Proposal 1

Title:

Enhancing Healthcare Interpretation through Conversational AI: Exploring Large Language Model (LLM) Chatbots for Assisting Medical Professionals

Context:

In the realm of healthcare, the accurate and efficient interpretation of patient reports is essential for informed decision-making and optimal patient care. However, with the increasing volume and complexity of medical data, healthcare professionals often face challenges in quickly analyzing and understanding these reports. Traditional methods of reviewing patient data may lack efficiency and personalization, leading to potential delays in diagnosis or treatment.

Conversational agents, powered by Large Language Model (LLM) technology, present an innovative solution to this challenge. These AI-driven chatbots can provide personalized explanations and actionable insights, tailored to the specific needs of medical professionals. By integrating LLM-based chatbots into healthcare workflows, doctors and clinicians can benefit from intuitive and interactive support when interpreting patient reports. This approach aims to improve the accuracy, reliability, and accessibility of medical information while fostering a user-centric approach to healthcare delivery. From this research, you can also present guidelines, challenges, and opportunities associated with utilizing conversational agents for medical data interpretation.

Aim:

The goal of this project is to design, develop, and evaluate a prototype of a conversational AI system that aids medical professionals in interpreting patient reports. This thesis will also explore how Human-Computer Interaction (HCI) principles can be leveraged to enhance the usability and effectiveness of conversational agents in healthcare settings.

References:

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