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] T. Lu, M. Yu, L. Xu, Y. Xiangli, L. Wang, D. Lin, B. Dai, "Scaffold-GS: Structured 3D Gaussians for View-Adaptive Rendering", to appear in *Computer Vision and Pattern Recognition Conference (CVPR)* 2024.
- [2] 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*.
- [3] 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*.
- [4] 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.*
- [5] 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.
- [6] <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*.
- [7] 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*.
- [8] Y. Xiangli, 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)
- [9] 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)
- [10] 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.
- [11] Y. Xiangli, C. X. Lu, P. Zhao, C. Chen, A. Markham, "iSCAN: automatic speaker adaptation via iterative cross-modality association," in *ISWC Adjunct, UniComp 2019*.

[12] 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.

Preprint

[1] M. Yu, T. Lu, L. Xu, L. Jiang, <u>Y. Xiangli</u>, B. Dai, "GSDF: 3DGS Meets SDF for Improved Rendering and Reconstruction", arXiv 2024.

PROJECT/INTERN EXPERIENCE

2023.6-2023.9	Adobe Research
	Research Scientist/Engineer (Intern)
2022-2023	Shanghai AI Lab
	<u>Student Researcher</u> LandMark project (https://www.shlab.org.cn/news/5443429): Large-scale realworld urban scene reconstruction, editing and stylization.
2020.3-2021.9	Compilation and composition of Information Technology Textbook (High School)
	<u>Author</u> Composed Chapter 14: Generative Modeling; participate in reviewing other chapters.
2019.2-2019.8	Sensetime
	<u>Research Intern</u> 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
	<u>Data Analyst and developer (android app `MentalSpace')</u> 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
	<u>Research Assistant</u> 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