Sirui Xie

Email: sirius200208@outlook.com · **Tel:** (+86) 199-8367-9194 · **HomePage:** SiruiXie.github.io

Education

Beijing University of Civil Engineering and Architecture, Beijing Sept. 2021 - Present

*B.Eng in **Vehicle Engineering**:* 2021-2022
*B.Eng in **Urban Design**:* 2022-Present

Research Experience

Institute for AI Industry Research(AIR), Tsinghua University May. 2023 - Present

Intern Fortunately Advised by *Prof. Hao Zhao* from Tsinghua University

- Exploring *Neural Radiance Fields(NeRF)* for scene editing and asset mining
- Exploring automatic city planning and visualization using GNN and NeRF
- Exploring and creating 3D AIGC pipelines

AI Design Lab Dec. 2022 - Present

Research Assistant Fortunately Advised by *Prof. Yuejia Xu From Beijing University of Civil Engineering and Architecture*

- Exploring automatic city planning and visualization using GNN and NeRF
- Undertaking the routine meetings to share research tips and usages of the latest AI tools on architecture design worlflows

Publications

- ASSIST: Interactive Scene Nodes for Scalable and Realistic Indoor Simulation [arxiv]
- Structured NeRF for Indoor Scene Synthesis [Submitted to ECCV2024]
- Bouncing into Chaos: Hierarchical Scene Graph with Neural Representation[Submitted to ECCV2024]

Selected Competitions and Awards

[First Price] Honor of Beijing Challenge Cup: Entrepreneurial Plan Competition May. 2023
[Second Class Scholarship] Honor of Comprehensive Second Class Scholarship of BUCEA Sept. 2022
[Silver Award] Honor of Beijing Challenge Cup: Entrepreneurial Plan Competition Jun. 2022
[Third Prize] Honor of Blue Bridge Cup Programming Competition Beijing Division B May. 2022
[Excellent Member] Honor of Excellent Komsomol Member of BUCEA Apr. 2022

Relevant Self-study Courses

- CS229:Machine Leaning. Stanford University. by Andrew Ng.
- CS2230:Deep Learning. Stanford University. by Andrew Ng.
- STAT157:Introduction to Deep Learning. UC Berkeley. by Mu Li.
- CS231n:Convolutional Neural Networks for Visual Recognition.Stanford University. by Feifei Li.
- ...

Skills

- Programming Language: Python(Pytorch), C/C++, Markdown, Numpy, Matplotlib.pyplot, Pandas. etc.
- Other Skills: Linux, Photoshop, Blender, BIM, Rhino, SketchUp, Sketch, Architecture and Urban design

Other

Student Organization: Student Art Group of BUCEA
Kaggle: House Price Competition, score: 0.125, rank: top14.3%
Southern Calligraphy Exhibition, reported by the People's Daily
Parametric design and 3D printing of the exhibition "The new world" of Zaha Studio