ResearchoBot: A Virtual Research Assistant

The Phantom Troupe

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Introduction

- Literature Review precedes every research work: Researchers have to survey multiple papers over many days to identify gaps in current research
- Takes significant time and effort to read each paper minutely and capture information effectively

Problem Statement

- Extracting relevant information, summarizing complex papers, and finding answers quickly are time-consuming and challenging tasks.
- Existing tools lack the sophistication to deeply comprehend technical content and provide accurate summaries and answers.

Solution

- Comprehensive summarization: To learn more about the idea and the methodologies described in the paper
- Question-Answering: To obtain specific information on the key terminologies, experiments and results of the research presented

Tech Stack

Our solution is an AI research assistant that leverages cutting-edge technologies

- Clarifai: For using various AI models.
- Llama: To enhance language understanding and comprehension, enabling Q&A.
- OpenAl GPT: For summarization.
- Cohere: Text embeddings that represent complex research concepts.
- Chroma DB: For storing the text embeddings and retrieving similar concepts.
- Layout Parser: To extract structured content from documents.

Benefits

- Quicker Results: What would have otherwise taken a day to understand, will now take a few minutes
- Ease of understanding: Make it easy for researchers to make sense of the language and terminology
- Affordability: Costs much less than existing methods

Thank you!

"Coding is our passion, Coding is our life" ~ Douglas