# Xingyi Yang

#### **EMPLOYMENT**

The Hong Kong Polytechnic University

Incoming Assistant Professor (Presidential Young Scholar)

• Department of Data Science and Artificial Intelligence

Hong Kong July 2025-

Singapore

#### **EDUCATION**

National University of Singapore(NUS)

PhD. in Electrical and Computer Engineering

Advisor: Prof. Xinchao Wang

University of Oxford

Visiting PhD in Department of Engineering Science

Advisor: Prof. Philip Torr

University of California, San Diego(UCSD)

Msc. in Electrical and Computer Engineering, Jacobs School of Engineering

**Southeast University** 

B.Eng. in Computer Engineering

Oxford, United Kingdom

Sep. 2024-Mar. 2025

La Jolla, USA

Sept. 2019-Jun. 2021

Sept. 2021-Jun. 2025

Nanjing, China

Sept. 2015-Jun. 2019

### **Selected Awards**

- World Artificial Intelligence Conference Youth Outstanding Paper Nomination Award, 2024.
- Baidu Scholarship Finalist, 2024.
- Chinese Government Award for Outstanding Self-financed Students Abroad, 2023.
- NeurIPS 2022 Paper Award Nomination.

#### **PUBLICATIONS**

1. Xingyi Yang, Constantin Venhoff, Ashkan Khakzar,

Christian Schroeder de Witt, Puneet K Dokania, Adel Bibi, Philip Torr

Mixture of Experts Made Intrinsically Interpretable

The International Conference on Machine Learning (ICML 2025).

2. Xingyi Yang, Songhua Liu, Xinchao Wang

Hash3D: Training-free Acceleration for 3D Generation

Conference on Computer Vision and Pattern Recognition (CVPR 2025).

3. Suizhi Huang, Xingyi Yang, Hongtao Lu, Xinchao Wang

Few-shot Implicit Function Generation via Equivariance

Conference on Computer Vision and Pattern Recognition (CVPR 2025) (Highlight).

4. Hanyang Kong, Xingyi Yang, Xinchao Wang

Generative Sparse-View Gaussian Splatting

Conference on Computer Vision and Pattern Recognition (CVPR 2025).

5. Bonan Li, Zicheng Zhang, Xingyi Yang, Xinchao Wang

CoSER: Towards Consistent Dense Multiview Text-to-Image Generator for 3D Creation Conference on Computer Vision and Pattern Recognition (CVPR 2025) (Highlight).

6. Xingyi Yang, Xinchao Wang

Kolmogorov-Arnold Transformer

International Conference on Learning Representations (ICLR 2025).

#### 7. Li Ju, Xingyi Yang, Qi Li, Xinchao Wang

GraphBridge: Towards Arbitrary Transfer Learning in GNNs

International Conference on Learning Representations (ICLR 2025).

#### 8. Shizun Wang, Xingyi Yang, Qiuhong Shen, Zhenxiang Jiang, Xinchao Wang

GFlow: Recovering 4D World from Monocular Video

AAAI Conference on Artificial Intelligence (AAAI 2025).

#### 9. Hanyang Kong, Xingyi Yang, Xinchao Wang

Efficient Gaussian Splatting for Monocular Dynamic Scene Rendering via Sparse Time-Variant Attribute Modeling AAAI Conference on Artificial Intelligence (AAAI 2025).

#### 10. Xingyi Yang, Xinchao Wang

Languag Model as Visual Explainer

Conference on Neural Information Processing Systems (NeurIPS 2024).

#### 11. Xingyi Yang, Xinchao Wang

Neural Metamorphosis

European Conference on Computer Vision (ECCV 2024).

#### 12. Qiuhong Shen, Xingyi Yang, Xinchao Wang

FlashSplat: 2D to 3D Gaussian Splatting Segmentation Solved Optimally

European Conference on Computer Vision (ECCV 2024).

#### 13. Qiuhong Shen, Xingyi Yang, Xinchao Wang

Vista3D: Unravel the 3D Darkside of a Single Image

European Conference on Computer Vision (ECCV 2024).

#### 14. Songhua Liu, Xin Jin, Xingyi Yang, Jingwen Ye, Xinchao Wang

StyDeSty: Min-Max Stylization and Destylization for Single Domain Generalization

International Conference on Machine Learning (ICML 2024).

#### 15. Yinwei Wu, Xingyi Yang, Xinchao Wang

Relation Rectification in Diffusion Model

Conference on Computer Vision and Pattern Recognition (CVPR 2024).

#### 16. Jiahao Lu, Xingyi Yang, Xinchao Wang

*Unsegment* Anything by Simulating Deformation

Conference on Computer Vision and Pattern Recognition (CVPR 2024).

#### 17. Jiaqi Wang, Xingyi Yang, Suhan Cui, Liwei Che, Lingjuan Lyu, Dongkuan Xu, Fenglong Ma

Towards Personalized Federated Learning via Heterogeneous Model Reassembly

Conference on Neural Information Processing Systems (NeurIPS 2023).

#### 18. Xingyi Yang, Xinchao Wang

Diffusion Model as Representation Learner

International Conference on Computer Vision (ICCV 2023).

#### 19. Sucheng Ren, Xingyi Yang, Songhua Liu, Xinchao Wang

SG-Former: Self-guided Transformer with Evolving Token Reallocation

International Conference on Computer Vision (ICCV 2023).

#### 20. Xingyi Yang, Daquan Zhou, Jiashi Feng, Xinchao Wang

Diffusion Probabilistic Model Made Slim

Conference on Computer Vision and Pattern Recognition (CVPR 2023).

#### 21. Xinjiang Wang\*, Xingyi Yang\*, Shilong Zhang, Yijiang Li,

Litong Feng, Shijie Fang, Chengqi Lyu, Kai Chen, Wayne Zhang

Consistent-Teacher: Towards Reducing Inconsistent Pseudo-targets in Semi-supervised Object Detection

Conference on Computer Vision and Pattern Recognition (CVPR 2023) \* Contributed Equally. (Highlight).

#### 22. Runpeng Yu, Songhua Liu, Xingyi Yang, Xinchao Wang

Distribution Shift Inversion for Out-of-Distribution Prediction

Conference on Computer Vision and Pattern Recognition (CVPR 2023).

23. Xingyi Yang, Daquan Zhou, Songhua Liu, Jingwen Ye, Xinchao Wang

Deep Model Reassembly

Conference on Neural Information Processing Systems (NeurIPS 2022) (Paper Award Nomination).

24. Songhua Liu, Kai Wang, Xingyi Yang, Jingwen Ye, Xinchao Wang

Dataset Distillation via Factorization

Conference on Neural Information Processing Systems (NeurIPS 2022) (Spotlight).

25. Xingyi Yang, Jingwen Ye, Xinchao Wang

Factorizing Knowledge in Neural Networks

European Conference on Computer Vision (ECCV 2022).

26. Jingwen Ye, Yifang Fu, Jie Song, Xingyi Yang, Songhua Liu, Xin Jin, Mingli Song, Xinchao Wang *Learning with Recoverable Forgetting* 

European Conference on Computer Vision (ECCV 2022).

27. Zihao Zhou, Xingyi Yang, Ryan Rossi, Handong Zhao, Rose Yu

Neural Point Process for Learning Spatiotemporal Event Dynamics

Annual Learning for Dynamics & Control Conference (L4DC 2022).

28. Xingyi Yang, Muchao Ye, Quanzeng You, Fenglong Ma.

Writing by Memorizing: Hierarchical Retrieval-based Medical Report Generation

Annual Meeting of the Association for Computational Linguistics (ACL 2021) (Long Oral).

29. Xingyi Yang

Kalman Optimizer for Consistent Gradient Descent

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2021).

30. Ramtin Hosseini, Xingyi Yang, Pengtao Xie

DSRNA: Differentiable Search of Robust Neural Architectures

Conference on Computer Vision and Pattern Recognition (CVPR 2021).

31. Rui Zhu, Xingyi Yang, Yannick Hold-Geoffroy, Federico Perazzi, Jonathan Eisenmann, Kalyan Sunkavalli, Manmohan Chandraker

Single View Metrology in the Wild

European Conference on Computer Vision (ECCV 2020).

#### INTERNSHIP AND RESEARCH EXPERIENCE

ByteDanceSingaporeResearch InternMay. 2022-Sep. 2022

- Designed an efficient diffusion model that reduced the size of the latent diffusion model by  $10\times$ .
- Supervisor: Dr. Jiashi Feng

## Sensetime Research & Shanghai Artificial Intelligence Lab Research Intern

Shanghai, China April. 2021-Aug. 2021

- Maintain the codebase of OpenMMlab.
- Semi-supervised object detection and image recognition.

#### **Academic Services and Talks**

#### Invited Talks...

• Deep Model Reuse: Paving the Way for Efficient and Generalizable AI Systems Computer Vision Group, UIUC.

DeepWok Lab, Imperial College London.

• Disentanglement and Composition for AGI

CVPR 2024 Tutorial, Disentanglement and Compositionality in Computer Vision.

ECCV 2024 Tutorial, Emerging Trends in Disentanglement and Compositionality.

• Anything-3d: Towards single-view anything reconstruction in the wild The Future of 3D Vision in the Era of LLMs Seminar 2023, VALSE.

#### Tutorial and Workshop

- Organizer of CVPR 2024 Tutorial: Disentanglement and Compositionality in Computer Vision.
- Organizer of ECCV 2024 Tutorial: Emerging Trends in Disentanglement and Compositionality.
- Organizer, Workflow Chair of NeurIPS 2020 Workshop: Self-Supervised Learning Theory and Practice.

#### Reviewer

- Journal Reviewer for TIP, PR, TCSVT, JBHI, JVCI, ESWA.
- Conference Reviewer for CVPR, ICCV, ECCV, NeurIPS, ICLR, ICML, AAAI, IJCAI, ICASSP.