Zhaofeng Luo

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

Peking University. Beijing, China
B.S. in Computer Science *Sep. 2021 - Present*

- **GPA:** 3.87/4.00 (WES), Ranking:Top 10% 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

Research Experience

Physics-based Solid Simulation. Pittsburgh, PA, USA
Advised by Prof. Minchen Li *June. 2024 - Present*

- **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 and has been submitted to MobiCom '24 as Co-first author.
- 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.

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

- 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