Yue (Jack) Pan

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Objective

Seeking an AI research internship at leading tech companies, where I can leverage my expertise in IT and AI to contribute to impactful projects.

Education

UCL | GRADUATING JUNE 2027

· Program MEng Computer Science

BEIJING NATIONAL DAY SCHOOL | GRADUATED JUNE 2023

· A-Level Courses: Computer Science, Further Math, Physics

Skills & Abilities

PROGRAMMING SKILLS

· Programming Languages: JavaScript, Java, Python, SQL, HTML, CSS, C++, C, Rust
· Frameworks & Tools: Django, Spring Boot, FastAPI, Flask, Nginx, React, Nacos, Higress, Kubernetes, Docker, Linux OS, PyTorch, TensorFlow, Redis……
· Database: PostgreSQL, MySQL……

HONORS & AWARDS

· AMC12A (2021) the top 2.5%
· Euclid Contest Certificate of Distinction
· BEIJING TECHNOLOGY INNOVATION PRIZE

Work Experience

RESEARCH ASSISTANT | UCL SOLAR GROUP, LONDON (MAR 2025 – PRESENT)

· Supervisor: Dr. He Ye
· Led the development of **Prometheus**, an automated issue-resolution AI agent framework integrating **knowledge graphs** (KGs) and **Multi-Agents System**; currently ranked **Top 7** overall and **Top 1** among GPT-5-based agents on SWE-bench Verified, with a research paper submitted to ISSTA.
· https://arxiv.org/abs/2507.19942
· Designed and implemented Athena, a long-term memory module for code agents that unifies semantic and episodic memory representations to enhance contextual understanding and reasoning.
· Collaborated with cross-disciplinary researchers to advance the architecture of autonomous software intelligence within large-scale code repositories.

RESEARCH ASSISTANT | PEKING UNIVERSITY, BEIJING (JUN 2025 – SEP 2025)

· Supervisor: Prof. Sergey Mechtaev

- Conducted research on context compression for code agent systems, focusing on reducing input length while preserving semantic fidelity.
- Collected large-scale code-context datasets and fine-tuned models to achieve efficient context summarization and compression for software engineering tasks.

RESEARCHER & CTO | AIMOVERSE (NOV 2024 – JUN 2025)
- Co-designed and developed **Amico**, an event-driven, modular general AI agent framework optimized for persistent autonomy in resource-constrained edge environments with a paper published.
- Built Amico using **Rust** and **WebAssembly**, achieving high-performance, platform-agnostic deployments across embedded systems.
- Developed modular agent cores capable of integrating lightweight LLMs (TinyBERT, RWKV) and finite-state machines, significantly reducing computational overhead while maintaining real-time responsiveness.

CTO AND CO-FOUNDER | HANGZHOU RONGZHIRUANKE LTD. (JAN 2024 - SEP 2024)
- Developed an embedded general AI agent system serving for 10,000+ users.
- Traffic diversion through Nacos + Higress+ Springboot microservices architecture.
- Led multiple **Enterprise Resources Planning (ERP)** software projects for Chinese companies, delivering customized workflow automation and data management systems.

SOFTWARE ENGINEER INTERN | CHENGDU LVBEICHUXING XINNENGYUAN LTD (JUN 2023 – SEP 2023).
- Developed the **Enterprise Resources Planning (ERP)** system for the company from scratch with Django and React.