

Xie Sirui

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Education

Beijing University of Civil Engineering and Architecture – **BArch**

Sep 2021 – Jun 2026

Major: Urban Design

Average: 88.43 / 100

Languages: English (IELTS 6.5); Chinese (Native)

Publications

- Leiyao Cui*, Zihang Zhao*, **Sirui Xie***, Wenhuan Zhang, Zhi Han, Yixin Zhu. "Vi-TacMan: Articulated Object Manipulation via Vision and Touch." IEEE International Conference on Robotics and Automation, 2026. [Paper](#).
- Zihang Zhao*, Leiyao Cui*, **Sirui Xie***, Saiyao Zhang, Zhi Han, Lecheng Ruan, Yixin Zhu. "B*: Efficient and Optimal Base Placement for Fixed-Base Manipulators." IEEE Robotics and Automation Letters, 2025. [DOI](#).
- Zhide Zhong, Jiakai Cao, Songen Gu, **Sirui Xie**, Weibo Gao, Liyi Luo, Hao Zhao, Guyue Zhou, Haoang Li, Zike Yan. "Structured-NeRF: Hierarchical Scene Graph with Neural Representation." ECCV, 2024. [Paper](#).

Projects, Competitions & Honors

- **Kaggle House Prices (2024)**: Designed and trained a neural network for structured tabular data; final score 0.125 (top 14.3%).
- **Beijing Challenge Cup Entrepreneurial Plan (2023)**: First Prize; led planning, technical proposal, and presentation.
- **Beijing Challenge Cup (2022)**: Silver Award; contributed solution design and competitive presentation.
- **Blue Bridge Cup Programming Competition, Beijing Division B (2022)**: Third Prize.
- **BUCEA Second Class Comprehensive Scholarship (2022)**.

Experiences & Referees

Prof. Yixin Zhu – **Peking University Core Lab**

Role: Research Intern | Oct 2024 – Dec 2025

Relationship: Research Intern under Prof. Zhu (robotics).

Co-first authored one manuscript and submitted another to ICRA.

Prof. Hao Zhao – **Tsinghua AIR & Lightwheel AI**

Role: Research Intern | May 2023 – Oct 2024

Relationship: Research Intern collaborating on 3D scene generation and simulation.

Worked as free research intern until Jan., 2024.

Submitted a paper to ICRA and led iterative development of a radar simulation module for sensor fusion.

Skills

Python; Rust; C/C++;

PyTorch; NeRFStudio; TrajOpt;

Git; Linux; LaTeX/Markdown; 3D modeling (Rhino/Blender/SketchUp); AutoCAD 2D

Other Information

- BUCEA & Zaha Studio, Parametric Design & 3D Printing Team for "The New World" Exhibition (2024): built algorithm to convert 3D geometry into robotic arm print trajectories.