
CAPSTONE PROJECT

ADMISSION AGENT

Presented By:

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College Name & Department : K.S.Rangasamy College of Technology

OUTLINE

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- End users
- Result
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PROBLEM STATEMENT

Students and parents often face confusion during the college admission process due to scattered information, inconsistent eligibility criteria, dynamic cut-off trends, and lack of personalized guidance. Despite the availability of brochures, websites, and helpdesks, manually browsing multiple sources for updated information is time-consuming, inefficient, and error-prone.

Proposed Solution:

The Admission Agent is an AI chatbot that uses NLP and RAG (Retrieval-Augmented Generation) to provide instant, accurate answers to admission-related queries. Built with IBM Watson Assistant and Granite models, it helps users find relevant information from brochures, cutoff lists, and documents—making the admission process faster, easier, and more accessible.

TECHNOLOGY USED

IBM cloud lite services

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model

IBM CLOUD SERVICES USED

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

WOW FACTORS

RAG-Powered Intelligence

Combines Retrieval-Augmented Generation with Watson Assistant to generate context-aware responses from real admission documents like PDFs and brochures.

Powered by IBM Granite Model

- Uses IBM's cutting-edge Granite-13B model for deep language understanding and reliable answer generation.

Multi-Document Search

- Handles multiple files (e.g., cutoffs, fee structures, program info) with contextual comprehension—no need for manual FAQs.

Real-Time Chat Experience

- Provides a 24/7 assistant interface for students to ask questions naturally—reducing institutional workload.

Deploy Anywhere

- Can be easily embedded into websites or integrated via API into any college admission portal.

Personalized, Relevant Replies

- Understands user intent and fetches precise answers—no more searching through long PDFs or confusing websites.

Scalable & Secure on IBM Cloud

- Built on IBM Cloud with enterprise-grade reliability and scalability.

END USERS

- Academic Researchers
- Research Institutions and Universities
- Students
- Educators

RESULTS

Preview



Admission_Agent 07:55 PM

Welcome to Admission_Agent

Hi! I'm your Admission Agent. I'm here to help students with everything related to college.



Type something...



RESULTS



You 08:00 PM

top 10 engineering colleges in india



Admission_Agent 08:00 PM

Here are some of the top engineering colleges in India according to the National Institutional Ranking Framework (NIRF) 2021 rankings:

1. **Indian Institute of Technology (IIT) Madras:** Known for its strength in Engineering and Technology.
2. **Indian Institute of Technology (IIT) Delhi:** Offers a wide range of undergraduate and postgraduate programs in Engineering and Technology.
3. **Indian Institute of Technology (IIT) Bombay:** Renowned for its strong programs in Engineering, Science, and Humanities.
4. **Indian Institute of Technology (IIT) Kanpur:** Offers a variety of courses in Engineering and Technology.
5. **Indian Institute of Technology (IIT) Kharagpur:** One of the oldest IITs, known for its strong engineering programs.
6. **Indian Institute of Technology (IIT) Guwahati:** Known for its programs in Engineering, Science, and Technology.
7. **IIT Ropar:** Offers a range of engineering disciplines and is known for its research output.
8. **IIT Hyderabad:** Known for its interdisciplinary approach to education.
9. **IIT Indore:** Offers a variety of engineering programs and is known for its strong industry connections.
10. **IIT Gandhinagar:** A newer IIT, known for its focus on emerging areas of technology.

Type something...



RESULTS



You 08:02 PM

how to get admission in iit



Admission_Agent 08:02 PM

Admission to the Indian Institutes of Technology (IITs) is highly competitive and is based on the Joint Entrance Examination (JEE) Advanced. Here's a general guide on the process:

1. **Eligibility:** You must have passed 10+2 or equivalent examination with Physics, Chemistry, and Mathematics.
2. **JEE Main:** First, you need to clear the JEE Main examination conducted by the National Testing Agency (NTA). This exam is for engineering admissions across India, including the IITs.
3. **JEE Advanced:** Candidates who qualify in JEE Main are eligible to appear for JEE Advanced. JEE Advanced is the exam specifically for admission to the IITs.
4. **Ranking:** Your rank in JEE Advanced determines your chances of getting admitted to an IIT. The higher your rank, the better your chances of securing a seat in a top IIT.
5. **Counseling and Seat Allocation:** After the results of JEE Advanced are declared, the JoSAA (Joint Seat Allocation Authority) counseling process is conducted. Candidates need to participate in this counseling round to secure a seat in their preferred IIT and course.
6. **Document Verification:** Once you've secured a seat, you'll need to complete the document verification process as required by the IIT.

RESULTS

Deployed AI Agent

The screenshot displays the IBM Watsonx interface for a deployed AI agent. The top navigation bar includes the IBM Watsonx logo, an 'Upgrade' button, and user account information for 'Mohanavel Arjavu's Accou...'. The breadcrumb trail shows 'Deployment spaces / Admission_Agent / Admission_Agent /'. The agent 'Admission_Agent' is shown as 'Deployed' and 'Online'. Below the agent name, there are tabs for 'API reference', 'Test', and 'Preview', with 'Preview' being the active tab. The preview area shows a list of six numbered points regarding JEE Advanced exam eligibility and process. At the bottom, there is a text input field with the placeholder 'Type something...' and a 'Send' button.

IBM watsonx Upgrade ? ⓘ Mohanavel Arjavu's Accou... Dallas MA

Deployment spaces / Admission_Agent / Admission_Agent /

Admission_Agent Deployed Online

API reference Test **Preview**

New chat +

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Remember, the competition is very high and it's crucial to start your preparation early. Regular practice, understanding concepts thoroughly, and time management are key to success in JEE Advanced.

Also, keep in mind that these are general steps and the process might vary slightly each year. Always refer to the official IIT JEE and JoSAA websites for the most accurate and updated information.

► How did I get this answer?

🔄

Type something... ➤

CONCLUSION

- The Admission Agent revolutionizes how students access admission information by providing a fast, intelligent, and interactive chatbot experience. By combining Natural Language Processing (NLP) with Retrieval-Augmented Generation (RAG) and powerful models like IBM Granite, it transforms static documents into dynamic, searchable knowledge.
- Whether it's understanding eligibility, checking cutoffs, or navigating the application process, this assistant ensures that every query is answered accurately and instantly—making college admissions more transparent, accessible, and efficient for all.

FUTURE SCOPE

- Add multilingual support for wider accessibility.
- Enable voice-based interaction for hands-free use.
- Develop a mobile app version of the agent.
- Provide personalized course and college suggestions.
- Integrate with college portals for real-time updates.
- Include calendar reminders for key admission dates.
- Offer admin dashboard with user analytics.

IBM CERTIFICATIONS



7/24/25, 10:37 PM

Completion Certificate | SkillsBuild

IBM SkillsBuild

Completion Certificate



This certificate is presented to
Mohanavel A

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

In recognition of the commitment to achieve
professional excellence



Mohanavel A

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 18, 2025
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/1bc9f666-8ab5-4b9c-a5f0-f0f78326523c>



GITHUB LINK

- https://github.com/Mohanaavelayyavu/Admission_agent



THANK YOU