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# IBM AICTE INTERSHIP AI PROJECT

## COLLEGE ADMISSION AGENT

**Student name : Aditya Sharma**

**College Name & Department : Maulana Azad National Institute of  
Technology & Computer Science**

# OUTLINE

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications

# PROBLEM STATEMENT

The college admission process is often overwhelming and confusing for prospective students due to scattered information, unclear eligibility criteria, and delayed responses from institutions. Admission offices are burdened with repetitive queries related to course offerings, fees, application deadlines, and documentation, which slows down the overall process and negatively impacts the student experience. There is a lack of a centralized, real-time, and reliable system that can provide accurate and personalized admission guidance to applicants.

Proposed Solution:

To address this, we developed a **College Admission Agent powered by RAG (Retrieval-Augmented Generation)** using **IBM Granite and IBM Cloud Lite services**. The system retrieves relevant information from institutional documents, FAQs, and policy manuals, and then uses a powerful language model to generate accurate, real-time answers to natural language queries from students. The assistant provides guidance on course selection, eligibility, fee structure, important dates, and application procedures. This AI-driven solution enhances transparency, reduces manual workload, and significantly improves the admission experience for students and institutions alike.

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# TECHNOLOGY USED

- IBM cloud lite services
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- IBM Granite model

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## IBM CLOUD SERVICES USED

- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model

# WOW FACTORS

- The agent uses Retrieval-Augmented Generation (RAG) to give real-time responses based strictly on verified admission documents — no guesswork. Unique features:
- Uses IBM's powerful enterprise-grade LLM for generating high-quality, factual, and context-aware answers
- Gives user-specific information based on course, category, and exam score — almost like a personal admission counselor
- Can be deployed as a chatbot on college websites or messaging platforms like WhatsApp and Telegram.
- Recommendation of research papers based on a user's current topic
- Trend analysis over time for specific keywords or domains.
- With minor tweaks, the system can be scaled to serve multiple colleges or even a centralized education portal.

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## END USERS

- Academic Researchers
- Prospective Students
- Research Institutions and Universities
- School Counselors and Career Advisors
- Parents and Guardians
- Education Consultants and Agencies

# RESULTS

IBM watsonx

Upgrade

?

Aditya Sharma's Account

Dallas

AS

Projects / AI\_internProject / Agent Lab

Share feedback

Unsaved

New agent +

Deploy

Build

AI

Model: llama-3-3-70b-instruct

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Agent preview

Quick start questions

Add up to 4 quick start questions that your users can select.

Configuration

Framework

LangGraph

Architecture

ReAct

Instructions

Advanced configuration

You are a college admission assistant.  
Your job is to help students by answering their questions in detail about admission processes, eligibility, fees, deadlines, and course details.  
Use only the information provided in the context (retrieved from official sources like college websites, brochures, and FAQs).  
If you don't find the answer in the given context, say: "I'm sorry, I don't have that information right now."  
Be polite, clear, and factual. Do not guess or make up any information.

Knowledge

Tools

Add a tool

Create custom tool

AS

You: 09:14 PM

Can I get admission to B.Tech without JEE Main?




College Admission Agent ( RAG Based ) 09:15 PM

It is possible to get admission to B.Tech without JEE Main. There are several colleges in India that offer B.Tech courses without requiring JEE Main scores. Some of these colleges include Maharashtra Institute of Technology (MIT) Pune, Symbiosis Institute of Technology, Jadavpur University, Sri Venkateswara University, and Maharaja Sayajirao University. Additionally, there are some colleges that offer admission to B.Tech courses based on other entrance exams or criteria, such as the AP EAMCET, GUJCET, or 12th-grade science stream scores. It's best to research and check the specific admission requirements for each college to determine the best option for your needs.

► How did I get this answer?


Type something...




 Model: llama-3-3-70b-instruct   <

Build


Agent preview

Configuration 

Framework


LangGraph 


Architecture

ReAct 

Instructions [Advanced configuration](#)

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Knowledge 

Tools 


Add a tool

Create custom tool


Added tools (1)

Google search  

Retrieve information from the internet with the Google search engine.

 You: 09:27 PM

What courses are available in engineering college?


 College Admission Agent ( RAG Based ) 09:27 PM

Based on the search results, there are various courses available in engineering colleges, including:



- Undergraduate programs in biomedical, chemical, civil, computer, electrical, industrial, and mechanical engineering
- Master's programs in engineering
- General engineering courses
- Mechanical engineering courses
- Civil engineering courses
- Aerospace engineering courses
- Computer engineering courses
- Electrical engineering courses

It's worth noting that the specific courses available can vary depending on the college or university. It's best to check with the specific institution for their current course offerings.

► How did I get this answer?



Type something...

Build

AI Model: llama-3-3-70b-instruct ⌵ ⚙️ <

Configuration

Framework

LangGraph ⌵

Architecture

ReAct ⌵

Instructions

Advanced configuration

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Knowledge

⌵

Tools

Add a tool

Create custom tool

Added tools (1)

Google search

Retrieve information from the internet with the Google search engine.

⚙️ 🗑️

Agent preview

AS

You: 09:28 PM

What are the documents required for admission in Indian Colleges?

🤖

College Admission Agent ( RAG Based ) 09:28 PM

The required documents for admission in Indian Colleges may vary depending on the institution and program. However, some common documents that are typically required include:

- Digital photo
- Proof of age and identity
- Proof of residence
- Academic transcripts and certificates
- English proficiency test scores (for international students)
- Standardized test scores (such as SAT or ACT)
- Letters of recommendation
- Personal statement or essay

It's best to check with the specific college or university for their specific requirements. Additionally, some colleges may have additional requirements for international students, such as a visa application or proof of financial support.

► How did I get this answer?

🔄

Type something...

🗨️ ➤

Build

AI Model: llama-3-3-70b-instruct

Agent preview

Configuration

Framework Architecture

LangGraph ReAct

Instructions

Advanced configuration

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Knowledge

Tools

Add a tool Create custom tool

Added tools (1)

Google search

Retrieve information from the internet with the Google search engine.

AS You: 09:45 PM

List Scholarships available for Economically weaker students in India

College Admission Agent ( RAG Based ) 09:45 PM

Here are some scholarships available for economically weaker students in India:

1. National Means Cum-Merit Scholarship Scheme (NMMSS)

2. Power Grid Endowment scholarship

3. The Prime Minister Young Achievers Scholarship Award Scheme for Vibrant India (PM-YASASVI)

4. Central Sector Scheme of Scholarship for College & University Students

5. National Scholarship For Post Graduate Studies

6. ONGC Foundation Scholarships

These scholarships provide financial assistance to meritorious students from economically weaker sections, helping them pursue their education and achieve their dreams.

► How did I get this answer?

Type something...

# RESULTS (Deployed AI Agent)

IBM watsonx

Upgrade ? 🔔

Aditya Sharma's Account ▾ Dallas ▾ AS

Deployment spaces / CollegeAdmissionAgent(RAG) / College Admission Assistant(using RAG) /

College Admission Assistant(using RAG) ✔ Deployed Online

API reference Test Evaluations **Preview**

New chat +

A

You 11:14 PM

What is the criteria to give JEE mains exam?

🤖

College Admission Assistant(using RAG) 11:14 PM

The criteria to give JEE mains exam include passing Class 12th or equivalent examination in 2023 or 2024, or appearing in 2025, with Physics, Chemistry, and Mathematics as compulsory subjects. The candidate must have secured at least 75% marks in the Std. XII board exam. Additionally, the candidate must meet the age limit and other eligibility criteria set by the National Testing Agency (NTA). It is recommended to check the official website of NTA or other reliable sources for the most up-to-date and accurate information on JEE mains exam eligibility criteria.

► How did I get this answer?

↺

type something...

➤

About this deployment ×


**Name** ✎  
College Admission Assistant(using RAG)

**Description** ✎  
You are a college admission assistant. Your job is to help students by answering their questions

**Deployment Details**  
Deployment ID: 64d470cc-e0ff-40...  
Serving name: ✎  
No serving name.  
Software specification: ✎  
runtime-24.1-py3.11 ⚙️  
Hardware specification: ✎  
Extra extra small: 1 CPU and 2 GB RAM  
Copies: ✎  
1  
**Tags** ✎  
wx-agent  
**Associated asset** ✎  
📄 College Admission Assistant(using R...  
f7cb30a8-f424-4f40-90d9-f2cc7692add2  

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Last modified  
3 minutes ago  
  
Created on  
Aug 5, 2025



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## CONCLUSION

- The project successfully streamlines the college admission process by providing instant, accurate, and contextual responses to student queries.
- By combining document retrieval with generative AI, the system delivers trustworthy, real-time information from official sources.
- The agent reduces the burden on administrative staff by handling frequently asked questions automatically.
- The system is scalable and can be easily integrated with college websites, chat platforms, or mobile apps.

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# FUTURE SCOPE

- Multilingual Support
- Voice-Activated Research Assistant
- Real-Time Notification Feature
- Integration with Whatsapp and telegram
- Scholar Finder
- Document Upload & Verification
- Parent and Counselor Modes

# IBM CERTIFICATIONS

In recognition of the commitment to achieve  
professional excellence



## Aditya Sharma

Has successfully satisfied the requirements for:

### Getting Started with Artificial Intelligence



Issued on: Jul 23, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/bf1634e6-53e5-4bab-81ae-a58408da6fb5>



In recognition of the commitment to achieve  
professional excellence



# Aditya Sharma

Has successfully satisfied the requirements for:

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## Journey to Cloud: Envisioning Your Solution

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Issued on: Jul 24, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/fd490c51-498f-472d-8c2f-6e70d7e79496>





IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Aditya Sharma

for the completion of

**Lab: Retrieval Augmented Generation with  
LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 24 Jul 2025 (GMT)

**Learning hours:** 20 mins



Github link : <https://github.com/AdityaSh42/CollegeAdmissionAgent>



**THANK YOU**