

## LLM-Lab: Capability-focused Multimodal LLM Tuning

### Project Description:

As large language models (LLMs) continue to evolve as general-purpose problem solvers, this project emphasizes enhancing and fine-tuning their specific capabilities across various modalities. Students participating in the project can choose to work on specific capabilities of interest, propose new capabilities to explore, and develop innovative evaluation methods. The goal is to establish robust practices and frameworks for understanding and improving LLM performance, unlocking their full potential for diverse applications and use cases.

We are seeking individuals with **any of the following skills and interests** to contribute to our multidisciplinary project:

- Machine learning and AI, particularly large language models (LLMs)
- Frontend or backend development

**Project Type:** Research and Engineering

### Internship Batch:

- **Batch 1:** May 11 to July 10, suitable for Education City students, i.e., CMUQ, TAMUQ and HBKU students
- **Batch 2:** May 25 to July 24, suitable for QU university students

### Duties/Activities:

We have different roles depends on the applicants interest:

- 1) NLP and Machine Learning
- 2) Backend development
- 3) Front-end/mobile development

### Required Skills:

Python, Basic deep learning/ML skills or Frontend/backend

### Preferred Intern Academic Level:

Undergraduate or graduate

### Learning Opportunities:

LLM training best practices

**Expected Team Size:**

Up to 10 interns, as each team would work on different capabilities

**Mentors**

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