MOU, Linzhan

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Education

Zhejiang University Hangzhou, China
Bachelor of Automation(Robotics) *Sept. 2020 – Jul. 2024 (expected)*

- **GPA:** 3.98/4.00 (91.2/100), **Ranking:** Top 3%
- **Laureate of National Scholarship (Highest Honor for China Undergraduates)**
- **Honor Minor:** Advanced Honor Class of Engineering Education (Top 40/5,600 among all the engineering students)
- **Course Highlights:** Wheeled Mobile Robots and Enhanced Lab Training(4.0); Bipedal Mobile Robot Technology(4.0)

Publication

- **Painting 3D Nature in 2D: View Synthesis of Natural Scenes from a Single Semantic Mask**
  Shangzhan Zhang, Sida Peng, Tianrun Chen, **Linzhan Mou**, Haotong Lin, Kaicheng Yu, Yiyi Liao, Xiaowei Zhou
  IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023. [website]

- **Compact Neural Volumetric Video Representations with Dynamic Codebooks**
  Haoyu Guo, Sida Peng, Yunzhi Yan, **Linzhan Mou**,, Yujun Shen, Hujun Bao, Xiaowei Zhou
  Conference on Neural Information Processing Systems (**NeurIPS**), 2023. [paper]

- **MAttFace: High-Resolution Face Swapping with Multi-Level Attention**
  Linzhan Mou*, Shaoting Zhu*, Junyi Shen, Chao Xu, Yong Liu (* equal contribution)
  Under Review of IEEE Transactions on Computational Imaging (**TCI**). [paper]

- **Relightable Neural Avatars from Sparse Multi-View Videos**
  Zhen Xu, Sida Peng, Chen Geng, **Linzhan Mou**, Zihan Yan, Jiaming Sun, Hujun Bao, Xiaowei Zhou
  arXiv preprint arXiv:2308.07903; [website]

Research Experience

Vision Group, University of Illinois at Urbana-Champaign, Research Assistant
Adivisor : **Prof.** ***Yuxiong Wang*** (Department of Computer Science) Feb. 2023 – Present
Topic : 3D vison & generative model Champaign, IL, USA (on-site)

- Instruction-guided dynamic scene editing based on diffusion model with multi-dimension consistency

State Key Laboratory of CAD&CG, Zhejiang University, Research Assistant
Adivisor : **Prof.** ***Xiaowei Zhou*** (Department of Computer Science) Jun. 2022 – Present
Topic : 3D vision & graphics & digital humans & generative model Hangzhou, Zhejiang, China

- View synthesis of natural scenes from a single semantic mask combining with neural field and image inpainting.
- Relightable & animatable neural avatars from sparse view videos with sphere-tracing and soft-shadow algorithm.
- Real-time rendering of dynamic volumetric videos using a novel dynamic codebook and tensor decomposition technique.

APRIL-Lab, Zhejiang University, Researcher Assistant
Adivisor : **Prof.** ***Yong Liu*** (Institute of Cyber-Systems and Control) Dec. 2021 – May. 2023
Topic : computer vison & generative model Hangzhou, Zhejiang, China

- Multimodal-driven talking face generation via a proposed texture-geometry-aware diffusion model which decomposes the complex transfer problem into multi-conditional denoising processes.

Honors & Awards

- National Scholarship, Ministry of Education of P.R. China **(Top 0.2% across China)** *2021*
- First-Class Scholarship for Academic Excellence of Zhejiang University **(Top 3%)** *2021*
- Top 10 Outstanding Students of Academy **(Top 10 out of 2,000)** *2022*
- Government Scholarship for Academic Excellence of Zhejiang Province **(Top 3%)** *2022*
- National First Prize, China Undergraduate Mathematical Contest in Modeling(CUMCM) **(Top 1%)** *2022*
- International Gold Prize, International Genetically Engineered Machine Competition(iGEM) **(Top 1%)** *2022*
- First Prize, Supcon Cup College Student Robot Competition **(Top 1 out of 37 teams)** *2022*

Extracurricular Skills

Computer: C/C++, Python, Matlab, Bash, PyTorch, LaTex, Linux, COLMAP, ROS, Unity.