

Wanhua Li

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Academic Employment

School of Engineering and Applied Sciences, Harvard University

Postdoctoral Fellow, working with Prof. Hanspeter Pfister

Boston, USA
Oct. 2022 - Present

Education

Department of Automation, Tsinghua University

Ph.D. in Computer Vision

Advisors: Prof. Jiwen Lu, and Prof. Jianjiang Feng

GPA: 3.9/4.0, Top 1/76

Beijing, China
Aug. 2017 - Jun. 2022

School of Data and Computer Science, Sun Yat-Sen University

B.E. in Computer Science

GPA: 4.0/4.0, Top 1/118

Guangzhou, China
Aug. 2013 - Jun. 2017

Work Experiences

Visual Computing Group at Microsoft Research Asia (MSRA)

Research assistant, working with Dr. Qi Dai and Dr. Han Hu

Jun. 2022 - Oct. 2022

Horizon Robotics

Research intern

Jul. 2019 - Aug. 2019

Huawei Noah Ark's Lab

Research intern advised by Prof. Qi Tian

Oct. 2018 - Jun. 2019

iSEE Lab, Sun Yat-Sen University

Research assistant advised by Prof. Wei-Shi Zheng

Mar. 2016 - Jul. 2017

Publications

* indicates equal contribution

Peer-Reviewed Conference Publications

- [1] Devaansh Gupta, Siddhant Kharbanda, Jiawei Zhou, **Wanhua Li**, Hanspeter Pfister, and Donglai Wei
Transferring Visual Knowledge with Pre-trained Models for Multimodal Machine Translation
IEEE International Conference on Computer Vision (ICCV), 2023
- [2] Shuai Shen, **Wanhua Li**, Xiaobing Wang, Dafeng Zhang, Zhezhu Jin, Jie Zhou, and Jiwen Lu
CLIP-Cluster: CLIP-Guided Attribute Hallucination for Face Clustering
IEEE International Conference on Computer Vision (ICCV), 2023
- [3] Shuai Shen, Wenliang Zhao, Zibin Meng, **Wanhua Li**, Zheng Zhu, Jie Zhou, and Jiwen Lu
DiffTalk: Crafting Diffusion Models for Generalized Audio-Driven Portraits Animation
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- [4] **Wanhua Li***, Xiaoke Huang*, Zheng Zhu, Yansong Tang, Xiu Li, Jie Zhou, and Jiwen Lu
OrdinalCLIP: Learning Rank Prompts for Language-Guided Ordinal Regression
Conference on Neural Information Processing Systems (NeurIPS), 2022
- [5] **Wanhua Li**, Zhexuan Cao, Jianjiang Feng, Jie Zhou, and Jiwen Lu
Label2Label: A Language Modeling Framework for Multi-Attribute Learning
European Conference on Computer Vision (ECCV), 2022
- [6] Shuai Shen, **Wanhua Li**, Zheng Zhu, Yueqi Duan, Jie Zhou, and Jiwen Lu
Learning Dynamic Facial Radiance Fields for Few-Shot Talking Head Synthesis
European Conference on Computer Vision (ECCV), 2022

- [7] **Wanhua Li**, Xiaoke Huang, Jiwen Lu, Jianjiang Feng, and Jie Zhou
Learning Probabilistic Ordinal Embeddings for Uncertainty-Aware Regression
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021
- [8] **Wanhua Li**, Shiwei Wang, Jiwen Lu, Jianjiang Feng, and Jie Zhou
Meta-Mining Discriminative Samples for Kinship Verification
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021
- [9] Shuai Shen, **Wanhua Li**, Zheng Zhu, Guan Huang, Dalong Du, Jiwen Lu, and Jie Zhou
Structure-Aware Face Clustering on a Large-Scale Graph with 10^7 Nodes
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021
- [10] Bingyao Yu, **Wanhua Li**, Xiu Li, Jiwen Lu, and Jie Zhou
Frequency-Aware Spatiotemporal Transformers for Video Inpainting Detection
IEEE International Conference on Computer Vision (ICCV), 2021
- [11] **Wanhua Li**, Yueqi Duan, Jiwen Lu, Jianjiang Feng, and Jie Zhou
Graph-Based Social Relation Reasoning
European Conference on Computer Vision (ECCV), 2020
- [12] **Wanhua Li**, Jiwen Lu, Jianjiang Feng, Chunjing Xu, Jie Zhou and Qi Tian
BridgeNet: A Continuity-Aware Probabilistic Network for Age Estimation
IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2019
- [13] **Wanhua Li**, Yingqiang Zhang, Kangchen Lv, Jiwen Lu, Jianjiang Feng, and Jie Zhou
Graph-Based Kinship Reasoning Network
IEEE International Conference on Multimedia and Expo (ICME), 2020, Oral Presentation
- [14] Benchao Li, **Wanhua Li**, Yongyi Tang, Jian-Fang Hu, and Wei-Shi Zheng
GL-PAM RGB-D Gesture Recognition
IEEE International Conference on Image Processing (ICIP), 2018

Peer-Reviewed Journal Publications

- [15] Shuai Shen, **Wanhua Li**, Zheng Zhu, Jie Zhou, and Jiwen Lu
STAR-FC: Structure-Aware Face Clustering on Ultra-Large-Scale Graphs
IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI, IF: 24.31), 2023
- [16] Bingyao Yu, Xiu Li, **Wanhua Li**, Jie Zhou, and Jiwen Lu
Discrepancy-aware Meta-learning for Zero-shot Face Manipulation Detection
IEEE Transactions on Image Processing (TIP), 2023
- [17] **Wanhua Li**, Jiwen Lu, Abudukelimu Wuerkaixi, Jianjiang Feng, and Jie Zhou
MetaAge: Meta-Learning Personalized Age Estimators
IEEE Transactions on Image Processing (TIP), 2022
- [18] Hongyi Sun, **Wanhua Li**, Yueqi Duan, Jie Zhou, and Jiwen Lu
Learning Adaptive Patch Generators for Mask-Robust Image Inpainting
IEEE Transactions on Multimedia (TMM), 2022
- [19] **Wanhua Li**, Jiwen Lu, Abudukelimu Wuerkaixi, Jianjiang Feng, and Jie Zhou
Reasoning Graph Networks for Kinship Verification: from Star-shaped to Hierarchical
IEEE Transactions on Image Processing (TIP), 2021

Talks

- **Learning Probabilistic Ordinal Embeddings for Uncertainty-Aware Regression**
Invited Presentation at 2021 Beijing University Academic Forum on Artificial Intelligence April 2021
- **Graph-Based Kinship Reasoning Network**
ICME'2020 Oral Presentation July 2020
- **BridgeNet: A Continuity-Aware Probabilistic Network for Age Estimation**
Invited Presentation at 2019 Beijing University Academic Forum on Artificial Intelligence March 2019

Scholarships and Awards

- NeurIPS Scholar Award 2022
- ICCV Doctoral Consortium Travel Award 2021
- Weihai Talent Scholarship, Tsinghua 2021

- **3rd Place in VIPriors Instance Segmentation Challenge at ICCV** 2021
- Outstanding Oral Presentation at 2021 Beijing University Academic Forum on Artificial Intelligence 2021
- **2nd Place in ChaLearn LAP Large-scale Isolated Gesture Recognition Challenge at ICCV** 2017
- Outstanding Undergraduate Thesis, SYSU 2017
- Outstanding Graduate, SYSU 2017
- National Encouragement Scholarship, Ministry of Education of P.R. China 2016
- **National Scholarship, Ministry of Education of P.R. China** 2015
- **National Scholarship, Ministry of Education of P.R. China** 2014

Academic Services

Conference Reviewer / PC Member

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- International Conference on Computer Vision (ICCV)
- European Conference on Computer Vision (ECCV)
- AAAI Conference on Artificial Intelligence (AAAI)
- International Joint Conference on Artificial Intelligence (IJCAI)
- IEEE International Conference on Multimedia and Expo (ICME)
- IEEE International Conference on Image Processing (ICIP)
- International Conference on Pattern Recognition (ICPR)
- Chinese Conference on Pattern Recognition and Computer Vision (PRCV)

Journal Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence
- IEEE Transactions on Image Processing
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Biometrics, Behavior, and Identity Science
- IEEE Transactions on Cybernetics
- International Journal of Computer Vision
- Pattern Recognition
- Neural Networks
- Neurocomputing
- Pattern Recognition Letters
- Knowledge-Based Systems
- Journal of Visual Communication and Image Representation