

Ziyang Xie

[Personal Page](#) | [Google Scholar](#) | [Github Page](#) | [Email](#) | +1 217-974-0151

EDUCATION

University of Illinois Urbana-Champaign

Master of Science in Computer Science (MSCS) | GPA: 4.0/4.0

Champaign, IL

Aug. 2023 – May 2025

Fudan Univeristy

Bachelor of Science in Computer Science | GPA: 3.54/4.0

Shanghai, China

Sep. 2019 – June 2023

PUBLICATIONS

Vid2Sim: Realistic and Interactive Simulation from Video for Urban Navigation

UnderReview

Ziyang Xie, Zhizheng Liu, Zhenghao Peng, Wayne Wu, Bolei Zhou

MV-Map: Offboard HD-Map Generation with Multi-view Consistency

ICCV, 2023

Ziyang Xie, Ziqi Pang*, Yu-Xiong Wang*

S-NeRF: Neural Radiance Fields for Street Views

ICLR, 2023

Ziyang Xie, Junge Zhang*, Wenye Li, Feihu Zhang, Li Zhang*

Frozen transformers in language models are effective visual encoder layers

ICLR, 2024 (Spotlight*)

Ziqi Pang, Ziyang Xie, Yunze Man*, Yu-Xiong Wang*

S-NeRF++: Autonomous Driving Simulation via Neural Reconstruction and Generation

UnderReview

Yurui Chen, Junge Zhang, Ziyang Xie, Wenye Li, Feihu Zhang, Jiachen Lu, Li Zhang

Brain3D: Generating 3D Objects from fMRI

Preprint

Yuankun Yang, Li Zhang, Ziyang Xie, Zhiyuan Yuan, Jianfeng Feng, Xiatian Zhu, Yu-Gang Jiang

SELECTED RESEARCH EXPERIENCE

University of California, Los Angeles

May. 2024 – Nov. 2024

Vid2Sim: Realistic and Interactive Simulation from Video for Urban Navigation

Advisor: Prof. Bolei Zhou

- Developed a comprehensive pipeline that can convert casual monocular videos into photo-realistic and physical interactive simulation for RL agents training.
- Conducted both simulation and real-world experiments to show that Vid2Sim can significantly reduce the sim-to-real gap and improve the success rate of urban navigation in the real world by 68.3% compared with agents trained with prior simulation methods.

University of Illinois Urbana-Champaign

Sep. 2022 – July. 2023

MV-Map: Offboard HD-Map Generation with Multi-view Consistency

Advisor: Prof. Yuxiong Wang

- Proposed a novel uncertainty-based offboard HD-Map generation pipeline that enhances HD-Map generation quality by ensuring multi-view consistency with neural reconstruction.
- Demonstrated strong compatibility with any online HD-Map generation method and can work in a plug-and-play manner to achieve consistent performance gain over 15%.

Fudan Univeristy

Jan. 2022 – Aug 2022

S-NeRF: Neural Radiance Fields for Street Views

Advisor: Prof. Li Zhang

- Proposed the first pipeline to reconstruct high-quality unbounded self-driving scenes and foreground moving vehicles with neural radiance field on public self-driving datasets.
- Developed a robust method for high-quality scene reconstruction with confidence-based dense depth supervision and achieved 21% and 45% PSNR gain for the background static scene and foreground moving vehicles rendering.

AWARDS

Fudan University Outstanding Graduate (Ranking: 6/101)

Jun. 2023

Hui-Chun Chin and Tsung-Dao Lee Chinese Undergraduate Research Endowment Researcher

July. 2021

Fudan University Excellent Student

Sep. 2020

Fudan University Student Professional Minor Scholarship (Ranking: 8/101)

Sep. 2020