

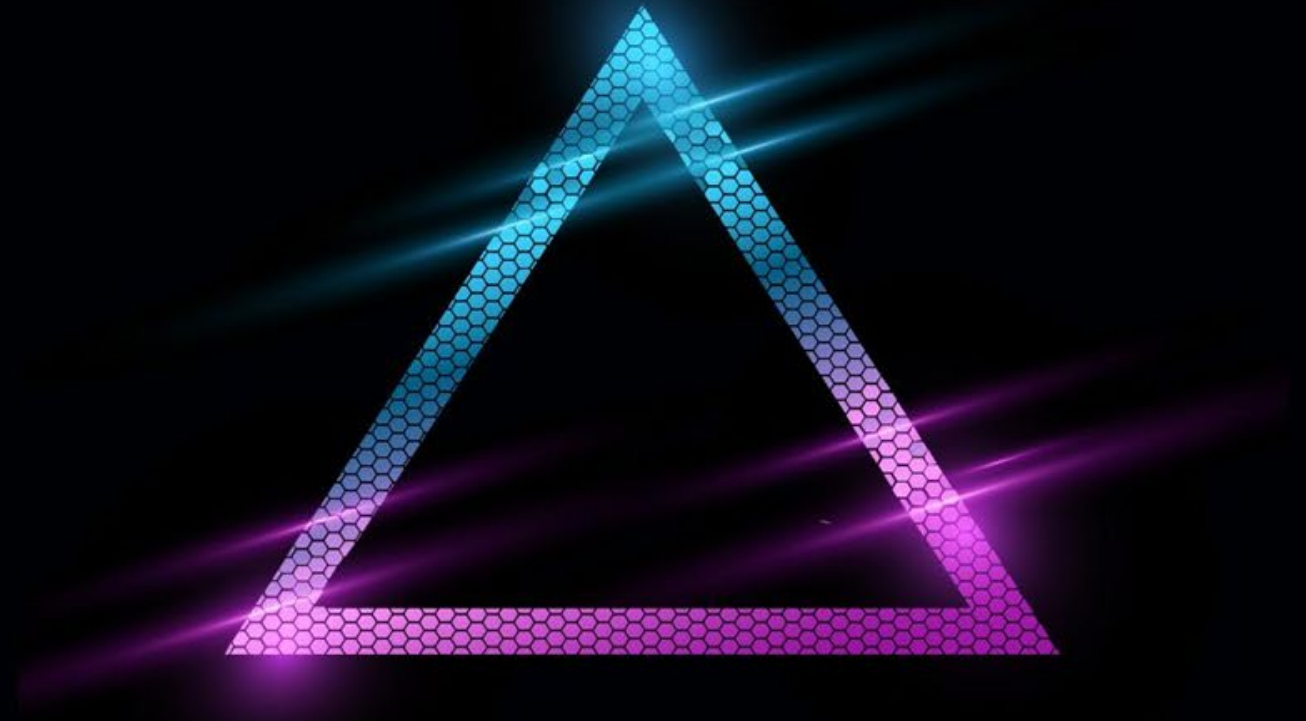
# Agentic Retrieval Augmented Generation (Agentic RAG)

Speaker

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Scan the QR & Hit Thumbs Up!



# Hygiene aspects

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1. Visit Git repo (scan QR code)  
[https://github.com/genaiconference/Agentic\\_RAG\\_Workshop/tree/main](https://github.com/genaiconference/Agentic_RAG_Workshop/tree/main)
2. Create Langfuse API keys, Tavily API keys.
3. Pick sample.env fill in your API keys
4. Rename it as ".env" file



# Capstone Problem Statement

Imagine you are handed a stack of **multimodal documents, meaning** PDFs filled with dense text, flow diagrams, tables, images, and charts at your enterprise. User would ask any question on this variety of datasets ranging from **HR policies** like **leave policy, insurance policy** or from finance documents like **Annual Reports**

# Capstone Project - Challenges

- **Traditional RAG fails** because it can't reason across modalities -> so we need Agentic RAG
- **No “single” retrieval and generation of answer** can solve this -> so we need multiple retrievals based on need.
- **Agentic RAG** must orchestrate tools, navigate sources, and justify its path -> so we need to know under the hood happenings

By the end of this workshop, **you will build an AI Agent Powered Assistant** named “**CyberBud**” that can:

- Seamlessly traverse **multimodal documents** with **text, images, tables, and flows**
- **Azure Document Intelligence** for multimodal parsing
- Use **LangChain for advanced document chunking and building a retrieval engine**
- **LangGraph** for reasoning and agent orchestration
- Leverage **Chroma DB** for retrieval
- Provide **transparent agent traces** using **Langfuse** so you can see *how the answer was built*

# The end2end flow

