Yuanbo Xiangli

EDUCATION

2019 – 2023	The Chinese University of Hong Kong PhD in MMLab, Information Engineering
2017 – 2018	Oxford University MSc in Computer Science
2013 – 2017	University of Nottingham BSc Honors Computer Science

BIO

I am currently a postdoc scholar at Department of Computer Science, Cornell University, advised by Prof. Noah Snavely. I obtained my Ph.D in Multimedia Lab, Information Engineering, CUHK, supervised by Prof. Dahua Lin. My research interest lies in 3D computer vision and generative modeling. I am working on photorealistic and efficient city scenes reconstruction, manipulation and generation based on multi-source data, including satellite imagery, oblique photography, street view panoramas and urban planning information. Find me at: https://kam1107.github.io/.

PUBLICATION

- [1] Y. Xiangli, L. Xu, X. Pan, N. Zhao, B. Dai, D. Lin, "AssetField: Assets Mining and Reconfiguration in Ground Feature Plane Representation", in *International Conference on Computer Vision 2023*.
- [2] Y. Li, L. Jiang, L. Xu, <u>Y. Xiangli</u>, Z. Wang, D. Lin, B. Dai, "MatrixCity: A Large-scale City Dataset for City-scale Neural Rendering and Beyond", in *International Conference on Computer Vision 2023*.
- [3] L. Xu, <u>Y. Xiangli</u>, S. Peng, X. Pan, N. Zhao, C. Theobalt, B. Dai, D. Lin, "Grid-guided Neural Radiance Fields for Large Urban Scenes", in *Computer Vision and Pattern Recognition Conference (CVPR) 2023*.
- [4] W. Li, Y. Lai, L. Xu, Y. Xiangli, J. Yu, C. He, G. Xia, D. Lin, "OmniCity: Omnipotent City Understanding with Multi-level and Multi-view Images", in *Computer Vision and Pattern Recognition Conference (CVPR)* 2023.
- [5] <u>Y. Xiangli</u>, L. Xu, X. Pan, N. Zhao, A. Rao, C. Theobalt, B. Dai, D. Lin, "BungeeNeRF: Progressive Neural Radiance Field for Extreme Multi-scale Scene Rendering", in *European Conference on Computer Vision 2022*.
- [6] L. Xu, <u>Y. Xiangli</u>, A. Rao, N. Zhao, B. Dai, Z. Liu, D. Lin, "BlockPlanner: City Block Generation with Vectorized Graph Representation," in *International Conference on Computer Vision 2021*.
- [7] <u>Y. Xiangli</u>, Y. Deng, B. Dai, C. C. Loy and D. Lin, "Real or Not Real, that is the Question," in *International Conference on Learning Representations 2020.* (Spotlight)
- [8] C. X. Lu, Y. Li, <u>Y. Xiangli</u> and Z. Li, "Nowhere to Hide: Cross-modal Identity Leakage between Biometrics and Devices," in *Proceedings of The Web Conference 2020.* (Oral)
- [9] C. X. Lu, <u>Y. Xiangli</u>, P. Zhao, C. Chen, N. Trigoni and A. Markham, "Autonomous Learning of Speaker Identity and WiFi Geofence from Noisy Sensor Data," in *IEEE Internet of Things Journal*, 2019.
- [10] <u>Y. Xiangli</u>, C. X. Lu, P. Zhao, C. Chen, A. Markham, "iSCAN: automatic speaker adaptation via iterative cross-modality association," in *ISWC Adjunct, UniComp 2019*.
- [11] Y. Li, H. Deng, <u>Y. Xiangli</u>, Z. Yuan, C. Peng, and S. Lu, "In-device, runtime cellular network information extraction and analysis: demo," In *Proceedings of the 22nd Annual International Conference on Mobile Computing and Networking (MobiCom '16)*. ACM, New York, NY, USA, 503-504, 2016.

[1] T. Lu, M. Yu, L. Xu, Y. Xiangli, L. Wang, D. Lin, B. Dai, "Scaffold-GS: Structured 3D Gaussians for View-Adaptive Rendering", arXiv 2023.

PROJECT/INTERN EXPERIENCE

2023.6-2023.9 Adobe Research

Research Scientist/Engineer (Intern)

2022-2023 Shanghai Al Lab

Student Researcher

LandMark project (https://www.shlab.org.cn/news/5443429): Large-scale real-

world urban scene reconstruction, editing and stylization.

2020.3-2021.9 Compilation and composition of Information Technology

Textbook (High School)

Author

Composed Chapter 14: Generative Modeling; participate in reviewing other

chapters.

2019.2-2019.8 Sensetime

Research Intern

Worked with Dr. Bo Dai and Prof. Dahua Lin on realistic image synthesis with

generative models.

2016 Summer Computer Science Department, the University of California, Los Angeles

Research Assistant

Worked with Dr. Yuanjie Li and Prof. Songwu Lu on project `MobileInsight', improving Dynamic Adaptive Streaming over HTTP (DASH) algorithm using

physical layer bandwidth for smoother streaming.

2015.9-2016.6 Computer Science Department, University of Nottingham

Data Analyst and developer (android app `MentalSpace')

Worked with Prof. Max L. Wilson on electroencephalogram (EEG) data

collection, analysis, and visualization.

2015 Summer Information Engineering Department, the Chinese University of Hong Kong

Research Assistant

Worked with Prof. Chen Change Loy on image aesthetic assessment.

TEACHING ASSISTANT

2021 Spring Data Structure (Undergrad)

2019/20 Spring Multimedia Coding and Processing (Undergrad) 2019/20/21 Fall Problem Solving by Programming (Undergrad)

SKILLS AND INSERTS

Skills Python/Numpy, PyTorch, C, C++