

# Xu Ke

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## Education

### Zhejiang University

Computer Science and Technology

Bachelor of Engineering

2024.09 – 2028.06

- **Minoring:** Advanced Honor Class of Engineering Education (ACEE) in **Chu Kochen Honors College (50 selected students per year from university-wide)**
- **GPA:** 91.7/100, 4.15/4.30
- **Languages:** Chinese (Native), English (TOEFL 103, CET-6 594)

## Experience

### Research Assistant

Advised by Prof. Zhou Zhao

Zhejiang University

2024.11 -- 2025.5

- **Research Topic:** Multimodal Learning, Spatial Audio Generation
- Participated in constructing a 484-hour spatial audio corpus. Engineered the preprocessing workflow for the MRSMusic and MRSSing subsets, handling 23 types of instruments and professional vocal recordings.

### Summer Program

Electronic Information Engineering Summer School

West Lake University

2025.08

- Visited West Lake University's high-tech labs and research centers, attended lectures and workshops on cutting-edge topics in electronic information engineering.

## Publications

- [NeurIPS 2025] **MRSAudio: A Large-Scale Multimodal Recorded Spatial Audio Dataset with Refined Annotations** [#Arxiv Link](#)  
Wenxiang Guo, Changhao Pan, Zhiyuan Zhu, Xintong Hu, Yu Zhang, Li Tang, Rui Yang, Han Wang, Zongbao Zhang, Yuhao Wang, Yixuan Chen, Hankun Xu, **Ke Xu**, Pengfei Fan, Zhetao Chen, Yanhao Yu, Qiange Huang, Fei Wu and Zhou Zhao. The Annual Conference on Neural Information Processing Systems Datasets and Benchmarks Track. 2025.

## Selected Projects

### • RAG-Based Intelligent Q&A System

Engineered a Retrieval-Augmented Generation (RAG) system integrating **Hybrid Search strategies** (BM25 + Vector Retrieval) to mitigate semantic mismatch and improve context recall accuracy. **Optimized data chunking pipelines** using HuggingFace BAAI models, reducing token redundancy while maintaining semantic integrity. Deployed the solution with a Gradio web interface, utilizing the Deepseek API for **high-quality natural language inference**.

## Honors and Awards

- 2025 **National Scholarship:** Highest scholarship for undergraduate students in China
- 2025 The **First Prize Scholarship** of Zhejiang University
- 2025 **Outstanding Students** of Yunfeng Community: **Top 2%** students in Yunfeng Community

## Extracurricular Activities

- **Vice President** of Badminton Association, Zhejiang University (2025.06 – present)
- **Director** of Student Science and Technology Innovation Guidance Center in Yunfeng Community, Zhejiang University (2025.06 – present)
- **Class Monitor** of Class CS-2402 in College of Computer Science and Technology, Zhejiang University

## Skills and Techniques

- **Programming Languages:** Proficient in C/C++; familiar with Python, Verilog, Matlab.
- **Interests:** Artificial Intelligence, Natural Language Processing, RAG Systems, Multimodal Learning