Yuchen Lin

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EDUCATION

Peking University

Beijing, China

Junior Undergraduate. Major in Intelligence Science and Technology (Zhi Class)

Sept. 2022 - Present

- **GPA:** 3.80/4.0 (Specialized)
- Core Courses: Advanced Mathematics I/II (96/95), Probability Theory and Statistics (99), Introduction to Computation (94), Introduction to Artificial Intelligence (93.5), Practice of Software Design (93), Research Practice for Intelligence Science I/II (94/93)
- Standard Tests: TOEFL 111 (Speaking 23), CET-6 622

Carnegie Mellon University

Pittsburgh, PA

Exchange Student. Major in Computer Science

Aug. 2024 – Present

• Core Courses (Latest Grade): 10301 Introduction to Machine Learning (94.5), 10423 Generative AI (90.5)

Publications and Manuscripts

- * indicates equal contributions
- About general physics-based 3D dynamic scene generation with Gaussian Splatting

Due to the double-blind reviewing requirement, please email me for more details Yuchen Lin, Chenguo Lin, Jianjin Xu, Yadong Mu

Under review by International Conference on Learning Representations (ICLR), 2025 (score: 86666)

• InstructLayout: Instruction-Driven 2D and 3D Layout Synthesis with Semantic Graph Prior Chenguo Lin^* , $\operatorname{\underline{Yuchen\ Lin}}^*$, Panwang Pan, Xuanyang Zhang, Yadong Mu Under review by Transactions on Pattern Analysis and Machine Intelligence (T-PAMI), 2024

Experience

Human Sensing Lab

Carnegie Mellon University

Sept. 2024 – Present

Research Intern

Advisor: Prof. Fernando De la Torre

- Research Topic: 3D human head generation
- Exploring 3D human head generation with pretrained 2D generative models. This work is expected to be submitted to a top-tier conference.

Machine Intelligence Lab

Peking University

Research Intern

Sept. 2023 – Present

Advisor: Prof. Yadong Mu

- Research Topic: 3D semantic learning, static and dynamic scene generation
- Proposed a unified framework for 2D and 3D instruction-driven layout synthesis with a semantic graph prior. New datasets have been curated to enhance further research. This work has resulted in a top-tier journal submission.
- Proposed a novel method for general physics-based 3D dynamic scene generation with Gaussian splatting. This work has resulted in a top-tier conference submission.

Awards

- Award for Scientific Research, 2024
- Zhi Class Scholarship, 2024
- Robin Li Scholarship (25 awards per year in Peking University), 2023
- Merit Student, 2023
- XiaoSong Scholarship of Fuguang Foundation (4/200k+ every year in Fujian Province), 2022
- First Prize in China Physics Olympiad (Fujian Province), 2020

Extracurricular Activities

EECS School Soccer Team

Peking University

Team Member

- Silver Medal in 2022 Freshman Soccer Cup of Peking University
- Bronze Medal in 2024 Peking University Soccer Cup

Sept. 2022 - Present