

Yichong Nie

Undergraduate researcher in Multimodal Learning, Vision-Language Models, Medical Image Analysis, and LLM Agents

Xi'an Jiaotong-Liverpool University (XJTLU) · BSc Information and Computing Science · Suzhou, China

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Summary

I am an undergraduate researcher at Xi'an Jiaotong-Liverpool University, majoring in Information and Computing Science. My work spans multimodal learning, vision-language models, medical image analysis, and LLM agents.

I am currently working on clinically deployable medical imaging models, long-context vision retrieval, and memory in agent systems. Feel free to contact me if you are interested in my work. I am always open to collaboration and exchange of ideas. Also, I am applying for 2027 Fall PhD positions.

Research Interests

Multimodal Learning · Vision-Language Models · Medical Image Analysis · LLM Agents

Education

- **BSc in Information and Computing Science**

Xi'an Jiaotong-Liverpool University (XJTLU), China 09/2023 – 07/2027 GPA: 3.74 / 4.0

Selected Publications

- **Train Multimodal, Deploy Unimodal: Hierarchical Cross-Modality Knowledge Distillation for Brain Disease Diagnosis**

Yichong Nie*, Bo Peng, Xin Zhu, Rong Xu, Jian Cheng, Yakang Dai

17th International Workshop on Machine Learning in Medical Imaging (MLMI), MICCAI 2026 · 2026

- **Early Cerebral Palsy Risk Stratification of Children and Adolescents in PVL based on Conventional MRI: Visual Scoring Validation and Deep Learning Prediction**

Co-authored clinical manuscript

Manuscript in preparation · 2026

- **Severity Grading of Neonatal Hypoxic-Ischemic Encephalopathy Based on a 2D Swin Transformer**

Co-authored clinical manuscript

Manuscript in preparation · 2026

Research Experience

- **Xi'an Jiaotong-Liverpool University**

Final Year Project · Academy of Artificial Intelligence and Advanced Technology, MMT Lab 09/2026 – present

Advisor: [Prof. Jimin Xiao](#)

- **Xi'an Jiaotong University**

Summer Research Intern · School of Future Technology 07/2026 – present

Advisor: [Prof. Xiaohua Wang](#)

- **University of California, San Diego**

Summer Research Intern · AIBuildAI 05/2026 – present

Advisor: [Prof. Pengtao Xie](#)

- **Suzhou Institute of Biomedical Engineering and Technology, Chinese Academy of Sciences**

Research Assistant · Laboratory of Artificial Intelligence in Biomedical Engineering 07/2025 – present

Advisor: [Dr. Bo Peng](#), [Dr. Jian Cheng](#), [Dr. Yakang Dai](#)

- **Xi'an Jiaotong-Liverpool University**

Research Assistant · Academy of Artificial Intelligence and Advanced Technology 11/2025 – 02/2026

Advisor: [Prof. Jionglong Su](#)

- **Xi'an Jiaotong-Liverpool University**

Summer Undergraduate Research Fellowships · Academy of Artificial Intelligence and Advanced Technology 07/2024 – 06/2025

Advisor: [Prof. Shengchen Li](#)

Projects & Deliverables

- **Homepage Generator Agent** <https://www.aigcoil.com/agents/homepage-builder/app/>

Upload a resume and get a customizable personal homepage, the Homepage Generator Agent is designed for college graduates and above. Your homepage URL will be /<name>/, and the backend at /<name>/admin/ can be accessed via a unified account, where you can make edits, publish updates, and roll back changes at any time; the page content is synced with your resume PDF, so any change made on either side will be reflected on the other automatically.

- **AI Nutrition Scanner · 拍物识营养** <https://www.aigcoil.com/food/>

Public deliverable of the AIGCOIL platform: photograph a meal and get an instant nutrition breakdown.

News

- **2026-10** Two papers will be submitted to CVPR 2027.
- **2026-09** I'll be at MICCAI 2026 in Strasbourg. Happy to chat!
- **2026-09** Started my final year project, advised by Prof. Jimin Xiao.
- **2026-08** One paper is accepted to the MLMI workshop at MICCAI 2026.
- **2026-07** Started a summer research internship at Xi'an Jiaotong University, advised by Prof. Xiaohua Wang.
- **2026-05** Started a summer research internship at UC San Diego, advised by Prof. Pengtao Xie.
- **2025-07** Joined the Laboratory of Artificial Intelligence in Biomedical Engineering, Suzhou Institute of Biomedical Engineering and Technology, Chinese Academy of Sciences.
- **2024-06** Awarded a Summer Undergraduate Research Fellowships (SURF) at XJTU.