

# MediGenius: Smart Customer Care Bot

AI-Wizards



# Our Team

## AI-Wizards



**Narendra**

- ❖ Principal Software Engineer @Veritas
- ❖ 1+ yrs. AI/ML exp
- ❖ Data Scientist and QA



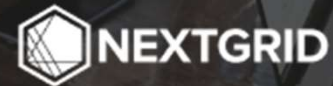
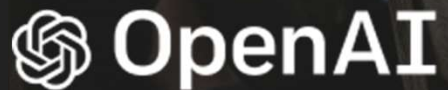
**Priyanshu**

- ❖ R&D Engineer @ Genpact
- ❖ 1 yrs. AI/ML exp
- ❖ ML Engineer and Researcher



**Shayan**

- ❖ Developer@Turing
- ❖ 4 yrs. AI/ML exp
- ❖ Domain Expert and ML Engineer



# Problem statement

## Challenges in traditional customer care support:-

- Long wait time
- Limited Accessibility
- Rising Cost
- Lack of personalization

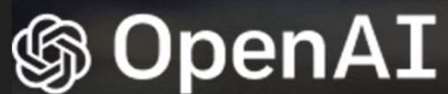
So,

Introducing a ground-breaking approach to customer service, Designing an AI-driven chat solution for streamlined healthcare customer service, prioritizing real-time query resolution and personalized assistance.



# Overview

- A smart customer care bot, offering **personalized assistance** and solutions to inquiries through natural language processing ultimately enhancing customer satisfaction and streamlining support processes.
- Combining **OpenAI GPT-4** with **TruLens** technology, this chatbot offers an advanced customer care experience, leveraging state-of-the-art natural language understanding and personalized recommendations to address inquiries effectively and empathetically, setting new standards in customer service excellence.



# Technologies Used:

## Front End

- Telegram App

## Back End / Framework

- Llama\_index
- Python
- telebot library
- trulens (Benchmarking)

## Models

- OpenAI – GPT4
- text-embedding-small (for embedding)

## Database

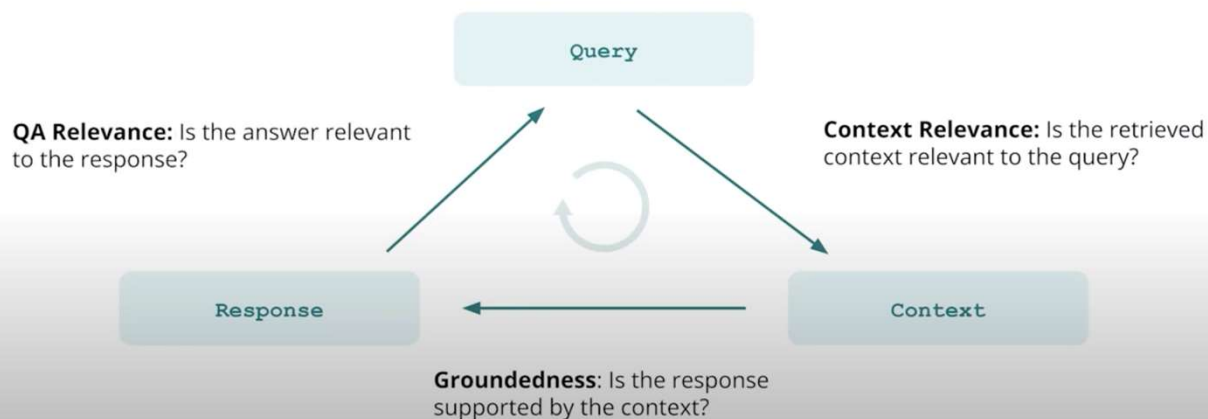
- MongoDB Atlas as Vector DB

# Use of TruLens

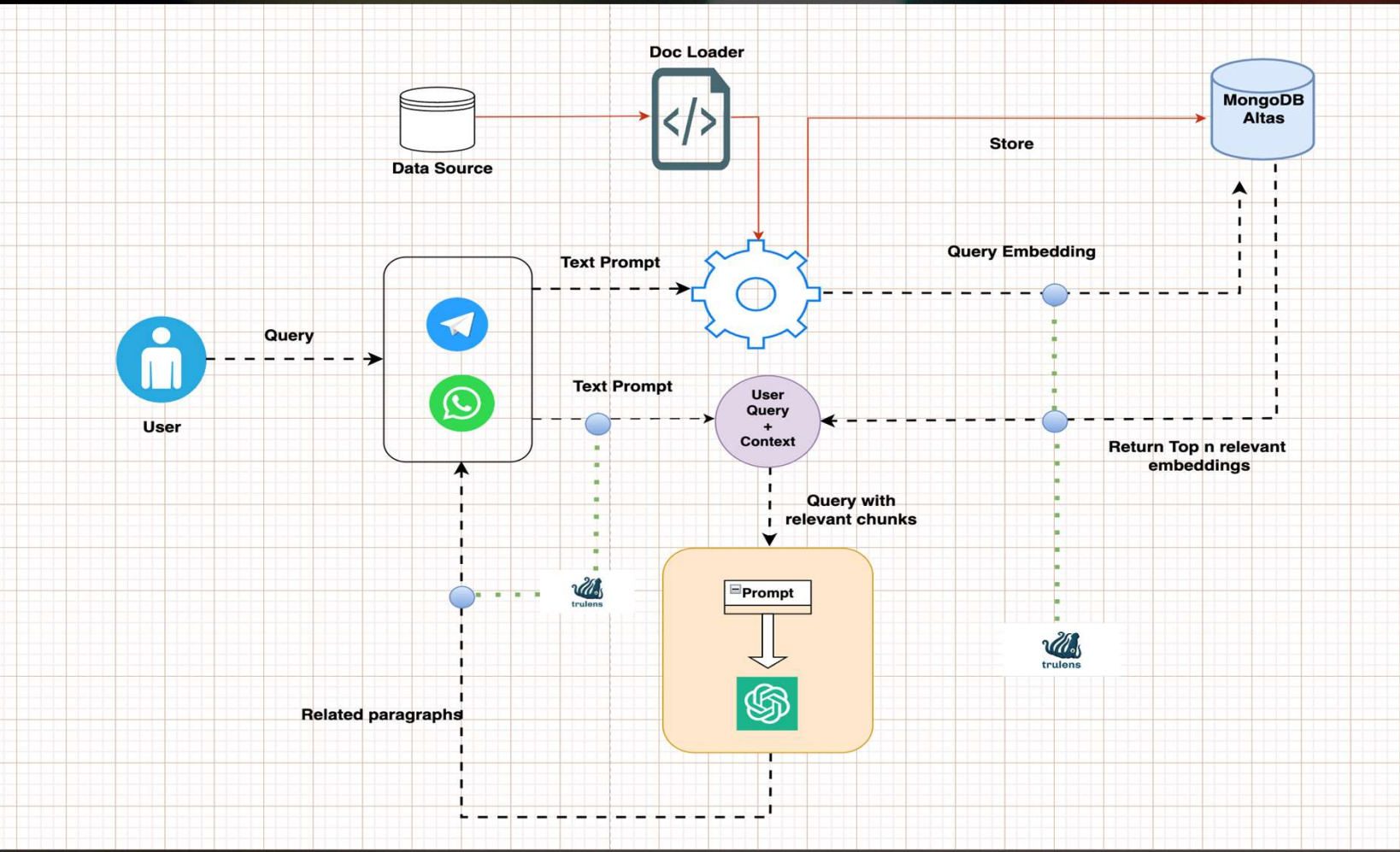
- A powerful open-source library for evaluating and tracking large language model-based applications

## Testing that RAGs are hallucination free

The RAG Triad

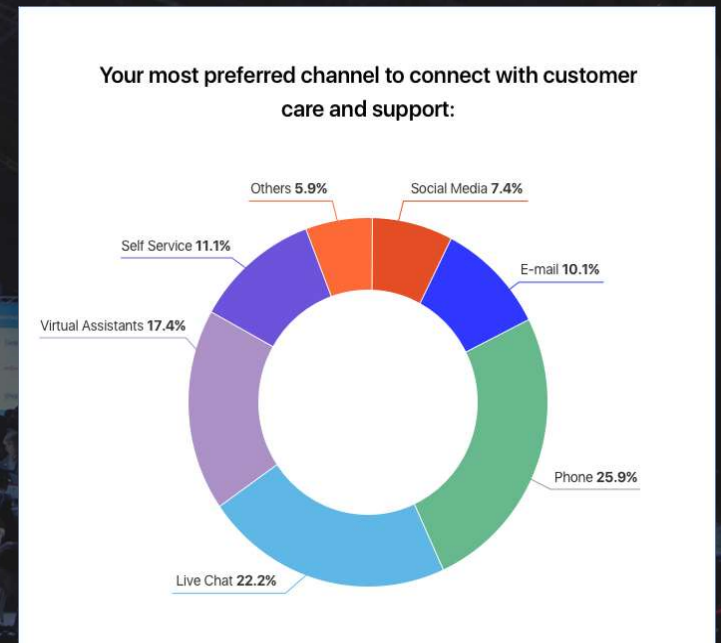


# Architecture Diagram



# Market Opportunity

- Growing demand for efficient customer service solutions
- Adoption trends: Shift towards text and voice-enabled technologies
- Target industries: E-commerce, telecommunications, healthcare, hospitality



Global customer care industry survey



# Competitive Analysis

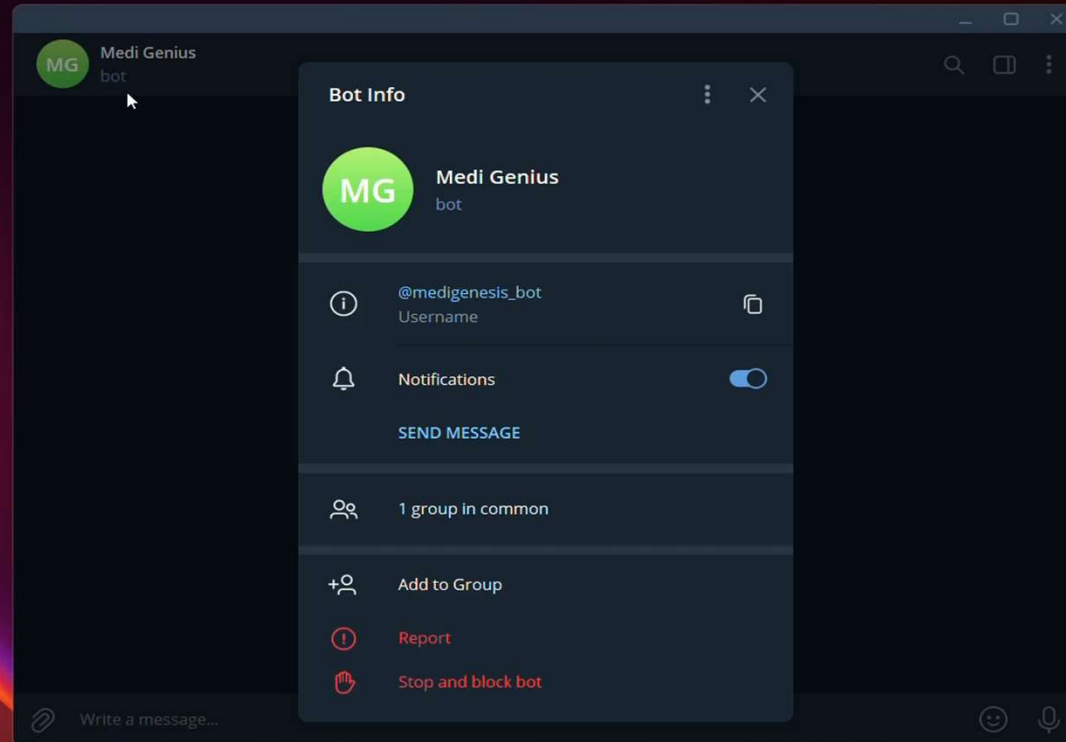
- **Key competitors:** Established chatbot providers, and voice assistants
- **Points of differentiation:** Powered by Telegram, Whatsapp apps, personalized customer interactions, integration capabilities
- **Market positioning:** Blending cutting-edge tech and personalized service to set new standards for satisfaction and loyalty.



# Revenue Model

- **Pay-per-use pricing:** Charging customers based on the number of interactions or minutes of usage, allowing for flexibility and scalability
- **Licensing fees:** Generating revenue through licensing the technology to third-party platforms or businesses for integration into their systems
- **Value-added services:** Offering premium features such as advanced analytics, customizations, or dedicated support for an additional fee
- **Partnerships and collaborations:** Exploring opportunities to monetize through partnerships with other businesses or service providers, sharing revenue generated from joint offerings or referrals.

# App Demo



clideo.com



# TruLens LeaderBoard

**trulens**

Leaderboard

Apps

Evaluations

## App Leaderboard

Average feedback values displayed in the range from 0 (worst) to 1 (best).

### LlamaIndex\_App1

Records	Average Latency (...)	Total Cost (USD)	Total Tokens	relevance	context_relevanc...	groundedness_...	Select App
7	3.71	\$0	3.43k	0.87 ✓ high	0.78 ⚠ medium	0.49 ● low	Select App

trulens\_eval v0.28.2 [Share Feedback](#)

# TruLens integration

The screenshot shows the TruLens web interface in a browser window. The URL is `quiet-signs-wait.local/evaluations?app=LlamaIndex_App1`. The interface includes a sidebar with navigation options: Leaderboard, Apps, and Evaluations. The main content area displays the title "LlamaIndex\_App1" and tabs for "Records" and "Feedback Functions". A table lists evaluation records with columns for App ID, App Type, User Input, Response, and Application Tag. The table contains 7 rows of data. At the bottom of the interface, there is a "Share Feedback" button and version information "trulens\_eval v0.28.2".

App ID	App Type	User Input	Response	Application Tag
LlamaIndex_App1	RetrieverQueryEngine(llama...	"I need help in knowing the ..."	"Symptoms of diabetes may ..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"Thanks for you help."	"You're welcome! If you hav..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"Lately, I have been focusing..."	"Adhering to a well-balance..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"It is concerning to see a risi..."	"Recognizing signs of depres..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"Recently a friend of mine h..."	"The symptoms of asthma ty..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"I am uncertain about wheth..."	"Common symptoms of type..."	-
LlamaIndex_App1	RetrieverQueryEngine(llama...	"Hello, I'm Priyanshu, and I'..."	"Regular health check-ups a..."	-



# Future Prospects:

- **Voice enablement:** Adding capability for voice-based conversation
- **Zoom and Google Meet Support:** Integration to this tool to provide one-on-one meeting experience to clients or join meetings as an AI-based bot acting as representative
- **Multilingual support:** Developing capabilities to cater to a diverse customer base globally
- **Advanced analytics:** Leveraging data insights to optimize customer interactions and improve service efficiency
- **Onboarding doctors:** Learning from patient-doctor conversation in confidential way
- **Cloud-based infrastructure** Explore it for seamless expansion and updates



# Thanks!

