Jingdong Wang (PhD, CAE/IEEE Fellow)

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Education

Ph.D, Computer Science	2004.09 - 2007.08
The Hong Kong University of Science and Technology	

M.Eng, Automation — 2001.09 - 2004.07
Tsinghua University
Excellent master degree thesis award

B.Eng, Automation (Rank: 1/150) — 1997.09 - 2001.07
Tsinghua University

Research Interests

Computer vision and multimedia search
Vision foundation model, Self-supervised learning, Neural architecture design, human pose estimation, semantic segmentation, object detection, image classification, large scale indexing (vector search), large scale image search, salient object detection.

Machine learning and pattern recognition
Large scale learning, graph-based learning, probabilistic graphical modeling, kernel methods, spectral clustering.

Work Experience

Chief Scientist for Computer Vision — 2021.09 - present
Baidu

Senior Principal Research Manager (formerly Principal Research Manager) — 2019.09 - 2021.08
Microsoft Research Asia

Ph.D Supervisor — 2017.09 - 2021.08
University of Science and Technology, China

Principal Researcher (formerly Senior Researcher) — 2017.09 - 2019.08
Microsoft Research Asia

Principal Researcher (formerly Lead Researcher) — 2015.09 - 2017.08
Microsoft Research Asia

Senior Researcher (formerly Lead Researcher) — 2013.09 - 2015.08
Microsoft Research Asia

Senior Researcher (formerly Researcher) — 2012.03 - 2013.08
Microsoft Research Asia

Researcher (formerly Associate Researcher)	2007.09 - 2012.02

Researcher (formerly Associate Researcher) 2007.09 - 2012.02
Microsoft Research Asia

Research and Teaching Assistants 2004.09 - 2007.08
The Hong Kong University of Science and Technology
Advisor: Long Quan

Research Intern 2005.07 - 2005.12
Microsoft Research Asia 2003.09 - 2004.05
Mentor: Heung-Yeung Shum

Research Assistant 2001.09 - 2004.07
Tsinghua University
Advisor: Changshui Zhang

Professional Activities

Program chair
ICCV 2025

Senior Area chair
CVPR 2024, ACMMM 2024

Area/track chair
NeurIPS 2024, ECCV 2024, NeurIPS 2023, ICCV 2023, CVPR 2023, AAAI 2023, ICPR 2022, AAAI 2022, CVPR 2021, AAAI 2021, IJCAI 2021, ECCV 2020, CVPR 2020, IJCAI 2020, ICCV 2019, IJCAI 2019, ACMMM 2018, ICCV 2017, CVPR 2017, ECCV 2016, ACMMM 2015, ICPR 2018, ICIP 2017, ICME 2015, ICME 2012

Senior programme committee member
AAAI 2019, IJCAI 2018, AAAI 2018

Conference organizers
ACMMM 2024, Sponsor chair
ACMMM 2021, open source software chair
ACMMM Asia 2020, general chair
ICME 2019, workshop co-chair
ACM ICMR 2014, special session co-chair

Associate editors/editorial board members
ACM Transactions on Multimedia Computing Communications and Applications (July 2023 -)
International Journal of Computer Vision (Aug. 2021 -)
IEEE Transactions on Pattern Analysis and Machine Intelligence (Sept. 2018 -)
IEEE Transactions on Circuits and Systems for Video Technology (Jan. 2018 - Jan. 2022)
IEEE Transactions on Multimedia (May 2016 - May 2020)
Neurocomputing (April 2015 - May 2017)
Multimedia Tools and Applications (October 2011 -)

Workshop organizers
Fifth Workshop on Neural Architecture Search. (CVPR 2024)
Workshop on Foundation Models: 2nd Workshop. (CVPR 2024)
Workshop on Foundation Models: 1st Foundation Model Challenge. (CVPR 2023)
Fourth Workshop on Neural Architecture Search, Third lightweight NAS challenge. (CVPR 2023)
Billion-Scale Approximate Nearest Neighbor Search Challenge: NeurIPS'21 competition track. (NeurIPS 2021
The 2nd International Workshop on Deep Learning for Pattern Recognition (DLPR 2020) (ICPR 2020)
The 2nd workshop and challenge on Target Re-Identification and Multi-Target Multi-Camera Tracking (CVPR 2019)

The 2nd International Workshop on Deep Learning for Pattern Recognition (DLPR 2018) (ICPR 2018)
The 1st workshop on Target Re-Identification and Multi-Target Multi-Camera Tracking (CVPR 2017)
The 1st International Workshop on Deep Learning for Pattern Recognition (DLPR 2016), (ICPR 2016)
Big Media Data: Understanding, Search, and Mining (ICDM 2015)
Advances in LargeScale Multimedia Data Collection, Mining and Retrieval (ICME 2012)

Special issue guest editor
Human Pose Estimation and Its Applications (Machine Vision and Applications, 2023)
Fine-grained image categorization (IEEE Trans. Pattern Anal. Mach. Intell., 2018)
Intelligent urban computing with big data (Machine Vision and Applications, 2017)
Big Media Data: Understanding, Search, and Mining (IEEE Transactions on Big Data, 2016)
Ad Hoc Web Multimedia Analysis with Limited Supervision (Multimedia Tools and Applications, 2015)

Programme committee members or conference reviewers
ICML (2018), ICLR (2018 - 2019), CVPR (2009 - 2016, 2018), ICCV (2007/09/11/13/15), ECCV (2010/12/14), ACMMM (2009/12/13/14/17), NIPS (2014 - 2018) SIGIR (2011/13), SIGGRAPH Asia (2010), SIGKDD (2010), SIGCHI (2010), IJCAI (2011/13), ICMR (2011/12), ICME (2009/10/11), CIVR (2010), IJCNN (2007/09), ACCV (2007), ICPR (2006)

Honors and Awards

Fellow	CAE	2024
Fellow	IEEE	2022
The second prize	Natural science of China Society of Image and Graphics	2022
Fellow	AAIA	2021
Featured ACM Member	ACM	2021
Outstanding service award	ICME	2019
ACM Distinguished Member	ACM	2018
Fellow	IAPR	2018
Best paper runner up	Workshop on Big Data Analytics for Social Computing	2018
The first prize	Natural science of Ministry of Education of China	2017
Best paper runner-up	ACMMM	2015
Outstanding reviewer	CVPR	2014
Gold star	Microsoft	2009
Graduate Fellowship	HKUST	2004 - 2007
Excellent Master Degree Thesis Award	Tsinghua University	2004
Excellent Master Scholarship	Tsinghua University	2003
Title of Graduate with Honors (top 5%)	Tsinghua University	2001
Rockwell Scholarship	Tsinghua University	2000
Friend-Eastern Communications Scholarship	Tsinghua University	1999
Outstanding Student Scholarship	Tsinghua University	1998
Rank #1	nuScenes tracking task (camera) leaderboard	11/2022
Rank #1	nuScenes tracking task (Lidar) leaderboard	11/2022
Rank #1	COCO object detection leaderboard	11/8/2022
Rank #1	standard English and Chinese benchmarks	05/2022
Rank #1	cityscapes segmentation leaderboard	01/2020
Second place	COCO keypoints detection challenge (ECCV 2018)	2018

Publications (Google Scholar citations: 53386, h-index: 100)

Google Scholar citations (PDF Document Clickable Link):
https://scholar.google.com/citations?user=z5SPCmgAAAAJ&hl=en
The interns and supervisees are in bold.

Book

[1] Jingdong Wang. Graph Based Image Segmentation: A Modern Approach. *ISBN-10: 3639110749, ISBN-13: 978-3639110746.* VDM Verlag Dr. Muller Aktiengesellschaft & Co. KG. 2008.

Book chapters

[1] Jingdong Wang, **Jing Wang**, Gang Zeng, Rui Gan, Shipeng Li, and Baining Guo. Fast Neighborhood Graph Search using Cartesian Concatenation. *Multimedia Data Mining and Analytics: Disruptive Innovation. Edited by Aaron K. Baughman, Jiang Gao, Jia-Yu Pan, and Valery Petrushin*, 397-417, Springer, 2015.

[2] Jingdong Wang, **Jing Wang**, Qifa Ke, Gang Zeng, and Shipeng Li. Fast Approximate K-Means via Cluster Closures. *Multimedia Data Mining and Analytics: Disruptive Innovation. Edited by Aaron K. Baughman, Jiang Gao, Jia-Yu Pan, and Valery Petrushin*, 373-395, Springer, 2015.

[3] Jingdong Wang, **Yinghai Zhao**, and Xian-Sheng Hua. Image Search by Color Map. *Internet Multimedia Search and Mining. Edited by Xian-Sheng Hua, Marcel Worring, and Tat-Seng Chua.* Bentham Science Publishers, 2010.

Technical reports

[1] Kai Chen, Jiaqi Wang, Jiangmiao Pang, Yuhang Cao, Yu Xiong, Xiaoxiao Li, Shuyang Sun, Wansen Feng, Ziwei Liu, Jiarui Xu, Zheng Zhang, Dazhi Cheng, Chenchen Zhu, Tianheng Cheng, Qijie Zhao, Buyu Li, Xin Lu, Rui Zhu, Yue Wu, Jifeng Dai, Jingdong Wang, Jianping Shi, Wanli Ouyang, Chen Change Loy, and Dahua Lin. MMDetection: Open MMLab Detection Toolbox and Benchmark. *CoRR*, abs/1906.07155, 2019.

[2] **Liming Zhao**, Jingdong Wang, Xi Li, Zhuowen Tu, and Wenjun Zeng. On the connection of deep fusion to ensembling. *CoRR*, abs/1611.07718, 2016.

[3] Jingdong Wang, **Zhen Wei**, **Ting Zhang**, and Wenjun Zeng. Deeply-fused nets. *CoRR*, abs/1605.07716, 2016.

Top referred journals: TPAMI (12), IJCV (10), TOG (3), TIP (8), TMM (7), TOMM (2), TKDE (1)

[1] **Xiaokang Chen**, **Mingyu Ding**, Xiaodi Wang, Ying Xin, Shentong Mo, Yunhao Wang, Shumin Han, Ping Luo, Gang Zeng, and Jingdong Wang. Context Autoencoder for Self-Supervised Representation Learning. *International Journal of Computer Vision*, 2024.

[2] Wenhao Wu, Zhun Sun, Yuxin Song, Jingdong Wang, and Wanli Ouyangg. Transferring Vision-Language Models for Visual Recognition: A Classifier Perspective. *International Journal of Computer Vision*, 2023.

[3] **Yifan Liu**, Changyong Shu, Jingdong Wang, and Chunhua Shen. Structured Knowledge Distillation for Dense Prediction. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2023.

[4] Yan Huang, Jingdong Wang, and Liang Wang. Few-Shot Image and Sentence Matching via Aligned Cross-Modal Memory. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2022.

[5] Yuhui Yuan, Lang Huang, Jianyuan Guo, Chao Zhang, Xilin Chen and Jingdong Wang. OC-Net: Object Context for Semantic Segmentation. *International Journal of Computer Vision*, 2021.

[6] Jingdong Wang, **Ke Sun**, **Tianheng Cheng**, **Borui Jiang**, **Chaorui Deng**, **Yang Zhao**, Dong Liu, Yadong Mu, Mingkui Tan, Xinggang Wang, Wenyu Liu, and Bin Xiao. Deep High-Resolution Representation Learning for Visual Recognition. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2021.

[7] **Jingchun Cheng**, Yuhui Yuan, Yali Li, Jingdong Wang, and Shengjin Wang. Learning to Segment Video Object With Accurate Boundaries. *IEEE Trans. Multimedia*, 2021.

[8] **Dengpan Fu**, Bo Xin, Jingdong Wang, Dongdong Chen, Jianmin Bao, Gang Hua and Houqiang Li Improving Person Re-Identification With Iterative Impression Aggregations. *IEEE Trans. Image Processing*, 2020.

[9] **Zilong Huang**, Chunyu Wang, Xinggang Wang, Wenyu Liu, and Jingdong Wang Semantic Image Segmentation by Scale-Adaptive Networks. *IEEE Trans. Image Processing*, 2019.

[10] **Peng Tang**, Chunyu Wang, Xinggang Wang, Wenyu Liu, and Jingdong Wang. Object Detection in Videos by High Quality Object Linking. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2020.

[11] **Song Bai**, Zhichao Zhou, Jingdong Wang, Xiang Bai, Longin Jan Latecki and Qi Tian. Automatic Ensemble Diffusion for 3D Shape and Image Retrieval. *IEEE Trans. Image Processing*, 28(1):88-101, 2019.

[12] Jingdong Wang and **Ting Zhang**. Composite Quantization. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2019.

[13] **Qiurui Wang**, Chun Yuan, Jingdong Wang and Wenjun Zeng. Learning Attentional Recurrent Neural Network for Visual Tracking. *IEEE Trans. Multimedia*, 2019.

[14] **Hong Liu**, Rongrong Ji, Jingdong Wang, and Chunhua Shen. Ordinal Constraint Binary Coding for Approximate Nearest Neighbor Search. *IEEE Trans. Pattern Anal. Mach. Intell.*, 2019.

[15] Jingdong Wang, **Ting Zhang**, **Jingkuan Song**, Nicu Sebe, and Heng Tao Shen. A Survey on Learning to Hash. *IEEE Trans. Pattern Anal. Mach. Intell.*, 40(4):769-790, 2018.

[16] **Na Qi**, Yunhui Shi, Xiaoyan Sun, Jingdong Wang, Baocai Yin, and Junbin Gao. Multi-Dimensional Sparse Models. *IEEE Trans. Pattern Anal. Mach. Intell.*, 40(1):163-178, 2018.

[17] Weiyao Lin, Yang Shen, Junchi Yan, Mingliang Xu, Jianxin Wu, Jingdong Wang, and Ke Lu. Learning Correspondence Structures for Person Re-identification. *IEEE Trans. Image Processing*, 26(5):2438-2453, 2017.

[18] **Dapeng Chen**, Zejian Yuan, Jingdong Wang, Gang Hua, and Nanning Zheng. Examplar-Guided Similarity Learning on Polynomial Feature Map for Person Re-Identification. *International Journal of Computer Vision*, 123(3):392-414, 2017.

[19] Jingdong Wang, **Huaizu Jiang**, Zejian Yuan, Ming-Ming Cheng, Xiaowei Hu, and Nanning Zheng. Salient Object Detection: A Discriminative Regional Feature Integration Approach. *International Journal of Computer Vision*, 123(2):251-268, 2017.

[20] **Lingxi Xie**, JingdongWang, Weiyao Lin, Bo Zhang, and Qi Tian. Towards Reversal-Invariant Image Representation. *International Journal of Computer Vision*, 123(2):226-250, 2017.

[21] **Dapeng Chen**, Zejian Yuan, Gang Hua, Jingdong Wang, and Nanning Zheng. Multi-Timescale Collaborative Tracking. *IEEE Trans. Pattern Anal. Mach. Intell.*, 39(1):141–155, 2017.

[22] **Liang Zheng**, Shengjin Wang, Jingdong Wang, and Qi Tian. Accurate image search with multi-scale contextual evidences. *International Journal of Computer Vision*, 120(1):1–13, 2016.

[23] **Dingwen Zhang**, Junwei Han, Chao Li, Jingdong Wang, and Xuelong Li. Detection of co-salient objects by looking deep and wide. *International Journal of Computer Vision*, 120(2):215–232, 2016.

[24] Xi Li, Xueyi Zhao, Zhongfei Zhang, Fei Wu, Yueting Zhuang, Jingdong Wang, and Xuelong Li. Joint multilabel classification with community-aware label graph learning. *IEEE Trans. Image Processing*, 25(1):484–493, 2016.

[25] Weiyao Lin, **Yang Mi**, Weiyue Wang, Jianxin Wu, Jingdong Wang, and Tao Mei. A diffusion and clustering-based approach for finding coherent motions and understanding crowd scenes. *IEEE Trans. Image Processing*, 25(4):1674–1687, 2016.

[26] Xi Li, Liming Zhao, Lina Wei, Ming-Hsuan Yang, Fei Wu, Yueting Zhuang, Haibin Ling, and Jingdong Wang. Deepsaliency: Multi-task deep neural network model for salient object detection. *IEEE Trans. Image Processing*, 25(8):3919–3930, 2016.

[27] **Jingkuan Song**, Heng Tao Shen, Jianfeng Wang, Zi Huang, Nicu Sebe, and Jingdong Wang. A distance-computation-free search scheme for binary code databases. *IEEE Trans. Multimedia*, 18(3):484–495, 2016.

[28] Jinhui Tang, **Xiangbo Shu**, Zechao Li, Guo-Jun Qi, and Jingdong Wang. Generalized deep transfer networks for knowledge propagation in heterogeneous domains. *ACM TOMCCAP*, 12(4s):68:1–68:22, 2016.

[29] **Jianfeng Wang**, Jingdong Wang, Jingkuan Song, Xin-Shun Xu, Heng Tao Shen, and Shipeng Li. Optimized Cartesian k-means. *IEEE Trans. Knowl. Data Eng.*, 27(1):180–192, 2015.

[30] **Lingxi Xie**, Jingdong Wang, Bo Zhang, and Qi Tian. Fine-grained image search. *IEEE Trans. Multimedia*, 17(5):636–647, 2015.

[31] Jingdong Wang, **Naiyan Wang**, **You Jia**, Jian Li, Gang Zeng, Hongbin Zha, and Xian-Sheng Hua. Trinary-projection trees for approximate nearest neighbor search. *IEEE Trans. Pattern Anal. Mach. Intell.*, 36(2):388–403, 2014.

[32] Jingdong Wang, **Huaizu Jiang**, **Yangqing Jia**, Xian-Sheng Hua, Changshui Zhang, and Long Quan. Regularized tree partitioning and its application to unsupervised image segmentation. *IEEE Trans. Image Processing*, 23(4):1909–1922, 2014.

[33] Qinghua Huang, **Bisheng Chen**, Jingdong Wang, and Tao Mei. Personalized video recommendation through graph propagation. *ACM TOMCCAP*, 10(4):32:1–32:17, 2014.

[34] **Peng Wang**, Gang Zeng, Rui Gan, Jingdong Wang, and Hongbin Zha. Structure-sensitive superpixels via geodesic distance. *International Journal of Computer Vision*, 103(1):1–21, 2013.

[35] Houqiang Li, **Yang Wang**, Tao Mei, Jingdong Wang, and Shipeng Li. Interactive multimodal visual search on mobile device. *IEEE Trans. Multimedia*, 15(3):594–607, 2013.

[36] **Tianjia Shao**, Weiwei Xu, Kun Zhou, Jingdong Wang, Dongping Li, and Baining Guo. An interactive approach to semantic modeling of indoor scenes with an RGBD camera. *ACM Trans. Graph.*, 31(6):136:1–136:11, 2012.

[37] Tie Liu, Zejian Yuan, Jian Sun, Jingdong Wang, Nanning Zheng, Xiaoou Tang, and Heung-Yeung Shum. Learning to detect a salient object. *IEEE Trans. Pattern Anal. Mach. Intell.*, 33(2):353–367, 2011.

[38] **Xinmei Tian**, Linjun Yang, Jingdong Wang, Xiuqing Wu, and Xian-Sheng Hua. Bayesian visual reranking. *IEEE Trans. Multimedia*, 13(4):639–652, 2011.

[39] Jingdong Wang, Fei Wang, Changshui Zhang, Helen C. Shen, and Long Quan. Linear neighborhood propagation and its applications. *IEEE Trans. Pattern Anal. Mach. Intell.*, 31(9):1600–1615, 2009.

[40] Tie Liu, Jingdong Wang, Jian Sun, Nanning Zheng, Xiaoou Tang, and Heung-Yeung Shum. Picture collage. *IEEE Trans. Multimedia*, 11(7):1225–1239, 2009.

[41] Long Quan, Jingdong Wang, Ping Tan, and Lu Yuan. Image-based modeling by joint segmentation. *International Journal of Computer Vision*, 75(1):135–150, 2007.

[42] Ping Tan, Gang Zeng, Jingdong Wang, Sing Bing Kang, and Long Quan. Image-based tree modeling. *ACM Trans. Graph*, 26(3):87, 2007.

[43] Long Quan, Ping Tan, Gang Zeng, Lu Yuan, Jingdong Wang, and Sing Bing Kang. Image-based plant modeling. *ACM Trans. Graph*, 25(3):599–604, 2006.

Referred journals

[1] **Guotian Xie**, Kuiyuan Yang, Ting Zhang, Jingdong Wang, and Jianhuang Lai. Balanced Decoupled Spatial Convolution for CNNs. *IEEE Trans. Neural Netw. Learning Syst.*, 2019.

[2] Shengkang Yu, Xi Li, Xueyi Zhao, Zhongfei Mark Zhang, Fei Wu, Jingdong Wang, Yue Ting Zhuang, and Xuelong Li. A bilinear ranking SVM for knowledge based relation prediction and classification. *IEEE Trans. Big Data*, 2018.

[3] Ruoyu Liu, Shikui Wei, Yao Zhao, Zhenfeng Zhu, and Jingdong Wang. Multi-View Cross-Media Hashing with Semantic Consistency. *IEEE MultiMedia*, 2018.

[4] **Baoguang Shi**, Xiang Bai, Wenyu Liu, and Jingdong Wang. Face Alignment with Deep Regression. *IEEE Trans. Neural Netw. Learning Syst.*, 29(1):183-194, 2018.

[5] **Lingxi Xie**, Jingdong Wang, Bo Zhang, and Qi Tian. Incorporating visual adjectives for image classification. *Neurocomputing*, 182:48–55, 2016.

[6] **Min Tan**, Baoyuan Wang, Zhaohui Wu, Jingdong Wang, and Gang Pan. Weakly supervised metric learning for traffic sign recognition in a lidar-equipped vehicle. *IEEE Trans. Intelligent Transportation Systems*, 17(5):1415–1427, 2016.

[7] Congyan Lang, Jiashi Feng, Songhe Feng, Jingdong Wang, and Shuicheng Yan. Dual low-rank pursuit: Learning salient features for saliency detection. *IEEE Trans. Neural Netw. Learning Syst.*, 27(6):1190–1200, 2016.

[8] **Shiyang Lu**, Tao Mei, Jingdong Wang, Jian Zhang, Zhiyong Wang, and Shipeng Li. Exploratory product image search with circle-to-search interaction. *IEEE Trans. Circuits Syst. Video Techn.*, 25(7):1190–1202, 2015.

[9] Weiwei Xu, Zhouxu Shi, Mingliang Xu, Kun Zhou, Jingdong Wang, Bin Zhou, Jinrong Wang, and Zhenming Yuan. Transductive 3d shape segmentation using sparse reconstruction. *Comput. Graph. Forum*, 33(5):107–115, 2014.

[10] Jingdong Wang, **Jiazhen Zhou**, **Hao Xu**, Tao Mei, Xian-Sheng Hua, and Shipeng Li. Image tag refinement by regularized latent Dirichlet allocation. *Computer Vision and Image Understanding*, 124:61–70, 2014.

[11] **Shiyang Lu**, Tao Mei, Jingdong Wang, Jian Zhang, Zhiyong Wang, and Shipeng Li. Browse-to-search: Interactive exploratory search with visual entities. *ACM Trans. Inf. Syst.*, 32(4):18:1–18:27, 2014.

[12] Jingdong Wang, **Zhe Zhao**, **Jiazhen Zhou**, Hao Wang, Bin Cui, and Guojun Qi. Recommending Flickr groups with social topic model. *Inf. Retr.*, 15(3-4):278–295, 2012.

[13] **Tianjia Shao**, Weiwei Xu, KangKang Yin, Jingdong Wang, Kun Zhou, and Baining Guo. Discriminative sketch-based 3d model retrieval via robust shape matching. *Comput. Graph. Forum*, 30(7):2011–2020, 2011.

[14] Jingdong Wang, **Liyan Jia**, and Xian-Sheng Hua. Interactive browsing via diversified visual summarization for image search results. *Multimedia Syst.*, 17(5):379–391, 2011.

[15] Jingdong Wang, **Yinghai Zhao**, Xiuqing Wu, and Xian-Sheng Hua. A transductive multi-label learning approach for video concept detection. *Pattern Recognition*, 44(10-11):2274–2286, 2011.

[16] Jingdong Wang and Xian-Sheng Hua. Interactive image search by color map. *ACM TIST*, 3(1):12:1–12:23, 2011.

[17] **Zheng-Jun Zha**, Tao Mei, Jingdong Wang, Zengfu Wang, and Xian-Sheng Hua. Graph-based semi-supervised learning with multiple labels. *J. Visual Communication and Image Representation*, 20(2):97–103, 2009.

[18] Fei Wang, Jingdong Wang, Changshui Zhang, and James T. Kwok. Face recognition using spectral features. *Pattern Recognition*, 40(10):2786–2797, 2007.

[19] Jianguo Lee, Jingdong Wang, Changshui Zhang, and Zhaoqi Bian. Visual object recognition using probabilistic kernel subspace similarity. *Pattern Recognition*, 38(7):997–1008, 2005.

Top refereed conferences: CVPR (56), ICCV (31), ECCV (16), ACMMM (16), SIGGRAPH (2), SIGGRAPH ASIA (1), NeurIPS (9), ICLR (4), ICML (6), SIGIR (3), KDD (1), IJCAI (5), AAAI (7)

[1] Xingyu Wan, Chengquan Zhang, Pengyuan Lyu, Sen Fan, Zihan Ni, Kun Yao, Errui Ding, and Jingdong Wang. Towards Unified Multi-granularity Text Detection with Interactive Attention. *ICML 2024.*

[2] Zhiyu Yao, Jian Wang, Haixu Wu, Jingdong Wang, and Mingsheng Long. Mobile Attention: Mobile-Friendly Linear-Attention for Vision Transformers. *ICML 2024.*

[3] hexi Peng, Tianjia Shao, Yong Liu, Jingke Zhou, Yin Yang, Jingdong Wang, and Kun Zhou. RTG-SLAM: Real-time 3D Reconstruction at Scale using Gaussian Splatting. *SIGGRAPH 2024.*

[4] Chuyang Zhao, Yifan Sun, Wenhao Wang, Qiang Chen, Errui Ding, Yi Yang, and Jingdong Wang. MS-DETR: Efficient DETR Training with Mixed Supervision. *CVPR 2024.*

[5] Huan Liu, Zichang Tan, Chuangchuang Tan, Yunchao Forgery-aware Adaptive Transformer for Generalizable Synthetic Image Detection. *CVPR 2024.*

[6] Hao Li, Dingwen Zhang, Yalun Dai, Nian Liu, Lechao Cheng, Li Jingfeng, Jingdong Wang, and Junwei Han. GP-NeRF: Generalized Perception NeRF for Context-Aware 3D Scene Understanding . *CVPR 2024.*

[7] Yanpeng Sun, Jiahui Chen, Shan Zhang, Xinyu Zhang, Qiang Chen, Gang Zhang, Errui Ding, Jingdong Wang, and Zechao Li. VRP-SAM: SAM with Visual Reference Prompt. *CVPR 2024.*

[8] Haochen Han, Qinghua Zheng, Guang Dai, Minnan Luo, and Jingdong Wang. Learning to Rematch Mismatched Pairs for Robust Cross-Modal Retrieval. *CVPR 2024.*

[9] Wenjie Wang, Yehao Lu, Guangcong Zheng, Shuigenzhan, Xiaoqing Ye, Zichang Tan, Jingdong Wang, Gaoang Wang, and Xi Li. BEVSpread: Spread Voxel Pooling for Birds-Eye-View Representation in Vision-based Roadside 3D Object Detection. *CVPR 2024.*

[10] Jiacheng Zhang, Jiaming Li, Xiangru Lin, Wei Zhang, Xiao Tan, Junyu Han, Errui Ding, Jingdong Wang, and Guanbin Li. Decoupled Pseudo-labeling for Semi-Supervised Monocular 3D Object Detection. *CVPR 2024.*

[11] Zhuohang Dang, Minnan Luo, Chengyou Jia, Guang Dai, Xiaojun Chang, and Jingdong Wang. Noisy Correspondence Learning with Self-Reinforcing Errors Mitigation. *AAAI 2024.*

[12] Chengyou Jia, Minnan Luo, Zhuohang Dang, Guang Dai, Xiaojun Chang, Mengmeng Wang, and Jingdong Wang. SSMG: Spatial-Semantic Map Guided Diffusion Model for Free-Form Layout-to-Image Generation. *AAAI 2024.*

[13] Keyao Wang, Guosheng Zhang, Haixiao Yue, Ajian Liu, Gang Zhang, Haocheng Feng, Junyu Han, Errui Ding, and Jingdong Wang. Multi-Domain Incremental Learning for Face Presentation Attack Detection. *AAAI 2024.*

[14] Mengmeng Wang, Jiazheng Xing, Boyuan Jiang, Jun Chen, Jianbiao Mei, Xingxing Zuo, Guang Dai, Jingdong Wang, and Yong Liu. A Multimodal, Multi-Task Adapting Framework for Video Action Recognition. *AAAI 2024.*

[15] Junkun Yuan, Xinyu Zhang, Hao Zhou, Jian Wang, Zhongwei Qiu, Zhiyin Shao, Shaofeng Zhang, Sifan Long, Kun Kuang, Kun Yao, Junyu Han, Errui Ding, Lanfen Lin, Fei Wu, and Jingdong Wang. HAP: Structure-Aware Masked Image Modeling for Human-Centric Perception. *NeurIPS 2023.*

[16] Linyan Huang, Zhiqi Li, Chonghao Sima, Wenhai Wang, Jingdong Wang, Yu Qiao, and Hongyang Li. Leveraging Vision-Centric Multi-Modal Expertise for 3D Object Detection. *NeurIPS 2023.*

[17] Zhengdong Hu, Yifan Sun, Jingdong Wang, and Yi Yang. DAC-DETR: Divide the Attention Layers and Conquer. *NeurIPS 2023.*

[18] Kaisiyuan Wang, Hang Zhou, Qianyi Wu, Jiaxiang Tang, Zhiliang Xu, Borong Liang, Tianshu Hu, Errui Ding, Jingtuo Liu, Ziwei Liu, and Jingdong Wang. Efficient Video Portrait Reenactment via Grid-based Codebook. *SIGGRAPH 2023.*

[19] **Bo Fang**, Wenhao Wu, Chang Liu, Yu Zhou, Yuxin Song, Weiping Wang, Xiangbo Shu, Xiangyang Ji, and Jingdong Wang. UATVR: Uncertainty-Adaptive Text-Video Retrieval. *ICCV 2023.*

[20] **Lizhao Liu**, Zhuangwei Zhuang, Shangxin Huang, Xunlong Xiao, Tianhang Xiang, Cen Chen, Jingdong Wang, and Mingkui Tan. CPCM: Contextual Point Cloud Modeling for Weakly-supervised Point Cloud Semantic Segmentation. *ICCV 2023.*

[21] **Jiaxiang Tang**, Hang Zhou, Xiaokang Chen, Tianshu Hu, Errui Ding, Jingdong Wang, and Gang Zeng. Delicate Textured Mesh Recovery from NeRF via Adaptive Surface Refinement. *ICCV 2023.*

[22] **Huan Liu**, Qiang Chen, Zichang Tan, Jiang-Jiang Liu, Jian Wang, Xiangbo Su, Xiaolong Li, Kun Yao, Junyu Han, Errui Ding, Yao Zhao, and Jingdong Wang. Group Pose: A Simple Baseline for End-to-End Multi-person Pose Estimation. *ICCV 2023.*

[23] Qiang Chen, Xiaokang Chen, Jian Wang, Shan Zhang, Kun Yao, Haocheng Feng, Junyu Han, Errui Ding, Gang Zeng, and Jingdong Wang. Group DETR: Fast DETR Training with Group-Wise One-to-Many Assignment. *ICCV 2023.*

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Tutorial and Seminars

Context Autoencoder for Scalable Self-Supervised Representation Pretraining	Keynote	SSLAD at ECCV 2022
Context Autoencoder for Scalable Self-Supervised Representation Pretraining	Keynote	NAS at CVPR 2022
Dense Prediction with Transformers: Semantic Segmentation and High-Resolution Backbone	Invited talk	Neural Architectures at ICCV 2021

Semantic Segmentation, Object Detection, and High-Resolution Backbone with Transformers	Keynote	VisDrone at ICCV 2021
High-resolution networks	Keynote	BigMM 2020
High-resolution networks	Keynote	CVWC at ICCV 2019
Neural architecture construction and search	tutorial	ICME 2019
High-resolution networks	Keynote	CEFRL at CVPR 2019
Interleaved group convolutions for efficient deep neural networks	Keynote	ACM ICIMCS 2018
Person re-identification: datasets and representations	Keynote	PCM 2018
Person re-identification: recent advances and challenges	Tutorial	FG 2018
CNN architecture design: from deeper to wider	Keynote	ACM ICIMCS 2017

Representative Product Transfer

Context auto-encoder (CAE v2)	Shipped to AI cloud, 2023
Group DETR	Shipped to Baidu AI cloud, 2023
Context auto-encoder (CAE v1)	Shipped to AI cloud, 2022
MaskOCR	Shipped to Baidu OCR products, 2022
HRNet	Shipped to Form Recognizer, 2021
SPTAG (spatial partition tree and graph, improved NGS)	Shipped to Bing platform, 2018
Fast human detection	Shipped to XiaoIce, 2017
How-Old Fashion	Shipped to XiaoIce, 2016
How-Old 2.0	Shipped to XiaoIce, 2015
Celebrity for chat	Shipped to XiaoIce, 2015, 2017
Similar image search for image chat	Shipped to XiaoIce, 2015
Similar video search for video chat	Shipped to XiaoIce, 2015
Similarity search	Shipped to Ads Selection, 2015
XiaoIce book recognition	Shipped to Weibo in XiaoIce, 2014
Nearest neighbor search	Shipped to Microsoft Bing image search in 2014.
Image match	Shipped to Microsoft Bing image search in 2014.
Visual attribute enhanced image relevance ranker	Shipped to Microsoft Bing image search in 2012.
Visual attribute enhanced image relevance ranker	Cognitive service. 2015
Dominant color filter	Shipped to Microsoft Bing image search, 2012
Image search by color map	Shipped to Microsoft Bing image search, 2010

Interns and Students ever Working With Me

(Many interns working with me at Baidu)

Huan Liu	Beijing Jiaotong University (23)
Jiaxiang Tang	Peking University (23)
Jiyang Qi	Huazhong University of Science and Technology (22)
Jie Zhu	Peking University (22)
Mingyu Ding	Hong Kong University (22)

Yan Liu	Zhejiang University (21)
Xiaosong Zhao	UCAS (21)
Yifan Zhang	South China of Technology (21)
Juhong Min	Pohang Univ. of Science and Technology (20-21)
Zejia Fan	Peking University (20-21)
Qi Han	Nankai University (20 - 21)
Zhuoyi Huang	Tongji University (20)
Xiaokang Chen	Peking University (20-21)
Changqian Yu	HUST (20)
Shaobo Min	USTC (20)
Baifeng Shi	Peking University
Chaoqun Wang	USTC (19)
Hung-Jen Chen	National Chiao Tung University (19)
Jingyi Xie	USTC (19)
Zigang Geng	USTC (19)
Boqi Chen	Boston University (19)
Tianheng Cheng	Huazhong University of Science & Technology (18)
Chaorui Deng	South China University of Technology
Manli Shu	USTC (18)
Borui Jiang	Peking University (18)
Jingchun Cheng	Tsinghua University (18)
Weijian Xu	UCSD (18)
Yifan Liu	Beihang University (18)
Yao Qin	UCSD (18)
Ke Sun	USTC (17 - 18)
Shichen Liu	Tsinghua University (17 - 18)
Depu Meng	USTC (17 - 18)
Mingji Li	USTC (17 - 18)
Junran Peng	IA, CAS (17)
Chong Shang	Tsinghua University (17)
Guotian Xie	Sun Yat-Sen University (17)
Peng Tang	Huazhong University of Science & Technology (16 - 17)
Song Bai	Huazhong University of Science & Technology (16 - 17)
Gangming Zhao	IA, CAS (17)
Kexin Zhang	Peking University (17)
Yumin Suh	Seoul National University, Korea (16 - 17)
Yajie Xing	Peking University (16 - 17)
Shuang Li	Tsinghua University (16)
Ryosuke Furuta	The University of Tokyo, Japan (16)
Yanzhao Wu	USTC (16)
Jun He	HeFei University of Technology (16)
Liheng Zhang	University of Central Florida (16)
Liming Zhao	Zhejiang University (16)
Zilong Huang	Huazhong University of Science & Technology (16)

Xun Huang	Beihang University (16)	
Xiaojuan Wang	Sun Yat-Sen University (15)	
Zhen Wei	Shanghai Jiao Tong University (15)	
Wei Tang	IA, CAS (15)	
Qiqi hou	Xi'an Jiaotong University (15)	
Ning Xu	UIUC (15)	
Liang Zheng	Tsinghua University (14 - 15)	
Jiaming Song	Tsinghua University (14)	
Tianxiao Shen	Tsinghua University (14)	
Jianqiu Ji	Tsinghua University (14)	
Fan Liu	Nanjing University of Science & Technology (14)	
Baoguang Shi	Huazhong University of Science & Technology (14)	
Dapeng Chen	Xi'an Jiaotong University (14)	
Falong Shen	Peking University (13 - 14)	
Lingxi Xie	Tsinghua University (13)	
Ting Zhang	USTC (13)	
Xianjie Chen	University of California, Los Angeles (13)	
Chongxuan Li	Tsinghua University (13)	
Chao Du	Tsinghua University (13 - 14)	
Jingkuan Song	The University of Queensland, Australia (12 - 13)	
Chuang Gan	Beihang University (12 - 13)	
Zhansheng Jiang	Shanghai Jiao Tong University (12 - 13)	
Yupeng Gu	USTC (12 - 13)	
Shiyu Chang	UIUC (12)	
Jianfeng Wang	USTC (12 - 13)	
Weiwen Tu	Sun Yat-Sen University (11)	
Tiansheng Yao	Zhejiang University (11)	
Dongqing Zhang	Shanghai Jiao Tong University (11)	
Peng Wang	Peking University (11 - 13)	
Xianghang Liu	University of New South Wales, Australia (11)	
Jiazhen Zhou	Peking University (11)	Columbia University
Junyang Lu	Peking University (11)	Columbia University
Xiang Ren	Zhejiang University (11)	UIUC
Nobuyuki Morioka	University of New South Wales, Australia (11)	Google
Naiyan Wang	Zhejiang University (10 - 11)	HKUST
Huaizu Jiang	Xi'an Jiaotong University (10 - 11)	
Shijie Xu	Beihang University (10)	
Jing Wang	Peking University (10 - 13)	
Bin Cheng	National University of Singapore (10)	
Biao Wang	Tsinghua University (10)	
Wenhao Lu	Tsinghua University (10)	
Zhe Zhao	Peking University (09 - 10)	University of Michigan
Xiangang Chen	Nanyang Technological University (09)	
Jue Xie	Monash University, Melbourne, Australia (09)	
Hao Xu	USTC (08 - 09)	
You Jia	Peking University (09)	CMU, Facebook
Liyan Jia	Tsinghua University (09)	Cornell University

Heng Zhang	Peking University (08 - 09)	
Yang Hu	USTC (08)	
Darui Li	USTC (08)	
Yinghai Zhao	USTC (08)	
Xuan Huang	USTC (07 - 08)	
Jianxiong Xiao	HKUST	
Fei Wang	Tsinghua University (05 - 06)	IBM T. J. Watson Research Lab
Yangqing Jia	Tsinghua University (07)	University of California, Berkeley
Dan Zhang	Tsinghua University (07, 10)	Purdue University
Mingjie Qian	Tsinghua University (09)	UIUC

Beijing, July 23, 2024