XIAOXIAO LONG (龙霄潇)

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EDUCATION

The University of Hong Kong (HKU)

Present

Postdoctoral

Supervisor: Prof. Wenping Wang (IEEE Fellow, ACM Fellow)

The University of Hong Kong (HKU)

2018.09 - 2023.08

Ph.D. in Computer Science

Supervisor: Prof. Wenping Wang and Prof. Taku Komura

Zhejiang University (ZJU)

2014.09 - 2018.06

B.S. in Control Science and Engineering

RESEARCH INTERESTS

Computer graphics: 3D content generation, neural rendering, 3D surface modeling

Computer vision: image based depth/normal estimation, image-based 3D reconstruction

Google scholar profile: https://scholar.google.com/citations?user=W3G5kZEAAAAJ&hl=en

Citation: 455, H-index: 11 (updated at 2024.02.04)

HONORS (SELECTED)

| Hong Kong PhD Fellowship Scheme (top 100 PhD students in HK) | 2018 - 2023 |
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| Computer Science Scholarship of HKU | 2018 |
| Scholarship of Zhejiang Province | 2016, 2017 |
| Scholarship of Zhejiang University (Top 1%) | 2015, 2016, 2017 |
| Supcon Scholarship [Supcon] | 2017 |

PUBLICATIONS

- * equal contribution; † corresponding author
- 1. Xiaoxiao Long*, Yuhang Zheng*, Yupeng Zheng, Beiwen Tian, Cheng Lin, Lingjie Liu, Hao Zhao, Guyue Zhou, Wenping Wang, Adaptive Surface Normal Constraint for Geometric Estimation from Monocular Images, [in TPAMI submission, minor revision]
- 2. Xiaoxiao Long*, Yuan-Chen Guo*, Cheng Lin, Yuan Liu, Zhiyang Dou, Lingjie Liu, Yuexin Ma, Song-Hai Zhang, Marc Habermann, Christian Theobalt, Wenping Wang, Wonder3d: Single image to 3d using cross-domain diffusion, [ARXIV23] (Github 3.8k stars)
- 3. Yingwenqi Jiang, Jiadong Tu, Yuan Liu, Xifeng Gao, **Xiaoxiao Long**[†], Wenping Wang, Yuexin Ma[†], GaussianShader: 3D Gaussian Splatting with Shading Functions for Reflective Surfaces, [ARXIV23]
- 4. Zhengming Yu*, Zhiyang Dou*, **Xiaoxiao Long**, Cheng Lin, Zekun Li, Yuan Liu, Norman Muller, Taku Komura, Marc Habermann, Christian Theobalt, Xin Li, Wenping Wang, Surf-D: High-Quality Surface Generation for Arbitrary Topologies using Diffusion Models, [ARXIV23]

- 5. Yupeng Zheng, Xiang Li, **Xiaoxiao Long**[†], Pengfei Li, Yuhang Zheng, Chengliang Zhong, Bu Jin, Hao Zhao, Guyue Zhou, Qichao Zhang[†], *MonoOcc: Digging into Monocular Semantic Occupancy Prediction*, [ICRA24]
- 6. Kai Cheng*, **Xiaoxiao Long***, Wei Yin, Jin Wang, Zhiqiang Wu, Yuexin Ma, Kaixuan Wang, Xiaozhi Chen, Xuejin Chen, *UC-NeRF: Neural Radiance Field for Under-Calibrated Multi-view Cameras in Autonomous Driving*, [ICLR24]
- 7. Zongcheng Li*, Xiaoxiao Long*, Yusen Wang, Tuo Cao, Wenping Wang, Fei Luo, Chunxia Xiao, NeTO: Neural Reconstruction of Transparent Objects with Self-Occlusion Aware Refraction-Tracing, [ICCV23]
- 8. **Xiaoxiao Long**, Cheng Lin, Lingjie Liu, Yuan Liu, Peng Wang, Christian Theobalt, Taku Komura, Wenping Wang, NeuralUDF: Learning Unsigned Distance Fields for Multi-view Reconstruction of Surfaces with Arbitrary Topologies, [CVPR23]
- 9. Xiaoxiao Long, Cheng Lin, Peng Wang, Taku Komura, Wenping Wang, SparseNeuS: Fast Generalizable Neural Surface Reconstruction from Sparse views, [ECCV22]
- 10. **Xiaoxiao Long**, Cheng Lin, Lingjie Liu, Wei Li, Christian Theobalt, Ruigang Yang, Wenping Wang, Adaptive Surface Normal Constraint for Depth Estimation, [ICCV21]
- 11. **Xiaoxiao Long**, Lingjie Liu, Wei Li, Christian Theobalt, Wenping Wang, *Multi-view Depth Estimation using Epipolar Spatio-Temporal Networks*, [CVPR21]
- 12. **Xiaoxiao Long**, Lingjie Liu, Wei Li, Christian Theobalt, Wenping Wang, Occlusion-Aware Depth Estimation with Adaptive Normal Constraints, [ECCV20]
- 13. Yuan Liu, Cheng Lin, Zijiao Zeng, **Xiaoxiao Long**, Lingjie Liu, Taku Komura, Wenping Wang, Sync-Dreamer: Generating Multiview-consistent Images from a Single-view Image, [ICLR24 spotlight]
- 14. Ziqi Wang, Fei Luo, **Xiaoxiao Long**, Wenxiao Zhang, Chunxia Xiao, *Learning Long-range Information with Dual-Scale Transformers for Indoor Scene Completion*, [ICCV23]
- 15. Yuan Liu, Peng Wang, Cheng Lin, **Xiaoxiao Long**, Jiepeng Wang, Lingjie Liu, Taku Komura, Wenping Wang, NeRO: Neural Geometry and BRDF Reconstruction of Reflective Objects from Multiview Images, [SIGGRAPH23 (journal track)]
- 16. Jiepeng Wang, Peng Wang, **Xiaoxiao Long**, Christian Theobalt, Taku Komura, Lingjie Liu, Wenping Wang, NeuRIS: Neural Reconstruction of Indoor Scenes Using Normal Priors, [ECCV22]
- 17. Yuan Liu, Yilin Wen, Sida Peng, Cheng Lin, **Xiaoxiao Long**, Taku Komura, Wenping Wang, Gen6D: Generalizable Model-Free 6-DoF Object Pose Estimation from RGB Images, [ECCV22]
- 18. **龙霄潇**, 程新景, 朱昊, 张朋举, 刘浩敏, 李俊, 郑林涛, 胡庆拥, 刘浩, 曹汛, 杨睿刚, 吴毅红, 章国锋, 刘烨斌, 徐凯, 郭裕兰, 陈宝权, 三维视觉前沿进展, [**中国图象图形学报 2021**]

TEACHING

Teaching Assistants:

COMP3278 Introduction to database management systems

[Section 2B, 2018]

COMP3359 Artificial Intelligence Applications

[Section 2A, 2019]

COMP3270 Artificial intelligence

[Section 1A, 2021]

 ${\it CVPR, ICCV, EUROGRAPHICS, TPAMI, TOG, TIP, TMM, TMC, CVM, Information Fusion, Neurocomputing, Pattern Recognition.}$