



AI-Powered Admission Counseling

A Smart Agent for

Guangxi Normal University

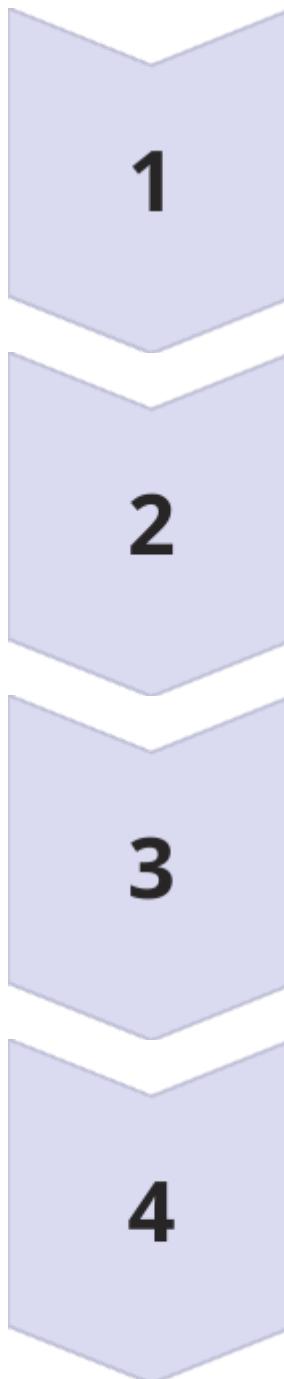
Group 6

Member: Nguyen Thanh Vinh, Nguyen Gia Bao, Do Thanh Hai, Nguyen Hoang Phong

Faculty of Information Technology - Hanoi University

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Outline



Problem

Our Solution

Conclusion

Future Work



The screenshot shows a user interface for an AI-powered admissions information assistant. At the top right are 'Fork' and '⋮' icons. Below them is the text 'Guangxi Normal University' next to its circular logo. A sub-header reads '© AI-Powered Admissions Information Assistant (Demo)'. A dropdown menu is open, showing 'System Architecture & Process Flow'. A message from the AI assistant says 'Welcome to the Guangxi Normal University Admissions Information System! I'm your AI assistant. How may I assist you today?'. At the bottom is a text input field with the placeholder 'Please enter your admissions-related question here...' and a send button with a right-pointing arrow.



Guangxi Normal University attracts many international students, but admission info is scattered and hard to access.



(img src: from Hanu's students with luv ^^)



Problems



STUDENT CHALLENGE



Information Overload

Too much data sources (web, social,...)



Hard-to-Find Details

Specific questions are **unanswered**.



Lack of 24/7 Support

Help isn't always **available**.

UNIVERSITY CHALLENGE



Repetitive Questions

Staff spend hours on the same queries.



Inconsistent Answers

Different staff might give different information.



High Workload

Causes burnout during peak season.

(img src: from Hanu's students with luv ^^)



Our project **uses AI** to make that process easier:

- **connecting students with clear answers**
- **helping the university support them better**



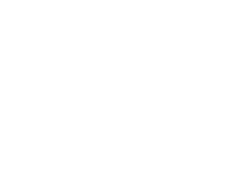
LLMs



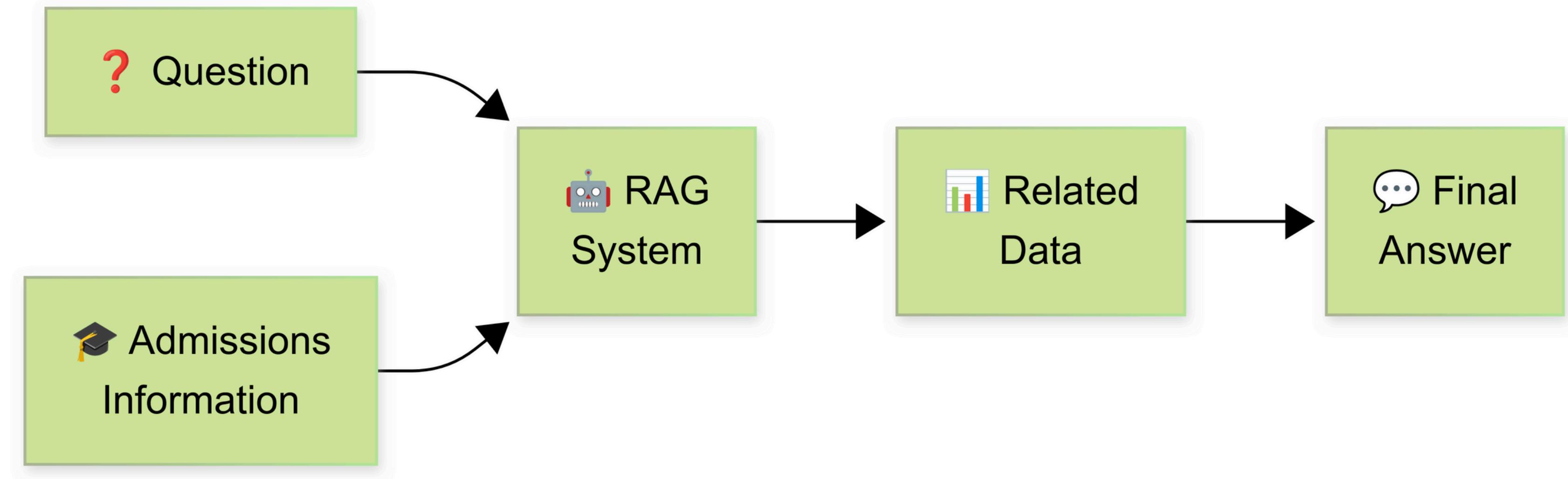
Powerful Capabilities.



Hallucination Risk.



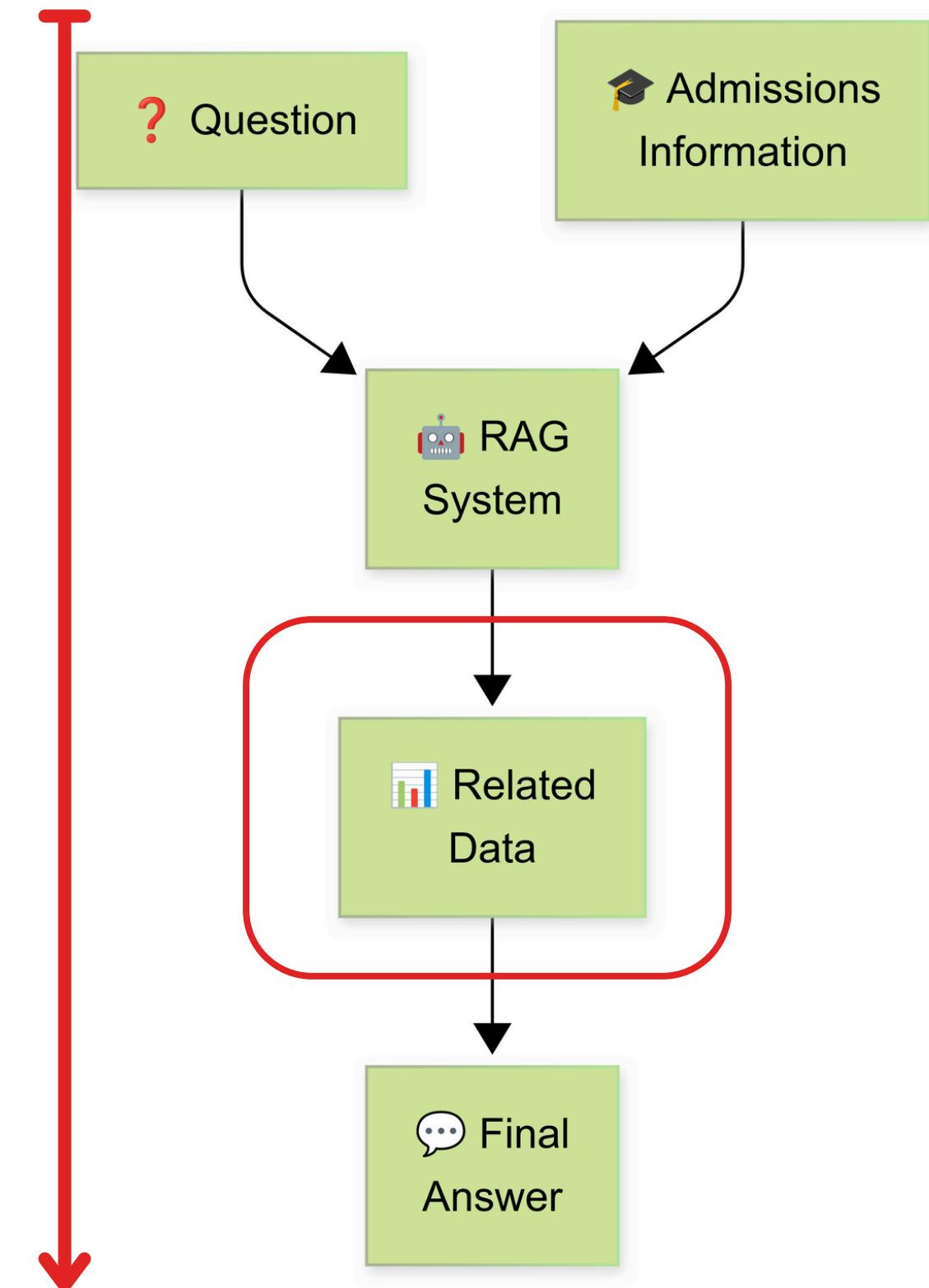
The Solution: Grounding AI with Facts



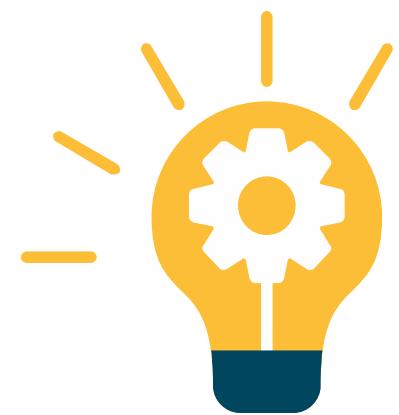
Limitations of Traditional RAG Systems



- **Rigid linear flow:**
 - always executes the full RAG pipeline
 - even for simple greetings like "hi" or "hello", which don't require retrieval or generation.
- **Inaccurate or irrelevant retrieval:**
 - When users ask **overly broad or vague questions**, the system may fail to retrieve meaningful or contextually relevant information.
 - When **too much text is embedded into the vector database**, retrieval quality may degrade due to noise and dilution of relevance.

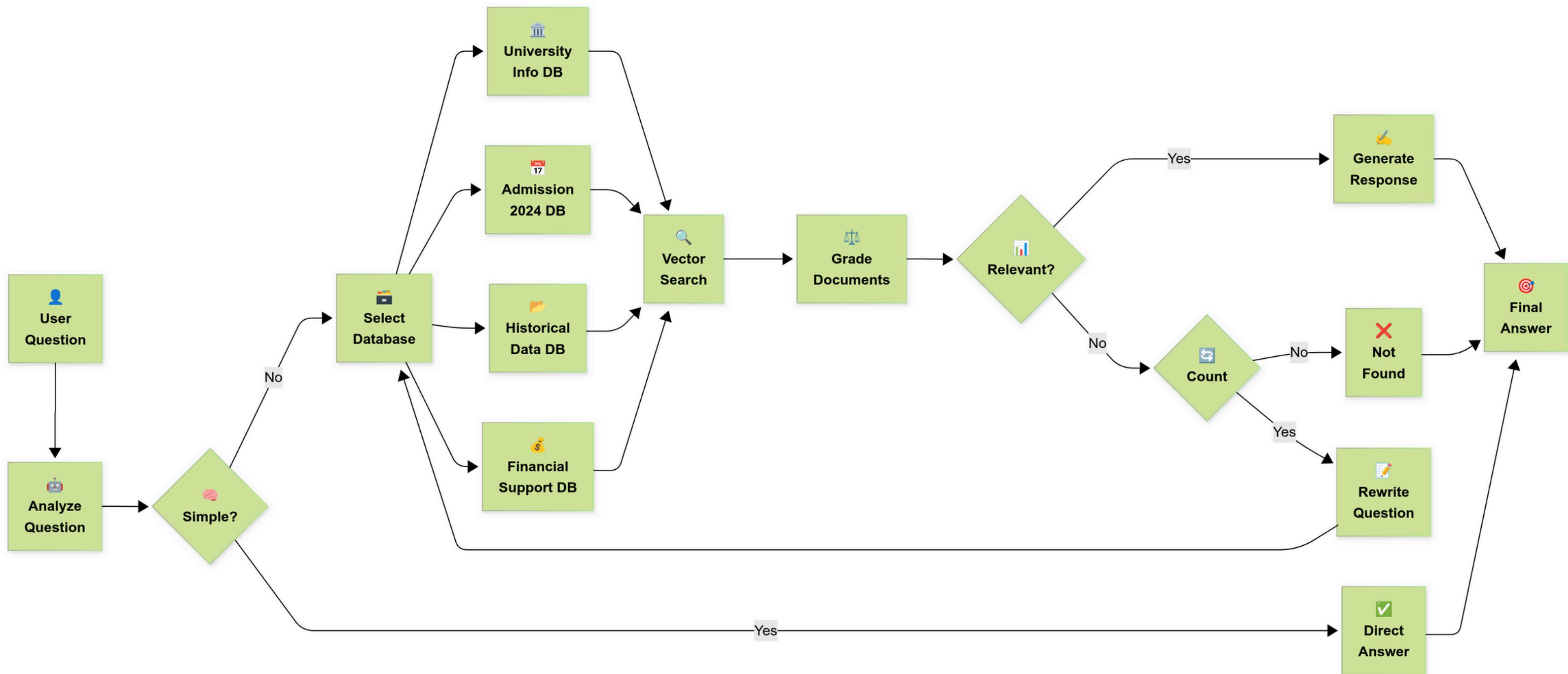


Our Solution:



AI Agent + RAG

How Our Agent Thinks



Improvements over Traditional RAG



Traditional
RAG

Our
Agent

- **Dynamic Flow Control**
 - Only runs retrieval when needed — avoids unnecessary steps for simple queries.
- **Smarter Context Selection**
 - Retrieves more relevant info by filtering vague or noisy inputs.
- **Modular Agent Reasoning**
 - Agent decides the next step instead of rigid linear execution.

Feature	Manual Support (Staff)	LLM Only	Traditional RAG ChatBot	👑 Our AI Agent
📅 Availability	Office hours only	24/7	24/7	24/7 Always Ready ✓
⚡ Response Speed	Slow, depends on workload	Instant	Instant	Ultra-Fast - Instant ✓
📈 Scalability	Not scalable, expensive	Scalable	Scalable	Infinitely Scalable ✓
🎯 Consistency	Inconsistent answers	Inconsistent answers	Highly consistent	Perfectly Consistent & Verified ✓
🎯 Accuracy	Prone to human error	Hallucination Risk	High, but can retrieve irrelevant facts	Highest - Self-Correction & Fact-Grounding ✓

The Technology Stack

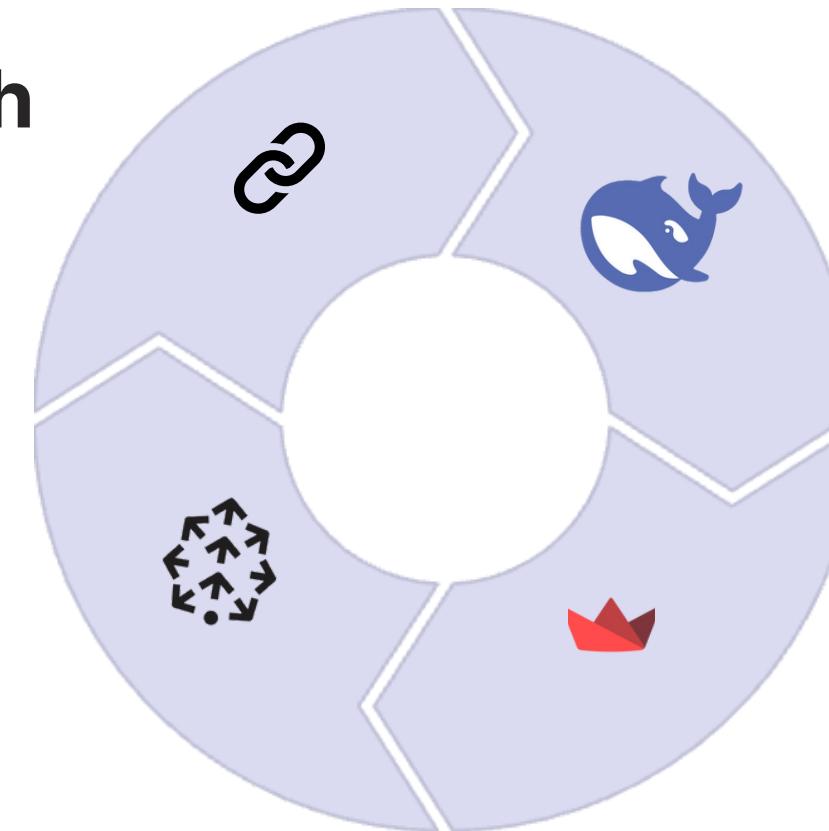


LangChain/LangGraph

For building the agent's reasoning framework.

Pinecone (Vector DB)

Managed, scalable, and fast for information retrieval.



Deepseek LLM

Excellent performance on Chinese language; cost-effective.

Streamlit

For rapid development and easy-to-use demo interface.

LIVE DEMO



LIVE DEMO



 **Guangxi Normal University**

AI-Powered Admissions Information Assistant (Demo)

System Architecture & Process Flow

Welcome to the Guangxi Normal University Admissions Information System!

I'm your AI assistant. How may I assist you today?

hi

Hello! How can I assist you with Guangxi Normal University admissions today?

Greeting and Offering Assistance

hi

Hello! 😊 How can I assist you today?

LIVE DEMO



Guangxi Normal University

AI-Powered Admissions Information Assistant (Demo)

System Architecture & Process Flow

Welcome to the Guangxi Normal University Admissions Information System!

I'm your AI assistant. How may I assist you today?

study fee

For undergraduate programs at Guangxi Normal University, tuition fees range from 14,000 RMB to 20,000 RMB per year, depending on the discipline. Additional costs include a one-time registration fee (400–800 RMB), medical insurance (800 RMB/year), and residence permit fees (400–800 RMB). Students should also budget for textbooks (1,000–2,000 RMB/year) and living expenses.

Please enter your admissions-related question here...

Manage app



Found 50 results

Here's a comprehensive overview of **study fees** (tuition and related costs) for higher education in key destinations, based on the search results:

1. United Kingdom

- **Undergraduate fees:** £11,400–£38,000 per year for international students, with humanities/social sciences typically cheaper than lab/clinical programs [1](#).
- **Postgraduate fees:** £9,000–£30,000, with many master's programs completed in 1 year (reducing overall costs) [1](#).
- **Living costs:**
 - **London:** £1,300–£1,400/month.
 - **Outside London:** £900–£1,300/month [1](#).

Message DeepSeek

DeepThink (R1)

Search

study fee



AI-generated, for reference only

LIVE DEMO



Guangxi Normal University

AI-Powered Admissions Information Assistant (Demo)

System Architecture & Process Flow

Welcome to the Guangxi Normal University Admissions Information System!

I'm your AI assistant. How may I assist you today?

学习费用

广西师范大学的学费根据课程不同而有所差异：本科生每年约1.4万至2万元人民币，硕士生每年约2万至2.5万元人民币，博士生每年约2.5万至3万元人民币。此外还需支付注册费、医疗保险等额外费用。

Please enter your admissions-related question here...

学习费用因学习类型、地区、课程内容等不同而有很大差异。以下是一些常见学习场景的费用参考：

1. 学历教育（中国）

- 公立学校**: 义务教育阶段（小学到初中）免费，高中每年约1000-5000元（公立），大学本科每年5000-2万元（公立）。
- 民办/国际学校**: 小学到高中每年几万到几十万元不等。
- 研究生**: 学硕每年8000-1.5万元，专硕或MBA可能更高（部分名校MBA可达10-30万元）。

2. 职业教育与培训

- 技能培训**（如IT、设计、烹饪等）：短期课程几千到几万元不等。
- 语言培训**（如英语、日语）：
 - 线下班：几千到数万元（如雅思/托福培训约1-5万元）。
 - 在线课程：几百到上万元（平台如VIPKID、沪江网校等）。

Message DeepSeek

DeepThink (R1) Search

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AI-generated, for reference only

Conclusion: Impact & Problems Solved



Problem

LLM Hallucination

Staff Overload & Repetitive Questions

Scattered & Hard-to-Access Information

Slow Response Times

Our Solution

Factual & Verified Answers

24/7 Automated Support

Centralized Knowledge Hub

Instantaneous Replies

Limitation



- Only 10 days of development, so **data was limited**.
- Small knowledge base → **limited answer coverage**.
- No **live university system integration** yet.

Future Work & Potential



WeChat Integration

Why: Reach students on their preferred platform.

How: Launch the AI chatbot on Guangxi Normal University's official WeChat for instant admissions support.



Official GNXU Website Plugin

Why: Provide seamless, on-demand help directly on the university's admissions page.

How: Embed the chatbot as a user-friendly widget on the official website for a smooth, integrated experience.



Scalable Model

Why: Extend the value of the solution beyond a single use case.

How: Design the agent to be easily adaptable for other universities, languages, or departments like Financial Aid and Student Affairs.

Thank You for Listening

谢谢你聆听，我们爱广西师范大学。

Xièxìè nǐ língtīng, wǒmen ài guāngxī shīfàn dàxué.

