

Yitong Li

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RESEARCH INTEREST

My research interests mainly lie in the field of **AI Agent**, and my long-term research vision is to build **proactive agents that can continuously work and learn in a human-like way**, and to apply such agents in **real-world workplace scenarios**. In detail, I am particularly interested in the following concrete research topics:

- **Applied Agent System:** Applying agents in real-world scenarios like deep research, software engineering, computer-using, etc.
- **Test-Time Scaling:** Increasing computation at inference time to improve performance
- **Self-Improving Agent:** Enabling agents to autonomously learn from their own experience, feedback, or failures
- **Multi-Agent Collaboration:** Coordinating multiple agents to solve complex tasks

EDUCATION

The University of Hong Kong

Bachelor of Engineering in Computer Science

09/2024 - 06/2028 (*expected*)

Hong Kong

- **GPA: 4.15/4.3**
- **Selected Courses:** Computer programming I/II (**A**), Computer organization (**A+**), Discrete mathematics (**A**), Linear algebra, probability and statistics (**A+**), Calculus and ordinary differential equations (**A+**), Introduction to data structures and algorithms, Object-oriented programming and Java, Principles of operating systems, Modern Technologies on World Wide Web

HONORS

- **Silver Medalist, 39th Chinese Physics Olympiad (CPhO) Finals** 10/2022
- **First Prize, 39th Chinese Physics Olympiad (CPhO) Semifinal Round (*top 20 in Shanghai*)** 09/2022
- **First Prize, 40th Chinese Physics Olympiad (CPhO) Semifinal Round** 09/2023
- **First Class Award (Ranked 17th Nationwide), 19th Pan-Pearl River Delta and Chinese Elite Schools Physics Olympiad (*organized by Hong Kong Physics Olympiad*)** 02/2023

EXPERIENCE

Shanghai Changxin Intelligence Technology Co., Ltd.

AI Developer Intern

08/2025 - 11/2025

Fudan University, Shanghai

- Built an **end-to-end autonomous agent** that scans GitHub repos, plans deployments, self-recovers from errors with ReAct pattern, and automatically exposes deployed services as APIs. Successfully deployed across **50+ repositories (73% success rate)** with built-in testing and long-term memory-driven continuous improvement.
- Developed a **Deep Research Agent** that automatically decomposes queries, retrieves and filters web sources in parallel, recursively fills knowledge gaps, and synthesizes research reports. [Repo]
- Built a multimodal AI studio for **image/video understanding, generation, and editing** using frontier models including Nano Banana, Sora 2, Whisper, CosyVoice, Flux, etc.

Shanghai Jiahui Elite Education Training Co., Ltd.

Teaching Assistant (CPhO)

07/2024 - 08/2024

Shanghai

- Managed the full lifecycle of a training program for **200+ students**, including problem design, instruction, grading, score analysis, and Q&A support.
- Coached students to achieve top results, with **95%** of all Shanghai First-Prize winners in the National Physics Olympiad coming from the program, and **three** students winning gold medals at **IPhO and APhO**.

PROJECTS

Agentic Stacking: Stack small models to approach large model performance10/2025 - 12/2025

Personal Project[Repo]

- Built an **automated SLM composition framework** using three-phase pipeline (warm-up, stacking, testing) to search **optimal multi-model hierarchies**, leveraging ReAct agents with forced tool-calling constraints to enable collaborative reasoning among small models (Llama/Qwen/DeepSeek) on **MATH-500** and **GPQA** benchmarks.
- Designed **intelligent caching layer** for Agent_tool wrappers that achieved **75%** token cost reduction during training through O(1) lookup of repeated inference results.

AI2Apps: A Distributed PC-Side AI Agent Platform07/2025 - 11/2025

Core Contributor, 400+ stars[Repo]

- Improved the **agent infrastructure** of AI2Apps platform, including sandbox for code execution, RAG knowledge base for long-term memory and atomic tools like web search (API & RPA), bash command (brew, conda, git, etc.) and file operation (ReadFile, WriteFile, ModifyFile).
- Enriched **AI application ecosystem** by adding deployable and useful models, including Coqui-TTS, FastVLM, SAM 2, Whisper, etc.

SKILLS

Agent Framework	LangChain, LangGraph, OpenAI/Claude Agent SDK, Pydantic AI
Programming	Python (PyTorch), C/C++, JavaScript, Java, Bash, LaTeX, MatLab
Tools & Software	Git, Conda, Docker, WSL 2, OpenRouter, Cursor, Claude Code, NotebookLM
Languages	Chinese, English