

Zhaofeng Luo

School of Electronics Engineering and Computer Science • Peking University
• Beijing, China

✉ roushelfy@stu.pku.edu.cn [@roushelfy](https://twitter.com/roushelfy) [Roushelfy.github.io](https://github.com/Roushelfy)

Education

Peking University.

Beijing, China

B.S. in Computer Science

Sep. 2021 - Present

- **GPA:** 3.87/4.00 (WES), Ranking: **1/40** of the class (Recent Academic Year)
- **Selected Coursework:** Computer Networks (Honor Track): 100, Computer Architectures: 93, Introduction to Computer Systems (ICS): 95.5, Mathematical Analysis (I, II, III): 91, 94, 96, Advanced Algebra: 92, Algorithm Design and Analysis (Honor Track): 92, Convex Analysis and Optimization 96.

Publication

ACM MobiCom 2023 Demo

(Best 5 Demos)

A Self-Adaptive Retro-FSO Design for Air-to-Ground Communication

- Zhe Ou, Zhaofeng Luo, Guanyu Shi, Chenren Xu

Open-Source Online Book

Physics-based Simulation

- Minchen Li, Chenfanfu Jiang, Zhaofeng Luo

Research Experience

Physics-based Solid Simulation.

Pittsburgh, PA, USA

Advised by Prof. Minchen Li

June. 2024 - Sep. 2024

- **Hand-GS** Explore using hand and Gaussian Splatting scenes for real-time physics-based 3D modeling and interactions, addressing challenges in real-time simulation and direct hand interaction.
- **Solid-sim-tutorial-gpu** A tutorial for elastodynamic contact simulation using MUDA (a CUDA programming paradigm).

Wireless Communication.

Beijing, China

Advised by Prof. Chenren Xu

May. 2023 - Present

- Working on a novel all-optical retro-FSO (Free-Space Optical) feedback architecture for building long-distance, high-mobility, high-throughput wireless laser links. The project was presented at MobiCom '23 Demo as Co-first author, and is now being prepared for submission to SIGCOMM 2025.
- Developed a satellite experimental framework that integrates satellite computing and networking. The framework can accurately simulate various environmental conditions, such as temperature and power consumption, to provide a realistic testing environment. The project has been submitted to MobiCom '24.

Physics-based Fluid Simulation.

Beijing, China

Advised by Prof. Mengyu Chu

May. 2023 - July. 2023

- Replicating fluid simulation using PIC/FLIP/APIC methods and attempt optimization

Circuit Design Automation.

Beijing, China

Advised by Prof. Yibo Lin

Jan. 2023 - Apr. 2023

- Developing a tool for reverse engineering code from analog circuits based on **Berkley Analog Generator**

TA Experience

- Teaching Assistant in Introduction to Computer Systems course Sep. 2023 - Jan. 2024
- Teaching Assistant in Tennis course Mar. 2023 - Jun. 2023

Awards & Honors

- National Scholarship (2024) (top1%)
- Merit Student (2024)(top10%)
- The First Prize of Peking University Scholarship (2023) (top3%)
- Merit Student (2023)(top10%)
- The First Prize of Peking University Scholarship (2022) (top3%)
- Merit Student (2022)(top10%)
- Freshman Scholarship of Peking University (2021)
- Chinese Physics Olympiad Gold Metal (2020)

Skills

- **Software Developing:** Computer System Designing; Embedded System Programming; Programming languages: C, C++, Rust, Python, C# (Unity Development)
- **Hardware Prototyping:** PCB Design Soldering
- **Tennis:** Served as the captain of the School of EECS tennis team and the president of the Peking University Student Tennis Association