

Zhenda Xie

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Biography

Zhenda Xie is currently a *final-year Ph.D. candidate* at the Institute for Advanced Study, Tsinghua University and Microsoft Research Asia (MSRA), under the supervision of Prof. Baining Guo. Prior to that, he received the B.Eng. degree from University of Science and Technology of China (USTC) in 2018 and was awarded as Outstanding Graduates.

Currently, he is working as a research intern in the Visual Computing Group at MSRA, mentored by Dr. Han Hu and working closely with Dr. Yue Cao and Zheng Zhang. His research interests include computer vision and deep learning, with a particular focus on *self-supervised visual representation learning and its transfer performance*.

Education

Tsinghua University

Ph.D. Candidate in Computer Science, advised by Prof. Baining Guo

Sep 2018 - Present

Beijing, China

University of Science and Technology of China

B.Eng. in Electronic Information Engineering

Sep 2014 - Jun 2018

Hefei, China

Publications

[†] indicates Equal Contribution

Revealing the Dark Secrets of Masked Image Modeling

Zhenda Xie[†], Zigang Geng[†], Jingcheng Hu, Zheng Zhang, Han Hu, Yue Cao
Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

On Data Scaling in Masked Image Modeling

Zhenda Xie, Zheng Zhang, Yue Cao, Yutong Lin, Yixuan Wei, Qi Dai, Han Hu
Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

SimMIM: A Simple Framework for Masked Image Modeling

Zhenda Xie[†], Zheng Zhang[†], Yue Cao[†], Yutong Lin, Jianmin Bao, Zhuliang Yao, Qi Dai, Han Hu[†]
Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

Self-Supervised Learning with Swin Transformers

Zhenda Xie[†], Yutong Lin[†], Zhuliang Yao, Zheng Zhang, Qi Dai, Yue Cao, Han Hu
Tech Report, 2021.

Propagate Yourself: Exploring Pixel-Level Consistency for Unsupervised Visual Representation Learning

Zhenda Xie[†], Yutong Lin[†], Zheng Zhang, Yue Cao, Stephen Lin, Han Hu
Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

Parametric Instance Classification for Unsupervised Visual Feature Learning

Yue Cao[†], **Zhenda Xie**[†], Bin Liu[†], Yutong Lin, Zheng Zhang, Han Hu
Conference on Neural Information Processing Systems (NeurIPS), 2020.

Spatially Adaptive Inference with Stochastic Feature Sampling and Interpolation

Zhenda Xie[†], Zheng Zhang[†], Xizhou Zhu, Gao Huang, Stephen Lin
European Conference on Computer Vision (ECCV), 2020. (Oral)

Contrastive Learning Rivals Masked Image Modeling in Fine-tuning via Feature Distillation

Yixuan Wei[†], Han Hu[†], **Zhenda Xie**, Zheng Zhang, Yue Cao, Jianmin Bao, Dong Chen, Baining Guo
Tech Report, 2022.

Swin Transformer V2: Scaling Up Capacity and Resolution

Ze Liu[†], Han Hu[†], Yutong Lin, Zhuliang Yao, **Zhenda Xie**, Yixuan Wei, Jia Ning, Yue Cao, Zheng Zhang, Li Dong, Furu Wei, Baining Guo
Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

Breaking Shortcut: Exploring Fully Convolutional Cycle-Consistency for Video Correspondence Learning

Yansong Tang[†], Zhenyu Jiang[†], **Zhenda Xie**[†], Yue Cao, Zheng Zhang, Philip H. S. Torr, Han Hu
ICCV SRVU workshop, 2021.

Local Relation Networks for Image Recognition

Han Hu, Zheng Zhang, **Zhenda Xie**, Stephen Lin
International Conference on Computer Vision (ICCV), 2019.

Research Experience

Microsoft Research Asia (MSRA)
Research Intern, mentored by Dr. Han Hu

*Aug 2019 - Present
Beijing, China*

Microsoft Research Asia (MSRA)
Research Intern, mentored by Dr. Jifeng Dai

*Feb 2018 - Aug 2019
Beijing, China*

Selected Honors

National Scholarship

Tsinghua University, 2021

Future Researchers Scholarship

Tsinghua University, 2018

Outstanding Graduates

University of Science and Technology of China, 2018

National Scholarship

University of Science and Technology of China, 2016