Jinrui Yang

jinruiyang.ray@gmail.com · Google Scholar · Semantic Scholar

Recent research interests

My current research interests lie in the field of Generative Models and Multimodal Large Language Model.

Education

University of California, Santa Cruz, CA, U.S. 2023.8 – present
Ph.D. student in Computer Science

Sun Yat-sen University, Guangzhou, China 2019.9 – 2021.6
M.E. in Computer Technology

Sichuan University, Chengdu, China 2015.9 – 2019.6
B.E. in Software Engineering

Work Experience

Research Intern. San Jose, USA 2024.06 – present
Research Intern
Project 1: Generative Image Layer Decomposition with Visual Effects: Designed **LayerDecomp**, a layered image decomposition method that preserves transparent visual effects and enables fine-grained editing, powered by a scalable synthetic dataset pipeline, resulting in a paper accepted at CVPR 2025.
Project 2: Unified Layer Aware Image Generation with Visual Effects: Developing a layered image generation framework for controllable RGBA synthesis with realistic visual effects, along with a supporting dataset.

Tencent YouTu Lab. Shanghai, China 2021.07 – 2023.08
Research Scientist, Full-time
Duties included:
1) Building robust vision perception models for different business scenarios.
2) Applying large multimodal models to downstream visual tasks in the real-world.
3) Building the comprehensive evaluation benchmark for MLLMs, MME. which is widely adopted by mainstream multimodality models(e.g., LLaVA family models, Qwen-VL family models, InternVL family models, etc).

Tencent YouTu Lab. Shanghai, China 2020.05 – 2020.10
Research Intern
Duties included: Conducted research on person re-identification, resulting in a paper accepted at ICCV 2021.

Publications

1. **Jinrui Yang**, Qing Liu, Yijun Li, Soo Ye Kim, Daniil Pakhomov, Mengwei Ren, Jianming Zhang, Zhe Lin, Cihang Xie, Yuyin Zhou. Generative Image Layer Decomposition with Visual Effects. **CVPR 2025**. Project page.
2. **Jinrui Yang**, Xianhang Li, Druv Pai, Yuyin Zhou, Yi Ma, Yaodong Yu, Cihang Xie. Scaling White-Box Transformers for Vision. **NeurIPS 2024**. Project page.
3. **Jinrui Yang**, Jiawei Zhang, Fufu Yu, Xinyang Jiang, mengdan zhang,Xing Sun,Yingcong Chen, Wei-Shi Zheng. Learning to Know Where to See:A Visibility-Aware Approach for Occluded Person Re-identification. **ICCV 2021**. Paper.
4. **Jinrui Yang**, Wei-Shi Zheng, Qize Yang, Yingcong Chen, Qi Tian. Spatial-Temporal Graph Convolutional Network for Video-based Person Re-identification. **CVPR 2020**. Paper.
5. Chaoyou Fu, Peixian Chen, Yunhang Shen, Yulei Qin, Mengdan Zhang, Xu Lin, **Jinrui Yang**, Xiawu Zheng, Ke Li, Xing Sun, Yunsheng Wu, Rongrong Ji. MME: A Comprehensive Evaluation Benchmark for Multimodal Large Language Models. **Arxiv, 2023**. Paper.
6. Yuqiao Xian, **Jinrui Yang** , Fufu Yu, Jun Zhang, Xing Sun. Graph-Based Self-Learning for Robust Person Re-identification. **WACV 2023**. Paper.
7. Jiaming Zhou, Junwei Liang, Kun-Yu Lin, **Jinrui Yang**,Wei-Shi Zheng. ActionHub: A Large-scale Action Video Description Dataset for Zero-shot ActionRecognition. **Arxiv, 2024**. Paper.

Academic Activities

Journal Reviewer: TIP, TCSVT, TMM
Conference Reviewer: NeurIPS2025, CVPR2025, ICML2024, CVPR 2024, WACV 2023, WACV 2025.