

Xianghui Yang, Ph.D.

✉ Email

🌐 LinkedIn

🔍 Google Scholar

🏠 Github

🌐 Homepage

Employment History


- 2024.05 – Now 📌 **Senior Applied Scientist (Full-time), Tencent, China**
Project: Large 3D Generative Models and Multimodal Large Generative Models
Main Duties: Research, and development.
- 2023.05 – 2023.11 📌 **Applied Scientist Intern (Full-time), Amazon, Australia**
Project: Single-view 3D reconstruction and generation via Diffusion Model
Main Duties: Research, and development.
- 2020.02 – 2020.07 📌 **Teaching Assistant (Part-time), The University of Sydney, Australia**
Course: Predictive Analytics
Main Duties: Coding Assistant, answer students' questions.
- 2020.01 – 2020.04 📌 **Research Assistant (Part-time), The University of Sydney, Australia**
Project: Pill Image Recognition
Target: Build an automated system to help patients recognize pills.
Main Duties: Data collection, processing and analysis, system establishment.

Education

- 2019 – 2023 📌 **Ph.D., The University of Sydney, Australia.**
Supervisors: Dr. Luping Zhou, Dr. Guosheng Lin and Dr. Wanli Ouyang
Thesis title: *Enhancing Novel-class Generalization of Deep Learning Models for Vision Tasks.*
- 2015 – 2019 📌 **B.Sc. in Physics, Nanjing University, China.**
Compulsory GPA: 4.48/5.0 (89.6/100) Overall GPA: 4.41/5.0 (88.2/100) RANK: 30/144
Thesis title: *Application of Deep Learning in Medical Imaging.*











Research Publications

- [1] D. Jiang, **X. Yang**, Z. Zhao, *et al.*, “Flexitex: Enhancing texture generation via visual guidance,” in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 39, 2025, pp. 3967–3975.
- [2] Z. Lai, Y. Zhao, H. Liu, *et al.*, “Hunyuan3d 2.5: Towards high-fidelity 3d assets generation with ultimate details,” *arXiv preprint arXiv:2506.16504*, 2025.
- [3] Z. Lai, Y. Zhao, Z. Zhao, *et al.*, “Unleashing vecset diffusion model for fast shape generation,” *arXiv preprint arXiv:2503.16302*, 2025.
- [4] J. Liu, H. Weng, B. Lei, *et al.*, “Freemesh: Boosting mesh generation with coordinates merging,” *arXiv preprint arXiv:2505.13573*, 2025.
- [5] J. Liu, J. Xu, S. Guo, *et al.*, “Mesh-rft: Enhancing mesh generation via fine-grained reinforcement fine-tuning,” *arXiv preprint arXiv:2505.16761*, 2025.
- [6] Y. Wang, X. Yi, H. Weng, *et al.*, “Nautilus: Locality-aware autoencoder for scalable mesh generation,” *arXiv preprint arXiv:2501.14317*, 2025.
- [7] X. Wei, B. Zhang, **X. Yang**, *et al.*, “Pbr3dgen: A vlm-guided mesh generation with high-quality pbr texture,” *arXiv preprint arXiv:2503.11368*, 2025.
- [8] H. Weng, Z. Zhao, B. Lei, *et al.*, “Scaling mesh generation via compressive tokenization,” in *Proceedings of the Computer Vision and Pattern Recognition Conference*, 2025, pp. 11 093–11 103.

- [9] **X. Yang**, G. Lin, Z. Chen, and L. Zhou, "Neural vector fields: Generalizing distance vector fields by codebooks and zero-curl regularization," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 2025.
- [10] Z. Zhao, Z. Lai, Q. Lin, *et al.*, "Hunyuan3d 2.0: Scaling diffusion models for high resolution textured 3d assets generation," *arXiv preprint arXiv:2501.12202*, 2025.
- [11] D. Jiang, Z. Ke, X. Zhou, *et al.*, "Timeformer: Capturing temporal relationships of deformable 3d gaussians for robust reconstruction," *arXiv preprint arXiv:2411.11941*, 2024.
- [12] **X. Yang**, G. Avraham, Y. Zuo, S. Ramasinghe, L. Bazzani, and A. van den Hengel, "Viewfusion: Towards multi-view consistency via interpolated denoising," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024.
- [13] **X. Yang**, H. Shi, B. Zhang, *et al.*, "Hunyuan3d 1.0: A unified framework for text-to-3d and image-to-3d generation," *arXiv preprint arXiv:2411.02293*, 2024.
- [14] **X. Yang**, G. Lin, Z. Chen, and L. Zhou, "Neural vector fields: Implicit representation by explicit learning," in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2023, pp. 16 727–16 738.
- [15] **X. Yang**, G. Lin, and L. Zhou, "Single-view 3d mesh reconstruction for seen and unseen categories," *IEEE Transactions on Image Processing*, vol. 32, pp. 3746–3758, 2023.  doi: 10.1109/TIP.2023.3279661.
- [16] **X. Yang**, B. Wang, K. Chen, *et al.*, "Brinet: Towards bridging the intra-class and inter-class gaps in one-shot segmentation," *The 31st British Machine Vision Virtual Conference (BMVC Oral)*, 2020.

Miscellaneous Experience

Awards and Achievements

- 2023  **Paulette Isabel Jones Career Award.** Awarded by The University of Sydney
- 2020  **Faculty of Engineering Research Scholarship.** Awarded by The University of Sydney
- 2019  **Outstanding Graduates Award.** Awarded by Nanjing University
- 2018  **2017-2018 Outstanding Student Award.** Awarded by Nanjing University
-  **People Scholarships.** Awarded by Nanjing University
- 2017  **MCM/ACM Honorable Mention.** Awarded by the Consortium for Mathematics and Its Application
-  **People Scholarship.** Awarded by Nanjing University
-  **Xingquan Responsibility for Scholarship.** Awarded by Nanjing University
-  **2016-2017 Outstanding Student Award.** Awarded by Nanjing University
- 2016  **People Scholarship.** Awarded by Nanjing University

Certification

- 2022  **Financial Risk Manager (FRM) FRM Exam Part I.** Awarded Global Association of Risk Professionals.