## XING XIE

Contact Information	<i>E-mail</i> :xingxie.cn@gmail.com <i>WWW</i> :xingxie.cc	
Research Interests	I am generally interested in computer vision and machine learning. My recent focus is on <b>Multimodal</b> Large Language Model and Generative Model.	
	I enjoy exploring the unknown and excel in the practical application of technical skills. Beyond academia, I have a deep appreciation for open-source software and the collaborative spirit it fosters.	
Education	<ul> <li>Southeast University, School of Artificial Intelligence, Nanjing, China Bachelor of Artificial Intelligence, June, 2026(expected)</li> <li>Advisor : Prof. Guilin Qi and Prof. Hui Xue</li> <li>CCF Student Member</li> </ul>	
Publications	Xing Xie, Yu Wang, Hao Liang, Chenyang Lou, Bingtuan Gao. An Efficient Bird Detection Method for Substation Inspection via Improved YOLOv5. In <i>Proceedings of IEEE International Conference</i> on Cyber Technology in Automation, Control, and Intelligent Systems (CYBER), 2024. (Finalist of Best Poster Award)	
Research experience	<ul> <li>A Unified Table Reasoning Framework</li> <li>Proposed a multi-stage training paradigm for table reasoning , integrating layout transformation via self-supervised toolchain learning and semantic comprehension through header localization, enabling LLMs to robustly handle diverse table structures and reduce noise interference.</li> <li>Designed a novel training strategy for hybrid table QA , classifying reasoning types (e.g., numerical calculation, aggregation) and preparing golden toolchain labels, aiming to optimize task-specific performance via dynamic LoRA composition and expert balancing in Mixture-of-Experts frameworks.</li> <li>It is anticipated that the project will result in the production of a paper at NeurIPS 2025.</li> <li>Leveraging Graph Neural Retrieval-Augmented Generationfor OpenTable-Text Hybrid QA October, 2024 - Present</li> <li>This project is advised by Prof. Dr. Guilin Qi.</li> <li>The project aims to enhance the performance of open table-text hybrid QA by utilizing graph neural networks;</li> <li>Expected outcomes include the publication of one research paper, the acceptance of one patent, and the development of a TableRAG system.</li> <li>Research on Intelligent Bird Detection and Repelling Technology for Substations Using Audio-Visual Integration</li> <li>The primary objective of this project is to develop an integrated audio-visual bird-repelling device, leveraging deep learning and other advanced technologies;</li> <li>The project aims to create a comprehensive intelligent system designed to effectively detect and</li> </ul>	
	repel birds in substation environments. Intelligent Bird Recognition Technology for Substations Using Deep Learning April, 2024 - April, 2025	
	<ul> <li>Authored a paper published in <i>IEEE-CYBER 2024</i> and was recognized as finalist of best poster award;</li> <li>Pioneered the design of an enhanced, efficient, and lightweight bird detection model using advanced deep learning techniques, achieving an excellent rating in the final project evaluation.</li> </ul>	
Selected Open-Source Projects	<ul> <li>GitHub : kaicheng001 (15 followers)</li> <li>TikZ-Collection (TikZ Collection for creating high-quality LaTeX graphics) GitHub</li> <li>RAG-Collection (Collection of RAG-related papers based on my research) GitHub</li> <li>CG-NeRF2Mesh (Project page of my CG assignment) GitHub project page</li> </ul>	

Note : It is anticipated that a greater number of interesting projects will be made available to the public in the future.

Honors and Awards	<ul> <li>Provincial Third Prize, 6th Global Campus Intelligent Algorithm Elite Competit</li> <li>Three Good Students Award, Southeast University, 2024</li> <li>Finalist of Best Poster Award, <i>IEEE-CYBER 2024</i> in Copenhagen, Danmark, 20</li> <li>First Prize (Top 1%), 15th National College Students Mathematics Competition,</li> <li>Outstanding Communist Youth League Member Southeast University, 2022</li> </ul>	ion, 2024 )24 , 2024
	<ul> <li>First Prize (Top 1%), 20th Jiangsu Provincial College Student Mathematics Con</li> </ul>	potition, 2023
Scholarships And Grants	<ul> <li>Jiangsu Provincial University Student Innovation Training Program (project leader), ¥8,000 2024-2025</li> <li>Southeast University Competition Scholarship for Two Consecutive Years, ¥800; 2023-2024</li> </ul>	
Services	<ul> <li>Participated in three social practice projects, rated as excellent</li> <li>Member of Southeast University Student Science and Technology Association</li> </ul>	2022 - 2024 2022 - 2023
Skills	Programming : Python, C/C++, MATLAB, JavaScript Misc : PyTorch, Tensorflow, IATEX, Markdown OS : LINUX, macOS, Windows	