Llama3 AI Hackathon

Team Araycci

made simple with

Ārāycci

The Research Paper AI Assistant

lab lab ai

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

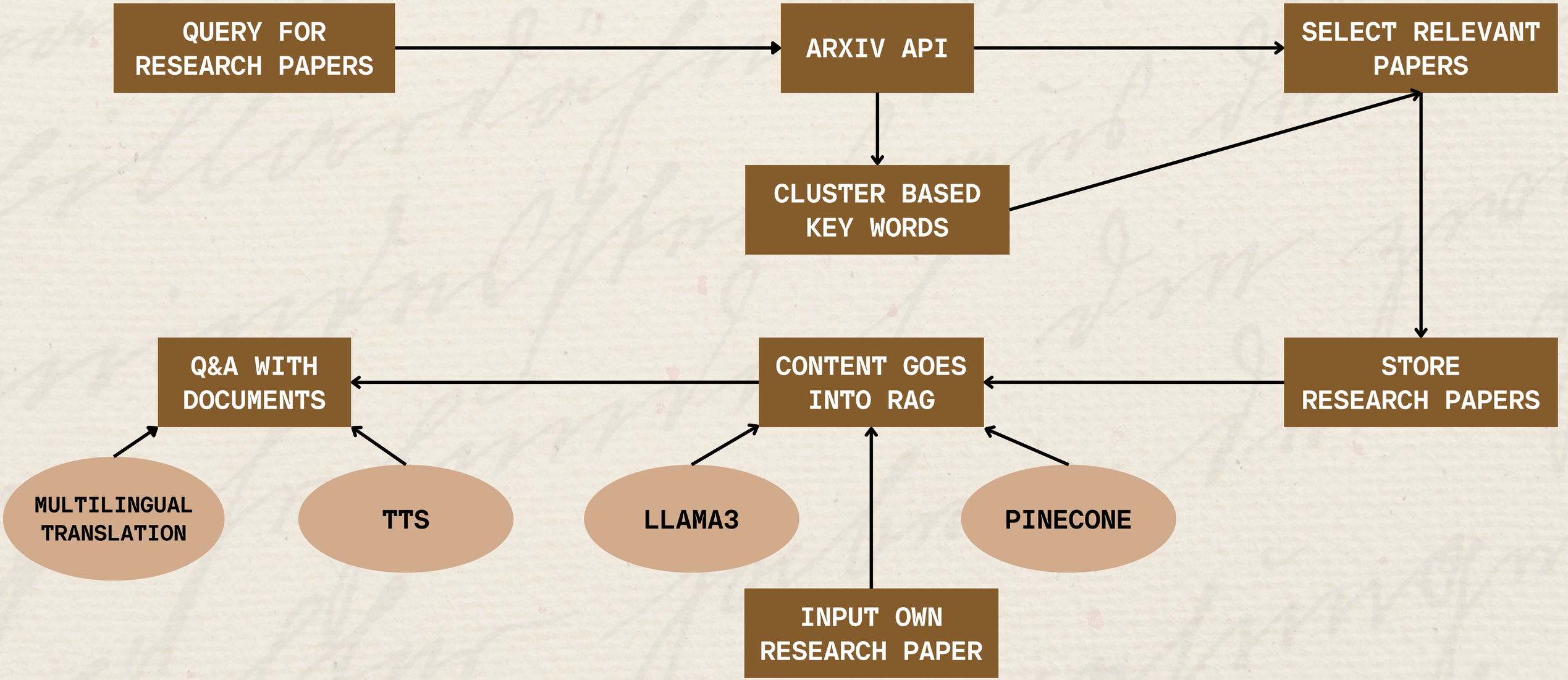
Researchers face challenges with managing the vast number of research papers. Each research paper in itself is large, and going through multiple papers in-depth is time-consuming.

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.

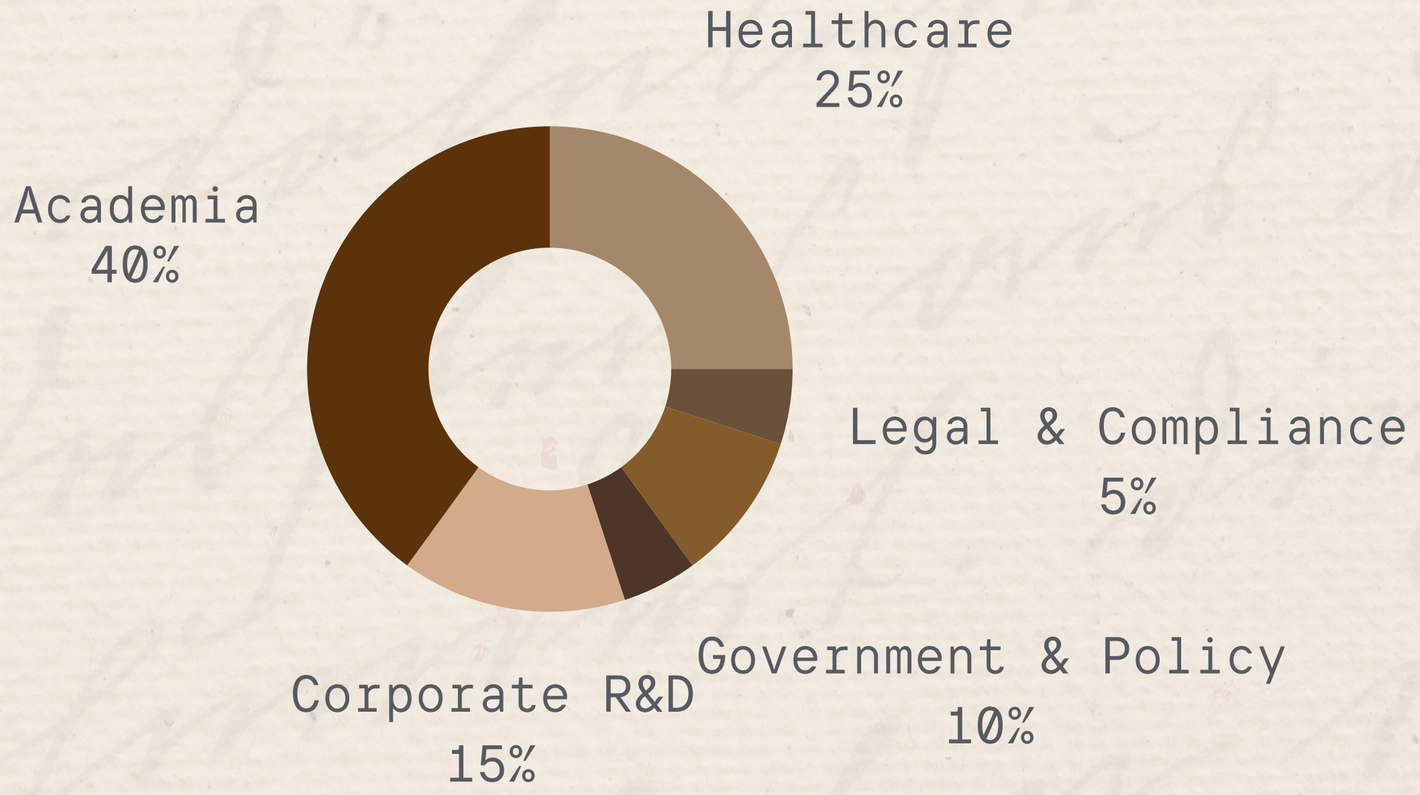
Ārāycci- Workflow



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	• Strong Community Support • Integration with Word Processors	• Limited Advanced AI Features like Summarisation, Clustering • Limited Multilingual Abilities
Mendeley	• Wide Adoption in Academia • Team Collaboration	• Privacy Concerns • Limited AI Capabilities
EndNote	• Integration with Online Databases • Reference Management	• Learning Curve for New Users • High Cost due to Complexity
ReadCube Papers	• Seamless Cloud Sync Across Devices	• Subscription based with Increased Cost • Limited Lingual Support

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 summarizaton, 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 constrants, 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