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## **Transforming Website Navigation and Interpretation with a Retrieval Augmented Generation Chatbot**

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Abstract: With the exponential growth of digital content, website navigation and information retrieval have become increasingly complex for users. Traditional search mechanisms often fail to provide precise and contextaware results, leading to inefficiencies in browsing. This paper presents a novel approach to website navigation and interpretation using a Retrieval-Augmented Generation (RAG) chatbot integrated with a Large Language Model (LLM). The chatbot leverages retrieval-based techniques to extract relevant website content while utilizing generative AI to enhance user interaction and query resolution. Implemented using Streamlit, the proposed system efficiently decodes website structures and provides intuitive responses, reducing user effort in information discovery. Our evaluation demonstrates that the chatbot significantly improves navigation efficiency and accuracy compared to conventional website search functionalities. This research contributes to the advancement of AI-driven website accessibility and presents opportunities for further enhancements in web-based information retrieval.

Keywords: LLM, Llama-2, chatbot, Navigation, Interpretation

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