Xingyi Yang

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EDUCATION

National University of Singapore(NUS) — **Singapore**
PhD. in Electrical and Computer Engineering — *Sept. 2021-Present*
Advisor: Xinchao Wang

University of Oxford — **Oxford, United Kingdom**
Visiting PhD in Department of Engineering Science — *Sep. 2024-Present*
Advisor: Philip Torr

University of California, San Diego(UCSD) — **La Jolla, USA**
Msc. in Electrical and Computer Engineering, Jacobs School of Engineering — *Sept. 2019-Jun. 2021*

Southeast University — **Nanjing, China**
B.Eng. in Computer Engineering — *Sept. 2015-Jun. 2019*

RESEARCH INTEREST

- **Deep Model Reuse:** Knowledge Transfer, Model Compositionality, Interpretability, and Controllability.
- **Generative Model:** Diffusion Probabilistic Model, 3D/Video Generation.
- **Computer Vision:** Recognition, Detection, Representation Learning, and 3D Reconstruction.

SELECTED PUBLICATIONS

1. **Xingyi Yang**, Songhua Liu, Xinchao Wang
   Hash3D: Training-free Acceleration for 3D Generation
   Conference on Computer Vision and Pattern Recognition(**CVPR 2025**).
2. **Xingyi Yang**, Xinchao Wang
   Kolmogorov-Arnold Transformer
   International Conference on Learning Representations(**ICLR 2025**).
3. **Xingyi Yang**, Xinchao Wang
   GPT as Visual Explainer
   Conference on Neural Information Processing Systems(**NeurIPS 2024**).
4. **Xingyi Yang**, Xinchao Wang
   Neural Metamorphosis
   European Conference on Computer Vision(**ECCV 2024**).
5. **Xingyi Yang**, Xinchao Wang
   Diffusion Model as Representation Learner
   International Conference on Computer Vision(**ICCV 2023**).
6. **Xingyi Yang**, Daquan Zhou, Jiashi Feng, Xinchao Wang
   Diffusion Probabilistic Model Made Slim
   Conference on Computer Vision and Pattern Recognition(**CVPR 2023**).
7. 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**).
8. **Xingyi Yang**, Daquan Zhou, Songhua Liu, Jingwen Ye, Xinchao Wang
   Deep Model Reassembly
   Conference on Neural Information Processing Systems(**NeurIPS 2022**) (**Paper Award Nomination**).
9. **Xingyi Yang**, Jingwen Ye, Xinchao Wang
   Factorizing Knowledge in Neural Networks
   European Conference on Computer Vision(**ECCV 2022**).

10. **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**).

INTERNSHIP AND RESEARCH EXPERIENCE

ByteDance **Singapore**
Research Intern *May. 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 **Shanghai, China**
Research Intern *April. 2021-Aug. 2021*

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

Selected Awards

- World Artificial Intelligence Conference Youth Outstanding Paper Nomination Award, 2024.
- Baidu Scholarship Finalist, 2024.
- CVPR 2023 Travel Grant.
- NeurIPS 2022 Paper Award Nomination.
- NeurIPS 2022, 2024 Top Reviewer.
- National University of Singapore, Graduate Research Scholarship.

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.