SCIKIQ

Gen Al for Hospitals

An overview of Various use cases of Generative AI applications with Hospitals

SCIKIQ DATA

1ST FLOOR, TOWER-A, MILLENNIUM PLAZA, SUSHANT
LOK PHASE I, SECTOR 27, GURUGRAM, HARYANA
122001

SALES@SCIKIQ.COM







Generative AI in Hospitals:

Transforming Healthcare Delivery

The advent of Generative AI in the healthcare sector, especially in hospital settings, marks a significant leap forward in medical technology. Generative AI refers to the subset of artificial intelligence that can generate new content, insights, and data based on the information it has learned. In hospitals, this technology has the potential to revolutionize various aspects of healthcare delivery, enhancing efficiency, accuracy, and patient outcomes.

GEN AI REPRESENTS A MEANINGFUL NEW TOOL THAT CAN HELP UNLOCK A PIECE OF THE UNREALIZED \$1 TRILLION OF IMPROVEMENT POTENTIAL PRESENT IN THE INDUSTRY.

MCKINSEY

One form of generative AI is a Large Language Model (LLM), which is a neural network trained on extensive datasets from the internet and other sources. It generates responses based on inferences drawn from the statistical patterns it has learned during its training.

ChatGPT, Google's BARD, LlaMA, Claude are popular examples of LLMs. The model can process prompts at a speed, volume and accuracy that outranks average human capability. SCIKIQ also uses some of the LLM which are designed to read, analyse, sort large amount of unstructured data like PDFs, Documents and more. In other words, LLMs possess two key abilities:

- LLMs can generate coherent, human-like text by predicting the next word or sequence of words based on the previous context.
- LLMs can also "understand" the meaning of text by building representations of the semantic content.

Prominent applications:

1. DOCUMENT ANALYSIS AND SUMMARIZATION:

Generative AI tools can process vast amounts of text data, such as patient histories, research papers, and case studies, extracting key points and summarizing them. This is especially useful in situations where healthcare professionals need to quickly understand patient conditions or stay updated with the latest medical research.

For instance, AI can read through a patient's entire medical history and provide a concise summary highlighting past diagnoses, treatments, and outcomes, which is invaluable for doctors seeing the patient for the first time or for quick reference.







2. DOCUMENT DRAFTING AND REVIEW:

This involves AI in drafting clinical notes, discharge summaries, referral letters, and other medical documents. The AI can suggest content based on the patient's medical history, current diagnosis, and treatment plans, ensuring that all relevant information is included.

In reviewing documents, AI can check for consistency, accuracy, and completeness. It can also ensure that documents adhere to legal and regulatory standards, reducing the risk of non-compliance.

3. RESEARCH AND KNOWLEDGE MANAGEMENT

Al can efficiently manage and sift through large volumes of medical research, extracting and summarizing findings relevant to specific medical conditions or treatments. This assists clinicians in keeping abreast of the latest developments in their field without having to spend hours reading through journals and articles.

In knowledge management, AI can organize and categorize internal hospital data, making it easily accessible. This includes clinical guidelines, treatment protocols, and patient education materials.

4. AUTOMATED DOCUMENTATION:

This use case focuses on reducing the administrative burden on healthcare professionals. All can automatically transcribe spoken words during patient consultations into text, filling out electronic health records (EHRs) in real-time.

It can also integrate and update various components of a patient's record, such as lab results, imaging reports, and notes from different healthcare providers, ensuring that the patient's record is comprehensive and up-to-date.

5.CUSTOMIZED PATIENT EDUCATION MATERIALS

Al can create tailored educational content for patients based on their specific diagnoses and treatment plans. This includes information about their condition, the expected course of treatment, potential side effects, and self-care instructions.

The content can be personalized to the patient's language, literacy level, and even cultural background, making it more accessible and easier to understand.

6.CLINICAL DECISION SUPPORT

Al can analyze patient data in conjunction with a vast database of clinical research to provide evidence-based recommendations. This can include suggestions for diagnostic tests, potential diagnoses, and treatment options.

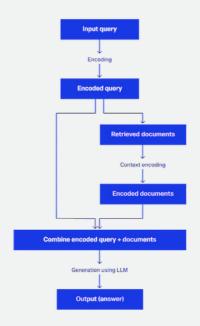
It can also identify potential drug interactions, contraindications, and recommend personalized drug dosages based on the patient's genetic makeup, thereby improving the safety and efficacy of treatments.

How SCIKIQ Uses Generative Al

SCIKIQ uses state-of-the-art LLM designed to help our clients improve their processes, just like having a techsavvy personal librarian at your service.

Our Generative AI solution works seamlessly to locate the information you need. It scans the entire knowledge base, picking out the most relevant topics buried within lengthy documents and providing you with concise summaries. It's like having your very own research assistant.

SCIKIQ understands plain English, it delves deep into unstructured data to uncover most relevant answers. Furthermore, it seamlessly integrates with chatbots, enabling the creation of intelligent solutions.



What sets SCIKIQ apart is its ability to safeguard your data's confidentiality and its offline functionality. This makes it the ideal choice for enterprises that require instant information access, even in offline settings, while ensuring the utmost privacy and security of their valuable data.

BENEFITS



Swift Information Retrieval: Experience an impressive 85% reduction in search time, enabling quicker access to critical data



Heightened Productivity: Boost your team's productivity by a remarkable 40%, resulting in more efficient workflows and outcomes.



User-Friendly Interface: SCIKIQ's intuitive interface slashes training time requirements by 40%, making it easier for your team to adapt and use effectively.



Elevated Customer Satisfaction: Seamlessly integrate with chatbots leading to 55% increase in customer satisfaction, enhancing user experiences.



Robust Data Security: Fortify data confidentiality and security with a noteworthy 60% reduction in security incidents.



Uninterrupted Operations: Enjoy offline functionality, drastically reducing downtime by an impressive 99%, ensuring business continuity.