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Academic Qualification:

Ph.D. in Computer Science and Technology, Harbin Institute of Technology, China, 1989.
M.S. in Computer Science and Technology, Harbin Institute of Technology, China, 1986.
B.S. in Computer Science and Technology, Harbin University of Science and Technology, China, 1983.

Teaching Area

Artificial Intelligence
Machine Learning

Research Area

Computer Vision
Multimedia Retrieval
Artificial Intelligent and Machine Learning

Working Experience

Jan 2019 - Present	Professor/Program Director, International Institute for Next Generation Internet, Macau University of Science and Technology, Macau.
Jan 2010 - Dec 2018	Professor/Executive Vice Dean/Dean, School of Electronic and Computer Engineering, Peking University, China.
	Deputy Director, Guangzhou R&D Center, National Engineering Lab for Video Technology, China.
Mar 2003 - Dec 2009	Senior Engineer/General Manager, DTV Department, Zentek Technology Japan, Inc., Japan.
Aug 2000 - Feb 2003	Senior Engineer/Chief Engineer, Liberate Technologies Inc. USA.
Jun 1992 - Jul 2000	Section Vice Chief/Staff Engineer, Canotec Co., Inc., Canon Group. Japan.
Mar 1989 - May 1991	Assistant Professor/Associate Professor, Harbin University of Science and Technology/Harbin Institute of Technology, China.

Academic Publication (selected)

[1] Cheng Yu, **Wenmin Wang**, and Jianhao Yan. "Self-Supervised Animation Synthesis Through Adversarial Training." *IEEE Access* 8, 2020.

[2] Qian Wu, Xiongtao Chen, Zhongyi Huang, **Wenmin Wang**. "Generating Future Frames with Mask-Guided Prediction." *IEEE Int'l Conf. on Multimedia and Expo* (ICME), Jul 2020.

[3] Xiongtao Chen and **Wenmin Wang**. "Uni-and-Bi-directional Video Prediction via Learning Object-Centric Transformation." *IEEE Trans. on Multimedia* (TMM), 22(6), 2020.

[4] Yaxian Xia, Lun Huang, **Wenmin Wang**, Xiaoyong Wei and Jie Chen. "Exploring Entity-Level Spatial Relationships for Image-Text Matching." *IEEE Int'l Conf. on Acoustics, Speech, and Signal Processing* (ICASSP), May 2020.

[5] Jinzhuo Wang, **Wenmin Wang** and Wen Gao. "Fast and Accurate Action Detection in Videos with Motion-

Centric Attention Model." *IEEE Trans. on Circuits and Systems for Video Technology* (TCSVT), 30(1), 2020.

[6]   Lun Huang, **Wenmin Wang**, Yaxian Xia and Jie Chen. "Adaptively Aligned Image Captioning via Adaptive Attention Time." *Advances in Neural Information Processing Systems* (NeurIPS), Dec 2019. Vancouver, Canada.

[7]   Jinzhuo Wang, **Wenmin Wang** and Wen Gao. "Predicting Diverse Future Frames with Local Transformation-Guided Masking." *IEEE Trans. on Circuits and Systems for Video Technology* (TCSVT), 29(12), 2019.

[8]   Lun Huang, **Wenmin Wang**, Jie Chen and Xiaoyong Wei. "Attention on Attention for Image Captioning." *IEEE Int'l Conf. on Computer Vision* (ICCV), Oct 2019. Seoul, Korea.

[9]   王文敏，《人工智能原理》，高等教育出版社，中國，2019年8月28日（550千字）。

[10] Qian Wu, **Wenmin Wang**, Xiongtao Chen, Weimian Li. "Video Prediction with Temporal-Spatial Attention Mechanism and Deep Perceptual Similarity Branch." *IEEE Int'l Conf. on Multimedia and Expo* (ICME), Jul 2019. Shanghai, China.

[11] Zheng Yu, **Wenmin Wang**, Ge Li. "Multi-Step Self-Attention Network for Cross-Modal Retrieval Based On A Limited Text Space." *IEEE Int'l Conf. on Acoustics, Speech, and Signal Processing* (ICASSP), May 2019. Brighton, UK.

[12] Lun Huang, **Wenmin Wang**, Gang Wang. "Image Captioning with Two Cascaded Agents." *IEEE Int'l Conf. on Acoustics, Speech, and Signal Processing* (ICASSP), May 2019. Brighton, UK.

[13] Zheng Yu, **Wenmin Wang**. "Learning DALTS for Cross-Modal Retrieval." *CAAI Trans. on Intelligence Technology*, 4(1), 2019.

[14] Jinzhuo Wang, **Wenmin Wang**, and Wen Gao. "Multiscale deep alternative neural network for large scale video classification." *IEEE Trans. on Multimedia* (TMM), 20(10), 2018.

[15] Ruonan Zhang, **Wenmin Wang**. "Second- and High-order Graph Matching for Correspondence Problem." *IEEE Trans. on Circuits and Systems for Video Technology* (TCSVT), 28(10), 2018.

[16] Jinzhuo Wang, **Wenmin Wang**, and Wen Gao. "Beyond knowledge distillation: collaborative learning for bidirectional model assistance." *IEEE Access*, 6, 2018.

[17] Xiongtao Chen, **Wenmin Wang**, Jinzhuo Wang and Weimian Li. "Learning Object-Centric Transformation for Video Prediction." *ACM Int'l Conf. on Multimedia* (MM), 2017.

[18] Mengdi Fan, **Wenmin Wang**, Peilei Dong. Liang Han, Ronggang Wang and Ge Li. "Cross-media Retrieval by Learning Rich Semantic Embeddings of Multimedia." *ACM Int'l Conf. on Multimedia* (MM), 2017. Mountain View, California, USA.

[19] Baoyang Chen, **Wenmin Wang** and Jinzhuo Wang. "Video Imagination from a Single Image with Transformation Generation." *Thematic Workshops*, *ACM Int'l Conf. on Multimedia* (MM), 2017. Mountain View, California, USA.

[20] Hongmeng Song, **Wenmin Wang**, Jinzhuo Wang and Ronggang Wang. "Collaborative Deep Networks for Pedestrian Detection." *IEEE Int'l Conf. on Multimedia Big Data* (BigMM), 2017. Laguna Hills, California, USA. (Best Paper Award).

[21] Gang Wang, **Wenmin Wang**, Jingzhuo Wang, Yaohua Bu. "Better Deep Visual Attention with Reinforcement Learning in Action Recognition." *IEEE Int'l Symp. on Circuits and Systems* (ISCAS), 2017. Baltimore, Maryland, USA.

[22] Weimian Li, **Wenmin Wang**, Xiongtao Chen, Jinzhuo Wang and Ge Li. "A joint model for action localization and classification in untrimmed video with visual attention", *IEEE Int'l Conf. on Multimedia and Expo* (ICME), 2017. Hong Kong, China.

[23] Liang Han, **Wenmin Wang**, Mengdi Fan and Ronggang Wang. "Cross-Modality Matching based on Neural Word Embedding and Deep Image Features." *IEEE Int'l Conf. on Acoustics, Speech, and Signal Processing* (ICASSP), 2017. New Orleans, USA.

[24] Jinzhuo Wang, **Wenmin Wang**, Ronggang Wang and Wen Gao. "Beyond Monte Carlo Tree Search: Playing Go with Deep Alternative Neural Network and Long-Term Evaluation." *Association for the Advance of Artificial Intelligence* (AAAI), 2017. San Francisco, USA.

[25] Jinzhuo Wang, **Wenmin Wang**, Xiongtao Chen, Ronggang Wang and Wen Gao. "Deep Alternative Neural Network: Exploring Contexts as Early as Possible for Action Recognition." *Advances in neural information processing systems* (NIPS), 2016. Barcelona, Spain.

[26] Yang Zhao, Ronggang Wang, **Wenmin Wang** and Wen Gao. "Multilevel Modified Finite Radon Transform Network for Image Upsampling," *IEEE Transactions on Circuits and Systems for Video Technology* (TCSVT), 26(12), 2016.

[27] Ruonan Zhang, **Wenmin Wang** and Ronggang Wang. "An MCMC-based Prior Sub-hypergraph Matching in Presence of Outliers." *Int'l Conf. on Pattern Recognition* (ICPR), 2016. Cancun, Mexico.

[28] Zhihao Li, **Wenmin Wang**, Nannan Li and Jinzhuo Wang. "Tube ConvNets: Better Exploiting Motion for Action Recognition." *IEEE Int'l Conf. on Image Processing* (ICIP), 2016. Phoenix, USA.

[29] Peilei Dong and **Wenmin Wang**. "Better Region Proposals for Pedestrian Detection with R-CNN." *IEEE Int'l Conf. on Visual Communications and Image Processing* (VCIP), 2016. Chengdu, China. (Best Top 10% Paper Award)

[30] Jinzhuo Wang, **Wenmin Wang**, Ronggang Wang and Wen Gao. "CSPS: An adaptive pooling method for Image Classification." *IEEE Trans. on Multimedia* (TMM), 18(6) , 2016.

[31] Mingmin Zhen, **Wenmin Wang** and Ronggang Wang. Regional Subspace Projection Coding for Image Retrieval, *ACM Int'l Conf. on Multimedia Retrieval* (ICMR), 2016. New York, USA.

[32] Yang Zhang, Yunqing Xia, Yi Liu and **Wenmin Wang**. "Clustering Sentences with Density Peaks for Multi-document Summarization." *The 2015 Annual Conf. of the North American Chapter of the ACL* (NAACL), 2015. Denver, USA.

[33] Yang Zhao, Ronggang Wang, **Wenmin Wang** and Wen Gao. "High Resolution Local Structure Constrained Image Upsampling." *IEEE Trans. on Image Processing* (TIP), 24(11) , 2015.

Professional Society Membership

Member of ACM/IEEE/CAAI, Senior Member of CCF