Dr. Hang Zhou

Contact Information

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Research Interests

Computer Graphics, Computer Vision, Generative Models, Geometric Modeling, Compositional Modeling, Spatial AI, Embodied AI, Robotics, Scene Understanding

Employment

Postdoctoral Fellow 2024 – Now
Collaborator: Prof. Li Cheng
Department of Electrical and Computer Engineering
Faculty of Engineering, The University of Alberta, Canada

Postdoctoral Fellow 2021 – 2023
Collaborator: Prof. Hao (Richard) Zhang
School of Computer Science
Faculty of Applied Sciences, Simon Fraser University, Canada

Research Intern 2017 – 2018
Machine Learning Group
Microsoft Research Asia, China

Education

Doctor of Engineering 2020
The University of Science and Technology of China (USTC), Hefei, China

Publication List

Conference Publications

11. **Hang Zhou**, Xinxin Zuo, Sen Wang, and Li Cheng, PICS: Pairwise Image Compositing with Spatial Interactions, *ICLR 2026*.
10. **Hang Zhou**, Xinxin Zuo, Rui Ma, and Li Cheng, BOOTPLACE: Bootstrapped Object Placement with Detection Transformers, *CVPR 2025*.
9. Weitao Feng, **Hang Zhou**, Jing Liao, Li Cheng, and Wenbo Zhou, CASAGPT: Cuboid Arrangement and Scene Assembly for Interior Design, *CVPR 2025*. **Oral**
8. Qi Sun, **Hang Zhou**, Wengang Zhou, Li Li, and Houqiang Li, FOREST2SEQ: Revitalizing Order Prior for Sequential Indoor Scene Synthesis, *ECCV, 2024*.
7. Zhiqin Chen, Qimin Chen, **Hang Zhou**, and Hao Zhang, DAE-Net: Deforming Auto-Encoder for Fine-grained Shape Co-segmentation, *ACM SIGGRAPH, 2024*.
6. Qimin Chen, Zhiqin Chen, **Hang Zhou**, and Hao Zhang, ShaDDR: Interactive Example-based Geometry and Texture Generation via 3D Shape Detailization and Differentiable Rendering, *ACM SIGGRAPH Asia, 2023*.
5. Zehua Ma, **Hang Zhou**, and Weiming Zhang, AnisoTag: 3D Printed Tag on 2D Surface via Reflection Anisotropy, *CHI, 2023*.

4. Qidong Huang, Xiaoyi Dong, Dongdong Chen, **Hang Zhou**, Weiming Zhang, and Nenghai Yu, Shape-invariant 3D Adversarial Point Clouds, *CVPR, 2022*.
3. **Hang Zhou**, Dongdong Chen, Jing Liao, Weiming Zhang, Kejiang Chen, Xiaoyi Dong, Kunlin Liu, Gang Hua, and Nenghai Yu, LG-GAN: Label Guided Adversarial Network for Flexible Targeted Attack of Point Cloud-based Deep Networks, *CVPR, 2020*.
2. Xiaoyi Dong, Dongdong Chen, **Hang Zhou**, Gang Hua, Weiming Zhang, and Nenghai Yu, Self-robust 3D Point Recognition via Gather-vector Guidance, *CVPR, 2020*.
1. **Hang Zhou**, Kejiang Chen, Weiming Zhang, Han Fang, Wenbo Zhou, and Nenghai Yu, DUP-Net: Denoiser and Upsampler Network for 3D Adversarial Point Clouds Defense, *ICCV, 2019*.

Journal Publications

4. **Hang Zhou**, Rui Ma, Ling-Xiao Zhang, Lin Gao, Ali Mahdavi-Amiri, and Hao Zhang, SAC-GAN: Structure-aware Image Composition, *IEEE Trans. on Visualization and Computer Graphics (TVCG)*, Vol. 30, No. 7, pp. 3151–3165, 2024.
3. Qichao Ying, **Hang Zhou**, Zhenxing Qian, Sheng Li, and Xinpeng Zhang, Learning to Immunize Images for Tamper Localization and Self-recovery, *IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI)*, Vol. 45, No. 11, pp. 13814–13830, 2023.
2. **Hang Zhou**, Weiming Zhang, Kejiang Chen, Weixiang Li, and Nenghai Yu, Three-Dimensional Mesh Steganography and Steganalysis: A Review, *IEEE Trans. on Visualization and Computer Graphics (TVCG)*, Vol. 28, No. 12, pp. 5006–5025, 2021.
1. **Hang Zhou**, Kejiang Chen, Weiming Zhang, Chuan Qin, and Nenghai Yu, Feature-Preserving Tensor Voting Model for Mesh Steganalysis, *IEEE Trans. on Visualization and Computer Graphics (TVCG)*, Vol. 27, No. 1, pp. 57–67, 2019.

Selected Awards

Best Paper Award of IJCAI Workshop on Safety and Security of Deep Learning	2021
Outstanding Doctoral Dissertation, Chinese Academy of Sciences	2021
SIGWEB Outstanding Doctoral Dissertation, ACM China	2021
Outstanding Doctoral Dissertation, University of Science and Technology of China	2020
The President Scholarship, Chinese Academy of Sciences	2020

Invited Talks

Learning Space Planning for 3D Indoor Scene Synthesis
at Department of Electrical and Computer Engineering, Concordia University, Canada (Online), Apr 2025

Deep Learning Meets Compositional Generative AI
at School of Computer Science, Fudan University, Shanghai, China, Sept 2024

Machine Learning in Compositional Generative AI
at Department of Electronic Engineering and Information Science, USTC, Hefei, China, June 2024

Controllable Compositional Modeling in Computer Vision and Graphics
at Imperial-X, Imperial College London, London, UK, Nov 2023

Exploring Deep Point-Cloud Robustness
at GAMES Webinar (Online), Dec 2022

Learning Diverse and Controllable 3D Content Generation
at Huawei-SFU Joint Lab Workshop, Vancouver, Canada, Nov 2022