graph generation, CN202210724045.8 (in Chinese)

[P3] A text and image retrieval method and mechanism, CN202010663328.7 (in Chinese)

[P2] A structure correlation-based cross-modal multi-graph matching, CN201711023877.2 (in Chinese)

[P1] A compression and searching method for sparse matrix, CN201510152316.7(in Chinese)

Teaching Experience

2025	Image Processing (Undergraduate level), Minzu University of China.
2025	Engineering Ethics (Undergraduate level), Minzu University of China.
2023-2024	Cross-modal Intelligence Technologies and Applications (Graduate level), University of the Chinese Academy of Sciences.
2017-2022	Fundamental of Natural Language Processing (Graduate level), University of the Chinese Academy of Sciences.
2017-2022	Advance of Natural Language Processing (Doctoral level), University of the Chinese Academy of Sciences.

Recent Journal Reviewer Experiences

Associate Editor: Blockchains, Cyber Security and Data Goverance

IEEE Transactions on Information Forensics and Security publication information (IEEE TIFS)

IEEE Transactions on Dependable and Secure Computing (IEEE TDSC)

IEEE Transactions on Circuits and Systems for Video Technology (IEEE TCSV)

IEEE Transactions on Image Processing (IEEE TIP)

IEEE Transactions on Multimedia (IEEE TMM)

IEEE Transactions on Vehicular Technology (IEEE TVT)

ACM Transactions on Multimedia Computing, Communications and Applications (TOMM)

Computer Vision and Image Understanding (CVIU, Elsevier)

Pattern Recognition (PR, Elsevier)

Knowledge-Based Systems (KBS, Elsevier)

Applied Soft Computing (ASC, Elsevier)

Information Fusion (Elsevier)

Network Security and Data Governance

Journal of Computer Research and Development

Journal of Chinese Information Processing

Journal of Computer Science and Technology

Conference Services

2025	The 7th International Conference on Application Intelligence and Blockchain Security (AIBlock 2025), General Chair
	Association for the Advancement of Artificial Intelligence (AAAI 2025) , TPC member
	International Joint Conference on Artificial Intelligence (IJCAI 2025), TPC member
	International Conference on Computer Vision and Pattern Recognition (CVPR 2025) , TPC member
2024	The 7th ACM International Symposium on Blockchain and Secure Critical Infrastructure (BSCI 2024), Publicity Chair
	International Joint Conference on Artificial Intelligence (IJCAI 2021), TPC member
	ACM International Symposium on Blockchain and Secure Critical Infrastructure, Program Chair
2023	The 6th ACM International Symposium on Blockchain and Secure Critical Infrastructure (BSCI 2023), Program Chair
	International Conference on Computer Vision and Pattern Recognition (CVPR 2023), TPC member
	ACM Multimedia Conference (ACM MM 2023), TPC member
2022	International Conference on Computer Vision and Pattern Recognition (CVPR 2022) , TPC member
	International Conference on Computer Vision (ICCV 2022), TPC member
	European Conference on Computer Vision (ECCV 2022), TPC member
2021	International Conference on Computer Vision and Pattern Recognition (CVPR 2021) , TPC member
	Association for the Advancement of Artificial Intelligence (AAAI 2021) , TPC member
	International Joint Conference on Artificial Intelligence (IJCAI 2021), TPC member

Research Project Experiences

2025-2028	Beijing Nova Program, Project Leader
2025-2026	Open Project of China Electronics Society, Project Learder
2022-2024	The National Key Research and Development Program of China, Project Leader (Topic manager)
2020-2023	National Natural Science Foundation of China, PI
2022-2025	National Key Research and Development Program of China, Project Leader (Topic manager)
2017-2021	National Key RD Program Sub-project
2016-2019	National Key RD Program Sub-project
2012-2016	Strategic Priority Research Program of the Chinese Academy of Sciences (Class A) Subproject
2019-2023	Strategic Priority Research Program of the Chinese Academy of Sciences (Class C) Project
2020-2023	Joint Key Program of the National Natural Science Foundation of China
2016-2019	National Key RD Program Project (Subproject: Network Space Security Mapping Technology)
2016-2019	National Key RD Program Project (Subproject: Integrated Network Information Security Technology)