

Zefei Xie

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EDUCATION

Carnegie Mellon University – School of Computer Science Pittsburgh, Pennsylvania
Master of Science in Intelligent Information Systems, Language Technologies Institute May 2028

University of Nottingham – School of Computer Science Nottingham, UK
BSc Hons Computer Science with Artificial Intelligence Jun 2026

- **Honors & Awards:** First-Class Honours (highest classification); Dean’s Scholarship, 2023 & 2024 (Top 10%)
- **Relevant Courses:** Designing Intelligent Agents, Artificial Intelligence Methods, Developing Maintainable Software

EXPERIENCE

Zhejiang Dahua Technology Co., Ltd. Hangzhou, China
AI Engineer Intern, Data Management Centre Jul 2025–Aug 2025

- Researched and evaluated open-source multimodal and language models, selecting and deploying **HiDream** and **Qwen3** on GPU servers and integrating **vLLM** for model serving.
- Evaluated **4-bit runtime quantization** with **bitsandbytes**, reducing GPU memory usage by over **70%** on a single NVIDIA A40; also deployed and assessed **Coze Studio** for agent workflows.

NetEase Hangzhou Research Institute Hangzhou, China
Low-Code Engineer Intern Jan 2024–Feb 2024

- Built and deployed marketplace and employee attendance applications using **CodeWave**, reducing manual development effort by approximately **50%**; trained **20+ employees** on low-code development.

University of Nottingham Nottingham, UK
Teaching Associate Nov 2024–Jul 2025

- Selected as the **sole CS student representative** to co-design the university’s new **MSc Data Analytics and AI (2027)** curriculum; developed a reusable Quarto Book framework for teaching materials.

PROJECTS

AwesomeLit: Agent-Supported Literature Research Nottingham, UK
Vis4Sense Lab, University of Nottingham Jun 2025–Present

- Developed a human-AI research system using **Next.js**, **LangGraph**, and **LLMs**, enabling interactive literature exploration and agent-supported research hypothesis generation.
- Designed transparent **human-in-the-loop** agent workflows with React Flow and evaluated the system through a mixed-methods user study; published as a **EuroVis 2026 Short Paper**.

Agentic Visualization Pipeline Online
Vis4Sense Lab – IEEE VIS 2025 VISxGenAI Challenge Aug–Sep 2025

- Built a multi-agent visualization pipeline using **LangGraph** and **OpenAI APIs**, integrating **iterative loops**, **sandboxed execution**, **function calling**, and prompt engineering for autonomous data analysis.
- Ranked **Top 5** among ~20 international teams and delivered an **oral presentation at IEEE VIS 2025**.

AI Assistant – IBM Industry Collaborative Project Nottingham, UK
IBM & University of Nottingham Oct 2024–May 2025

- Led a **7-student team** with **2 IBM experts** to develop a Next.js AI assistant with **IBM watsonx Assistant**, reaching **67 peak concurrent users** during its product demonstration.
- Built a **RAG** pipeline over a QA knowledge base using **Milvus**, indexing embedded QA pairs with a **FLAT index** for semantic retrieval and grounding OpenAI LLM responses; developed backend APIs for real-time queries.

SKILLS

Languages & Development: Python, C, Java, JavaScript, SQL, Git, Docker, Linux, Next.js, React, FastAPI
AI/ML: PyTorch, Scikit-learn, LangGraph, LangChain, RAG, Milvus, Hugging Face, vLLM, OpenAI API

PUBLICATIONS

Z. Xie, Y. Guo, and K. Xu. “AwesomeLit: Towards Hypothesis Generation with Agent-Supported Literature Research.” *EuroVis 2026 – Short Papers*. DOI: <https://doi.org/10.2312/evs.20261000>.

W. Meng, Y. Guo, **Z. Xie**, and K. Xu. “What Happened to Automated Visualization? An Agentic Analysis.” *Agentic VIS Challenge, IEEE VIS 2025*. Oral Presentation.

LEADERSHIP

VP, Product & Technology, Arenk Apr 2026–Present

Finance Director, Science & Engineering Student Association (SESA), UNNC Sep 2022–Sep 2023