

Yatian Pang

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Education


- Ph.D. National University of Singapore, Mechanical Engineering** Aug 2021 - Now
- Advisor: Prof. Tay Eng Hock, Francis
 - Working closely with Prof. Li Yuan from Peking University.
 - Research interest: Computer Vision
- M.Sc. National University of Singapore, Mechanical Engineering** Aug 2020 - June 2021
- GPA: 4.50/5.00
- B.Eng. Soochow University, College of Mechanical and Electrical Engineering** Sep 2016 - June 2020
- GPA: 3.80/4.00

Experience

- Qwen, Research Intern** April 2025 - Now
- Mentor: Dr. Shuai Bai and Dr. Hang Zhang
 - Working on computer vision for video processing.
- Everlyn, Research Intern** Oct 2024 - March 2025
- Mentor: Prof. Harry Yang and Prof. Sernam Lim
 - Developing algorithms for animating images.
- A*STAR, Research Engineer & Research Intern** Oct 2021 - Dec 2023
- Developing an abnormal detection method for industrial systems.
 - Conducting industrial data cleaning with machine learning algorithms.


Publications & Preprints

- Next Patch Prediction for Autoregressive Visual Generation.** 2024
Yatian Pang, Peng Jin, Shuo Yang, Bin Lin, Bin Zhu, Zhenyu Tang, Liuhan Chen, Francis EH Tay, Ser-Nam Lim, Harry Yang, Li Yuan
UNDER REVIEW. [Arxiv 2024] [🔗](#)
- DreamDance: Animating Human Images by Enriching 3D Geometry Cues from 2D Poses.** 2024
Yatian Pang, Bin Zhu, Bin Lin, Mingzhe Zheng, Francis EH Tay, Ser-Nam Lim, Harry Yang, Li Yuan
ICCV 2025. [Arxiv 2024] [🔗](#)
- Envision3D: One Image to 3D with Anchor Views Interpolation.** 2024
Yatian Pang, Tanghui Jia, Yujun Shi, Zhenyu Tang, Junwu Zhang, Xinhua Cheng, Xing Zhou, Francis EH Tay, Li Yuan
[Arxiv 2024] [🔗](#)
- Masked Autoencoders for 3D Point Cloud Self-Supervised Learning.** 2023
Yatian Pang, Zhenghua Chen, Li Yuan
Book Chapter in Deep Learning For 3D Vision: Algorithms And Applications. [link] [🔗](#)
- Masked autoencoders for point cloud self-supervised learning.** 2022
Yatian Pang, Wenxiao Wang, Francis EH Tay, Wei Liu, Yonghong Tian, Li Yuan
European Conference on Computer Vision (ECCV) 2022. [link] [🔗](#)
- VideoGen-of-Thought: A Collaborative Framework for Multi-Shot Video Generation.** 2024

Mingzhe Zheng, Yongqi Xu, Haojian Huang, Xuran Ma, Yexin Liu, Wenjie Shu, **Yatian Pang**,
Feilong Tang, Qifeng Chen, Harry Yang, Ser-Nam Lim
UNDER REVIEW. [\[Arxiv 2024\]](#) 


Cycle3D: High-quality and Consistent Image-to-3D Generation via Generation-Reconstruction Cycle.

2024

Zhenyu Tang, Junwu Zhang, Xinhua Cheng, Wangbo Yu, Chaoran Feng, **Yatian Pang**, Bin Lin,
Li Yuan
AAAI 2025. [\[link\]](#) 


Repaint123: Fast and high-quality one image to 3D generation with progressive controllable 2D repainting.

2024

Junwu Zhang, Zhenyu Tang, **Yatian Pang**, Xinhua Cheng, Peng Jin, Yida Wei, Wangbo Yu,
Munan Ning, Li Yuan
European Conference on Computer Vision (ECCV) 2024. [\[link\]](#) 

Moe-llava: Mixture of experts for large vision-language models.

2023

Bin Lin, Zhenyu Tang, Yang Ye, Jiaxi Cui, Bin Zhu, Peng Jin, Jinfa Huang, Junwu Zhang,
Yatian Pang, Munan Ning, Li Yuan
UNDER REVIEW. [\[Arxiv 2024\]](#) 


Languagebind: Extending video-language pretraining to n-modality by language-based semantic alignment.

2023

Bin Zhu, Bin Lin, Munan Ning, Yang Yan, Jiaxi Cui, HongFa Wang, **Yatian Pang**, Wenhao Jiang,
Junwu Zhang, Zongwei Li, Wancai Zhang, Zhifeng Li, Wei Liu, Li Yuan
International Conference on Learning Representations (ICLR) 2024. [\[link\]](#) 

Abnormal Wedge Bond Detection Using Convolutional Autoencoders in Industrial Vision Systems.

2022

Ji-Yan Wu, **Yatian Pang**, Xiang Li, Wen Feng Lu
International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICCME) 2022. [\[link\]](#) 

Skills

Languages: Chinese, English, Python

Deep Learning Technologies: Pytorch, Deepspeed, Megatron