Large Language Model (CSE 665) Quiz - 2

Date of Examination: 19.09.2024   Duration: 20 Minutes   Total Marks: 20

1. Hallucination in the context of LLM: It occurs when a large language model (LLM) generates a response that is either factually incorrect, nonsensical, or disconnected from the input prompt.

    A. Explain the root cause for hallucination in LLMs. [5 marks]

    B. How to eliminate it? Give one explanation. If not possible, give one reason. [5 marks]

2. A. What do you understand by Bias in Large Language Models (LLMs). Provide a specific example to illustrate your explanation. [2 Marks]

    B. Propose a method to measure cultural bias in Vision-Language Models (VLMs).

    (Example of cultural bias in VLMs: when prompted with "traditional clothing," a VLM might prioritize showing images of Western clothing like suits or dresses, while underrepresenting traditional attire from non-Western cultures such as kimonos, sarees, or dashikis.)

    1. How will you collect data samples across different cultures to measure the bias? (Assuming no relevant data exists). [4 Marks]
    2. What kinds of image-text prompts , techniques and metrics will you use for quantitatively measuring this bias present in any VLM? [4 Marks]