Yilin Liu

Mobile: (+86) 189-2876-9825 | E-mail: yliu859@connect.hkust-gz.edu.cn

EDUCATION

- **The Hong Kong University of Science and Technology (Guangzhou)** *09/2023 - 06/2027 (Expected)*
  BSc in Data Science and Big Data Technology (Intended) Guangzhou, China
  - GPA: **3.734/4.300**; Dean's List for three semesters. *The university does not rank students based on their GPA.*
- **University of California, Berkeley** *08/2025 - 12/2025 (Expected)*
  Berkeley Global Access Program Berkeley, USA

HONORS AND AWARDS

- **ESA Scholarship & Grant** *Oct. 2025*
  The Hong Kong University of Science and Technology (Guangzhou)
  - Selected for the Undergraduate Exchange and Study Abroad Financial Support Scheme, awarded to students with outstanding achievements in academics and research to support overseas learning.
- **Second Prize** *May. 2025*
  Blue Bridge Cup National Software and IT Talent Competition
  - Python Programming, Undergraduate Group A, Guangdong Province Division.
- **Gold Medal, Nomination Prize of Best New Basic Part** *Oct. 2024*
  International Genetically Engineered Machine Competition (iGEM)
  - Awarded Gold Medal for excellence in synthetic biology and coral protection, with a nomination for robust experimental design and sensor characterization.
- **Second Prize** *Aug. 2024*
  3rd Electrical & Electronic Engineering Innovation Competition (National Level)

RESEARCH EXPERIENCE

- **AgenticMath: Enhancing LLM Reasoning via Agentic Data Synthesis** *Mar. 2025 - Present*
  HKUST(GZ), Supervisor: **Prof. Jiaheng Wei**, *PhD in UCSC* Guangzhou, China
  - To address the quality bottleneck in mathematical reasoning, this project introduces **AgenticMath**, a novel framework that orchestrates a **four-stage multi-agent pipeline** to autonomously synthesize high-quality instruction data. By implementing an iterative **Review-Revise loop**, the method achieves **SOTA performance** with only 30K samples, significantly outperforming baselines.
  - As the **Second Author** (Sole Undergraduate Contributor), I **conducted a comprehensive survey** on data synthesis paradigms, **engineered the core multi-agent interaction pipeline** for diverse problem generation and **executed empirical evaluations** across 6 in-domain and OOD benchmarks to validate data efficiency. This paper is targeted for **ACL 2026**.

PROJECT EXPERIENCE

- **AppWorld Agentic Evaluation System** *Sep. 2025 - Present*
  UC Berkeley's AgentX-AgentBeats competition, Course Project
  - Developed an agentified evaluation infrastructure for AppWorld via Agent-to-Agent and Model Context Protocols, enabling standardized and reproducible assessment.
  - Led the **AppWorld benchmark agentification** via **A2A and MCP protocols**, designing the **green-white agent communication** and **dynamic tool delivery** mechanisms. **Enhanced the evaluation framework** with granular metrics (e.g., API success rates, step-based analysis) to ensure reproducible assessment.
- **Utilising Chromoprotein Expression to Counteract Coral Bleaching** *Feb. 2024 - Oct. 2024*
  Group Member, Supervisor: **Prof. Julie Qiaojin LIN**, *PhD in Cambridge*
  - To address coral bleaching problems, the project aims to design a genetic circuit conditionally expressing chromoprotein regulated by heat and light intensity, mimicsing the protective effects of turbid waters and thereby reduces the damages caused by high temperature and high light intensity to corals.
  - As one of the **main wet lab contributor**, I **spearheaded the design of a key circuit part** and **conducted intensive wet lab experiments**. I was responsible for the end-to-end experimental process, from **designing protocols** and **executing complex assays** to maintaining comprehensive documentation. The project was awarded by **iGEM competition**. More details can be seen at HKUST-GZ 2024 iGEM Team Wiki.

PUBLIC SERVING

- **Student Journalist Team Member** *Sep. 2024 - Present*
  Public Affairs Department
  - Participated in filming and producing various campus videos to promote university events and enhance the public image of HKUST(GZ).
- **Community Leader** *Oct. 2023 - Jun. 2024*
  Residential College of HKUST(GZ)
  - Responsible for organizing residential college activities to enhance campus life and student engagement.