Creating trust and traceability in knowledge discovery

Bringing a new conversational experience to scientific search, SciBite Chat will offer a simpler way to answer complex scientific questions. Coupling the power of Generative AI (GenAI) with the accuracy and transparency of ontology-driven semantic search, SciBite Chat provides accurate, evidence-based answers without fear of hallucination, while creating transparency.

Product Overview

SciBite Chat adds a new interface to SciBite Search that uses the power of GenAI combined with that of ontology driven semantic search to enable customers to “have a conversation with their data.” SciBite Chat provides evidence-backed answers to scientific questions – enabling users to perform sophisticated interrogations of their data without specialist knowledge.

SciBite Chat is set to transform the way researchers access and interpret vast amounts of biomedical data, offering a more efficient, accurate, and user-friendly search experience. As part of SciBite Search, the tool aligns GenAI and semantic data to deliver transparent, explainable, and reproducible answers to complex scientific questions in an interactive fashion.

Benefits

- **Provenance** – cites and highlights evidence. References documents along with a summarized answer.
- **Tried & tested** – built on existing search technology. Ability to handle ambiguity and complexity in life sciences.
- **Document security** – permissions aware. You only get the answers based on the documents you’re entitled to see.
- **Trust & traceability** – semantic search delivers improved recall and precision at a reduced cost.
- **Empowers organizations** – provides generative AI-based solutions to their users without the complexity of creating their own GenAI service.

Created to answer complex scientific questions, SciBite Chat uses our domain expertise and semantic search for enhanced recall and precision, providing greater transparency and understanding for information retrieval using GenAI.

Features

- **Source selection** – integration of multiple data sources. Integration of various data sources, providing a comprehensive and nuanced search experience for users in the scientific field. Searching a variety of data sources, among Medline, Elsevier data (e.g., Embase, Science Direct journal articles journals), PDFs, and clinical trial data.
- **Transparency** – highlighted sentences in the reference document. Makes it easy to identify the relevant information within the documents used in summarization.
- **Operational efficiency** – the use of tried-and-tested search technology. Offering an established, cost-effective approach to information retrieval.
- **Domain-specific ontologies** – built from domain-specific ontologies that are tried and tested over time. This enhances operational efficiency and is more cost-effective compared to vectorizing all data.
- **Plug & play** – customizable & tailored to your specific needs. The interface is founded on a flexible API that can be directly integrated into existing systems.
Ask filtering questions – users “have a conversation with their data”. Users can delve deeper into the data by asking follow-up questions that can either focus on specific details, lead to new insights, or broaden to reveal new details, such as “the top authors in a field of interest”.

Ease of use – user interface supports natural language queries. User-friendly chat-based interface that doesn’t require users to know complex search syntax or API calls.

Configurable – switch AI models and customize vocabularies. Easy to swap to other OpenAI models and tweak vocabulary preferences used within formulation of the semantic query for optimal explainable results.

Security & privacy – the tool is designed with privacy in mind. While questions are processed externally, user data remains secure and using Microsoft Azure’s implementation of OpenAI guarantees that data processed by generative AI is not logged or otherwise retained by the service.

Figure 2: SciBite Chat workflow

About SciBite

SciBite’s data-first, semantic analytics software is for those who want to innovate and get more from their data. At SciBite, we believe data fuels discovery, and we are leading the way with our pioneering infrastructure that combines the latest in machine learning with an ontology-led approach to unlock the value of scientific content.

Supporting the world’s leading scientific organizations with use cases from discovery through to development, SciBite’s suite of fast, flexible, deployable API technologies empowers our customers, making it a critical component in scientific, data-led strategies. Contact us to find out how we can help you get more from your data.

To learn how SciBite can unlock the value of your data, speak to one of our experts today or email us at contact@scibite.com