Project Title: Ask Me Anything: Data/Prompts Collection System for LLMs

Project Description: Large Language Models (LLMs) like ChatGPT have revolutionized the field of Natural Language Processing (NLP) with their human-like conversational abilities. To continuously refine and expand the capabilities of such models, there is a pressing need for structured and comprehensive data collection systems. This project aims to establish a robust data collection infrastructure tailored for LLMs.

Project Type: Research

Duties/Activities: The students will be asked to work on one or more of the following:

- Explore open-source data curation systems
    - https://docs.argilla.io/en/latest/index.html,
    - https://github.com/bigscience-workshop/promptsource)
    - https://learnprompting.org/docs/tooling/tools
- Deploy and evaluate a data collection system
- Host a system for data collection

Required Skills:

- Fluent in Python
- Full-stack development skills

Preferred Intern Academic Level: We accept all levels: PhD, MSc, Senior undergrad students enrolled in CS or CSE programs.

Learning Opportunities: You will learn basics of generative AI, system development and ML/NLP skills.

Expected Team Size: 2-3 people

Mentors
Maram Hasanain (mhasanain@hbku.edu.qa)
Firoj Alam (fialam@hbku.edu.qa)

Project Title: Towards the Robustness of Generative AI – Identifying Generated Disinformation and Persuasion Technique

Project Description: The rise of digital media has transformed the way we access and consume information. However, this has also paved the way for disinformation campaigns and subtle persuasion techniques that can influence public opinion. The primary goal of this project is to detect and combat these issues, focusing on Arabic and English content.

Project Type: Research and development

Duties/Activities: The students will be asked to work on one or more of the following:

- Machine learning model design and development
- Deploy the model and create an API

Required Skills:

- Knowledge of AI/Machine learning/NLP
- Fluent in Python

Preferred Intern Academic Level: We accept all levels: PhD, MSc, Senior undergrad students enrolled in CS, CSE.

Learning Opportunities: You will learn advanced machine learning techniques, understand how disinformation is used and propagated in the news and its various forms (fake news, propaganda, bias), and how to build systems to detect it automatically.

Expected Team Size: 2-3 people

Mentors
Maram Hasanain (mhasanain@hbku.edu.qa)
Firoj Alam (fialam@hbku.edu.qa)