

Llama3 AI Hackathon

Team Araycci

**RESEARCH**

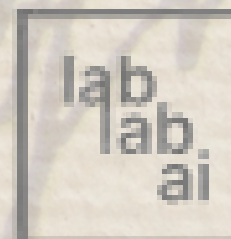
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made simple with

**Ārāycci**

The Research Paper AI Assistant





# Ārāycci- Meet The Team

Ananth

Team Lead,  
LLM Architect

Rohith

RAG Architect

Aditya

TTS Engineer



Samyuktha

Project Ideation  
Specialist

Avinash

Translation Expert

Arush

UI Designer



# Ārāycci- Problem Statement

Researchers face challenges with managing the vast number of research papers. Each research paper in itself is large, and going through multiple papers in-depth is time-consuming.

Different research papers may not be available in the language of our choice, diminishing potential sources of information.





# Ārāycci- Solution

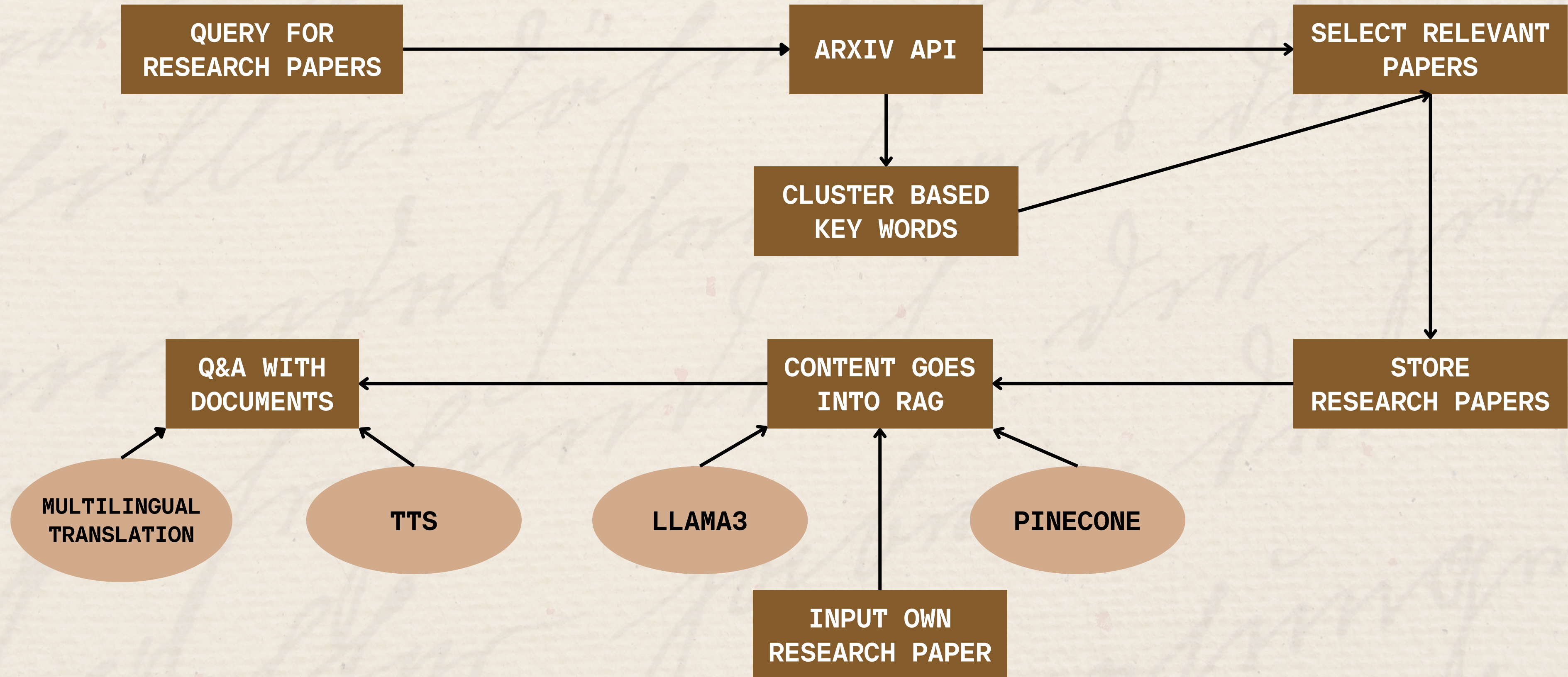


Our multilingual AI-powered Research Assistant offers clustering, summarization, and interactive Q&A with millions of documents from ArXiv, enhancing accessibility and efficiency for finding suitable papers and understanding them.

Supported by a RAG framework built on Llama 3 LLM, it also allows user-uploaded documents with text/audio input and output for in-depth Q&A.



# Ārāycci- Workflow





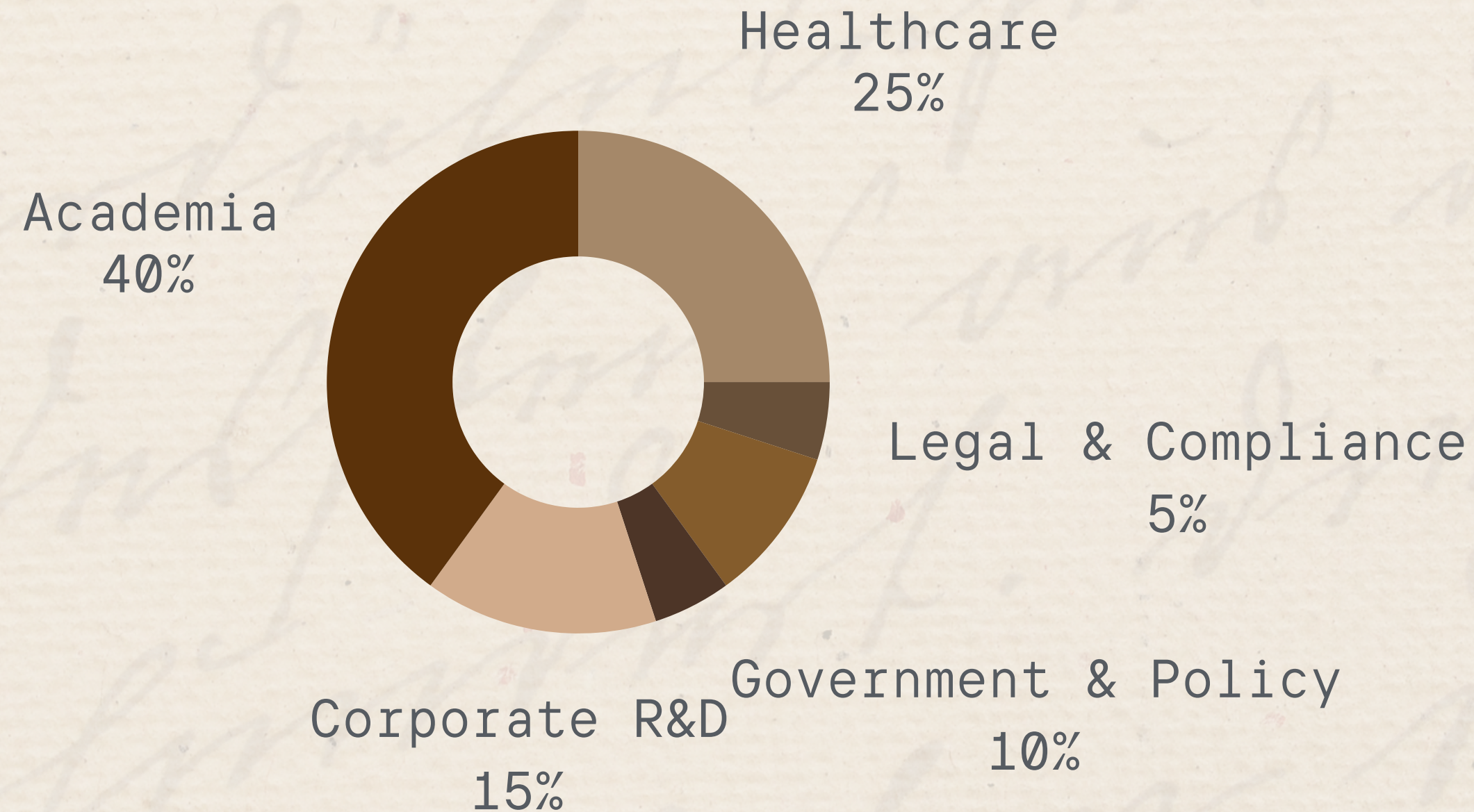
# Ārāycci- Tech Stack

- Llama 3
- Python and its libraries
- ArXiv
- gTTS
- Together AI
- Pinecone
- Huggingface
- Streamlit
- SentenceTransformer





# Ārāycci- Market Opportunity



**Our Unique Selling Proposition (USP) is the combination of multilingual text and audio support, and interactive Q&A capabilities with research documents, allowing users to engage with research content in multiple languages and directly interact with documents through advanced AI-driven features.**



# Ārāycci- Competitive Analysis

Company	Strengths	Weaknesses
Zotero	<ul style="list-style-type: none"><li>• Strong Community Support</li><li>• Integration with Word Processors</li></ul>	<ul style="list-style-type: none"><li>• Limited Advanced AI Features like Summarisation, Clustering</li><li>• Limited Multilingual Abilities</li></ul>
Mendeley	<ul style="list-style-type: none"><li>• Wide Adoption in Academia</li><li>• Team Collaboration</li></ul>	<ul style="list-style-type: none"><li>• Privacy Concerns</li><li>• Limited AI Capabilities</li></ul>
EndNote	<ul style="list-style-type: none"><li>• Integration with Online Databases</li><li>• Reference Management</li></ul>	<ul style="list-style-type: none"><li>• Learning Curve for New Users</li><li>• High Cost due to Complexity</li></ul>
ReadCube Papers	<ul style="list-style-type: none"><li>• Seamless Cloud Sync Across Devices</li></ul>	<ul style="list-style-type: none"><li>• Subscription based with Increased Cost</li><li>• Limited Lingual Support</li></ul>



# Ārāycci- Possible Revenue Models

Token Based Revenue Systems:  
Different requirements of tokens for different tasks and volume

## Subscription

Monthly or Yearly plans for  
Individuals, Corporates and  
Institutions based on  
requirements  
Also offer customised  
solutions for organisations

## Freemium

Free Basic Tier with  
limited tokens and payments  
to unlock additional  
features, ad-free

## Pay-Per-Use

Pay for required features  
based on usage like  
document summarization,  
translation and  
transcription, search and  
clustering algorithms



# Ārāycci- Future Prospects

## Cloud Infrastructure

Seamlessly integrating our model across devices via cloud, so users can continue where they left off from any device

## Expanding our Data Sources

Due to time constraints, our model only uses ArXiv for data collection and paper retrieval, and haven't included other digital libraries and repositories

## Enhancing Multilingual Capabilities

Including more languages to increase regional demographics, and fine-tuning results to give more accurate responses



# Thank You!

Try out Ārāycci at <https://araycci.streamlit.app>