Research Experience	
• Shanghai AI Lab	

• Mentors: Chao Yang and Zhanhui Zhou.

Bachelor of Computer Science and Technology Advisor: Xing Xu, GPA: 3.92 / 4.00

University of Electronic Science and Technology of China

• **Topic**: Track multimodal advancements, providing technical insights by reproducing papers. Optimize large models using PyTorch to address hallucinations and safety, and evaluate performance via comparative experiments.

• University of Virginia

- Mentors: Yu Meng.
- **Topic**: Conducted extensive research on Large Language Models and Multimodal Large Language Models under the supervision of Yu Meng, working closely with doctoral students.

• University of North Carolina at Chapel Hill

- Advisor: Tianlong Chen and Zhen Tan.
- **Topic**: Worked closely with Supervisor Tianlong Chen on in-depth research involving Large Language Models, Mixture of Experts, and Time Series Models.
- Centre of Future Media@UESTC
 - Advisor: Xing Xu.
 - **Topic**: Collaborated with Supervisor Xing Xu and doctoral students in extensive research on multimodal learning, computer vision and trustworthy machine learning.

PUBLICATION LIST (SCHOLAR PAGE)

- Embracing Unimodal Aleatoric Uncertainty for Robust Multimodal Fusion IEEE/CVF Conference on Computer Vision and Pattern Recognition, 2024(CVPR 2024) Zixian Gao*, Xun Jiang*, Xing Xu, Fumin Shen, Yujie Li, Heng Tao Shen (* equal contribution)
- Uncertainty-Debiased Multimodal Fusion: Learning Deterministic Joint Representation for Multimodal Sentiment Analysis IEEE International Conference on Multimedia and Expo, 2024(ICME 2024)
 Zixian Gao, Xun Jiang, Hua Chen, Yujie Li, Yang Yang, Xing Xu
- Enhanced Experts with Uncertainty-Aware Routing for Multimodal Sentiment Analysis ACM International Conference on Multimedia, 2024(ACM MM 2024)
 Zixian Gao, Disen Hu, Xun Jiang, Huimin Lu, Heng Tao Shen, Xing Xu

PROJECT EXPERIENCE

 Local Vision Alignment. (Key Words: Multimodal LLMs, Hallucination, Robustness) 1) Discover and investigate the local horizon of MLLMs. 2) Guide the decoding process using the prior information of the local horizon. 	2025
 Depth Mixture of Experts for LLMs. (Key Words: LLMs, Mixture of Experts, Efficiency) 1) Scale up large models and created a deeper and more efficient model. 2) Added Depth Mixture of Experts mechanism to the model, and conducted pretraining and fine-tuning. 	2024
 Pose Anything. (Key Words: 3D Vision, Pose Estimation) 1) Convert the 6DoF representation in pose estimation to a 3D oriented bounding box. 2) Achieve a universal estimation method for objects of different categories. 	2024
 Neural Network in Finance. (Key Words: AI for Finance, Time Series Models, Data Augmentation) 1) Utilize Data Augmentation to enhance financial data. 2) Employ time series models for processing financial data. 	2024

Other Information

Languages: Chinese - Native, English - Proficient (IELTS: 6.5)

EDUCATION EXPERIENCE

Sep. 2021 - Jun. 2025

Dec. 2024 - Now

May 2024 - Nov. 2024

Dec. 2023 - Apr. 2024

Jun. 2022 - Nov. 2023