

SmartLexicon : A Retrieval Augmented Generation Based Application

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Abstract

– SmartLexicon has been called a state of the art Retrieval-Augmented Generation system aimed at making the AI-generated response more accurate and trust-worthy within some specialized domains like healthcare, law, and engineering. While earlier generative AI models relied heavily on static old datasets, SmartLexicon infused real-time data retrieval with intelligent response generation to ensure that it provides current and verifiable outputs. A key feature of SmartLexicon is its incorporation of domain-specific repositories but adds citation and confidence scores to each answer from which it generates a response thereby improving transparency for building user trust. The modular architecture of the system eases adaptation across different sectors, thus being a flexible solution for different use cases. This real-time, citation-backed approach essentially knocks down the credibility barrier for AI when mission-critical applications are concerned and heralds SmartLexicon as an innovative tool in the field of information retrieval as applicable in any professional domain-pivoting reliability and efficiency.

Keywords

SmartLexicon, RAG, real-time data retrieval, AI responses, domain-specific repositories, modular architecture, information retrieval, data validation, dynamic response generation.