

---

# **IBM CAPSTONE PROJECT**

## **COLLEGE ADMISSION AGENT**

**Presented By**  
**Student name : ADITYA KOLLURU**  
**College Name & Department : M S RAMAIAH UNIVERSITY OF**  
**APPLIED SCIENCES (COMPUTER SCIENCE - ISE)**

# OUTLINE

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

---

# PROBLEM STATEMENT

**The Challenge** - A College Admission Agent, powered by RAG (Retrieval-Augmented Generation), streamlines the student admission process. It retrieves and summarizes admission policies, eligibility criteria, and FAQs from institutional databases and official sources. Prospective students can ask natural language questions and receive accurate, up-to-date responses instantly. The agent helps with course selection, application guidance, fee structure, and important deadlines. Using trusted, real-time data, it reduces manual inquiries and enhances applicant experience. This AI-driven assistant boosts transparency, accessibility, and efficiency in college admissions.

---

# 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

This agent will significantly reduce manual inquiry handling, improve accessibility to college-related information, assist prospective students in decision-making, and enhance engagement by offering quick, accurate responses through natural language interaction.

## Unique Features:

- **Instant query resolution** on admissions, hostel facilities, deadlines, and courses
- **Data-fed smart replies** based on real MSRUAS details for a near-human experience
- **NLP-style dialog simulation** through IBM Watsonx Assistant with no external code
- **Preview-tested assistant** without API or deployment complexity
- **Expandable structure** for future integration into web portals or mobile apps
- **Low-code setup** using Watson Actions for easy reusability and maintenance

# END USERS

- Prospective Students**

- To get instant answers about courses, fees, deadlines, hostel details, etc.

- Parents/Guardians**

- To clarify admission processes, accommodation safety, and fee structures.

- College Admission Officers**

- To reduce repetitive queries and streamline the initial inquiry process.

- High School Counselors**

- To assist their students in finding accurate information about MSRUAS offerings.

- International Applicants**

- To explore eligibility, documentation requirements, and admission support from afar.

# RESULTS

Upgrade

?

🔔

Aditya Kolluru's Account ▾

Dallas ▾

AK

⋮

β

🟢 Autosaved 10:56 AM

📁 ▾

New agent +

Deploy 🚀

🔒


📘



Agent preview

🤖 College Admission Agent 10:56 AM

Welcome to College Admission Agent

Change this description to reflect your particular agent



Type something...  



# RESULTS

## Agent preview



You: 10:59 AM  
good morning



College Admission Agent 10:59 AM

Good morning! 🤖 I'm your College Admission Assistant. Ask me anything about courses, fees, or deadlines!

► How did I get this answer?

## Agent preview



You: 11:00 AM

could you brief me about the courses offered in your college



College Admission Agent 11:00 AM

Sure! Here's what you need to know about our courses:

- **B.Tech (4-year program)** in specializations such as Computer Science & Engineering (CSE), Electronics & Communication Engineering (ECE), Mechanical Engineering (ME), Civil Engineering, Robotics, Artificial Intelligence/Machine Learning (AI/ML), and more.
- **B.Sc. (Honours & general)** across science, commerce, and arts streams (3–4 years)
- **M.Tech (2 years)** in areas like Data Science, VLSI, Structural Engineering – requires B.E./B.Tech + entrance exam
- **M.Sc. (2-year postgraduate)** in Biotechnology, Chemistry, Physics, Math, etc.
- Other programs: MBA/PGDM (CAT/MAT/CUET PG/RUAS AT), B.Pharm, M.Pharm, BDS, MHA, BHM, M.Des, and more.

Type something...



# RESULTS

## Agent preview

► How did I get this answer?



You: 11:02 AM

thanks ...could u also specify the eligibility criteria for btech



College Admission Agent 11:02 AM

Of course! Here are the eligibility criteria for B.Tech:

- 10+2 with Physics & Math + one of Chemistry/Biology/Computer Science
- Minimum 45% for general category, 40% for reserved categories
- Accepts COMEDK, KCET, or RUASAT scores

Would you like to know more about eligibility for other courses or proceed with the application process?

► How did I get this answer?



Type something...



## Agent preview



You: 11:03 AM

tell me more about the application process so i can go ahead with the admission



College Admission Agent 11:03 AM

Absolutely! Here's a brief overview of the application process:

1. **Application begins online** in December.
2. **B.Tech admissions** are accepted via COMEDK/KCET/REAP (60% RUASAT).
3. For MBA, Law, and others, CAT/MAT/CLAT may exempt RUASAT.
4. Payment deadline and original documents submitted after provisional offer.
5. Refund policy follows UGC guidelines (100% if withdrawn  $\geq 15$  days before admission deadline, decreasing later).

For detailed steps and requirements, you can visit our official website or contact our admission helpline at +91 80100 04444. You can also email us at [admissions@msruas.ac.in](mailto:admissions@msruas.ac.in) or [director.admissions@msruas.ac.in](mailto:director.admissions@msruas.ac.in).

Would you like information on hostel accommodation or any other details?

Type something...



## Agent preview



You: 11:05 AM

sure but before that may i know the last date to apply and other important dates



College Admission Agent 11:05 AM

You got it! Here are some important dates for admissions:

- Application begins online: December
- Payment deadline and submission of original documents: To be announced

For the most accurate and updated information, I recommend checking our official website or contacting our admission helpline at +91 80100 04444. They can provide you with the exact dates and any changes.

Now, would you like to know about our hostel facilities and accommodation details?

► How did I get this answer?



Type something...



## Agent preview

are there hostel facilities available ? if so tell me their fee structure too



College Admission Agent 11:08 AM

Absolutely! We have on-campus hostel facilities for both boys and girls, accommodating around 750 students across 378 rooms. Here's a breakdown of the annual room charges including meals and laundry:

- Single Sharing: ₹1,90,000
- Double Sharing: ₹1,40,000–1,50,000
- Triple Sharing: ₹1,25,000
- Quadruple Sharing: ₹1,10,000
- PG/Dormitory Option\*: ₹60,000–₹90,000

\*Some shared and PG blocks adjacent to campus offer lower cost options (₹60K–₹90K/year).

Hostel facilities include well-furnished rooms, Wi-Fi, dining hall, gym, TV lounge, laundry, hot water, purified water, power backup, and 24/7 security with CCTV and wardens.

Type something...



## Agent preview

how good are the placements in your college?



College Admission Agent 11:10 AM

MSRUAS has a robust placement record. Here are some highlights:

- In 2024, the highest package offered was ₹52 LPA, with an average of ₹6.2 LPA.
- The placement rate was approximately 69-73%.
- The college has ties with numerous companies, including IT giants, manufacturing firms, consulting agencies, and startups.

For the most current and detailed placement statistics, I recommend checking the official placement reports on our college website or contacting the placement cell directly.

Would you like to know more about our college's recognition or any other aspect of studying here?

► How did I get this answer?



## Agent preview



You: 11:11 AM

tell me about your rankings and accreditations




College Admission Agent 11:11 AM

MSRUAS is recognized and accredited by several prestigious bodies, which speaks to the quality of education and research we offer:

- **UGC Recognition:** The University Grants Commission (UGC) of India recognizes MSRUAS, ensuring our academic standards meet national benchmarks.
- **AICTE Approval:** All engineering programs are approved by the All India Council for Technical Education (AICTE).
- **NBA Accreditation:** The National Board of Accreditation (NBA) has accredited our B.Tech programs, signifying high-quality engineering education.
- **NIRF Ranking:** MSRUAS is ranked among the top universities in the National Institutional Ranking Framework (NIRF) conducted by the Ministry of Education, Government of India.
- **Outlook ICARE Ranking:** We are also recognized in the Outlook India College Ranking (ICARE).




## Agent preview

- AK** You: 11:12 AM  
can international students/nri apply too?
-  College Admission Agent 11:12 AM  
Yes, MSRUAS welcomes applications from international students and NRIs (Non-Resident Indians). They are subject to the same eligibility criteria and application process as domestic students.
- For international students, additional documents may be required, such as:
- Valid passport copies
  - Proof of English proficiency (TOEFL/IELTS scores)
  - Financial documentation to prove ability to cover educational and living expenses
- It's important to note that specific requirements and procedures might change, so it's advisable to contact the international student coordinator or the admissions office directly for the most current information.

Type something...



## Agent preview

- AK** You: 11:14 AM  
could you provide me your contact details
-  College Admission Agent 11:14 AM  
Of course! Here are our contact details:
- **Admission Helpline:** +91 80100 04444
  - **Email:** [admissions@msruas.ac.in](mailto:admissions@msruas.ac.in) / [director.admissions@msruas.ac.in](mailto:director.admissions@msruas.ac.in)
  - **Campus Address:** Vidya Soudha, Gnanagangothri Campus, New BEL Road, Bangalore – 560054

For any further inquiries or assistance, feel free to reach out using the above contact information.

Is there anything else you would like to know before proceeding with your application?

► How did I get this answer?

Type something...



# RESULTS

## Deployed AI Agent

IBM watsonx

Upgrade

Aditya Kolluru's Account

Dallas

AK

Deployment spaces /

college admission agent deployment

Overview

Assets

Deployments

Jobs

Manage

Search

| Name                                | Type   | Status               | Asset                   | Asset type | Tags                | Last modified                          |
|-------------------------------------|--------|----------------------|-------------------------|------------|---------------------|--|
| <div></div> College Admission Agent | Online | <div></div> Deployed | College Admission Agent | Ai service | <div>wx-agent</div> | 31 seconds ago<br>Aditya Kolluru (You) |

Items per page: 20

1-1 of 1 items

1 of 1 pages

---

## CONCLUSION

- The *College Admission Agent* effectively demonstrates how AI-powered virtual assistants can streamline the admission process by offering accurate, instant, and conversational support. Built using IBM Watsonx Assistant, this project eliminates the need for repetitive manual inquiry handling while improving accessibility to critical college information. With its smart, expandable design and user-friendly interface, the agent serves as a reliable digital bridge between the institution and its prospective students, setting the stage for future integration into full-scale admission systems.

---

## GITHUB LINK

- <https://github.com/AdityaK-gits/college-admission-agent>



# FUTURE SCOPE

- **Web Chat Integration:** Deploy the agent directly onto the college website or mobile app for public access.
- **Multilingual Support:** Enable interactions in regional and international languages to assist a wider audience.
- **Granite/RAG Integration:** Enhance the chatbot with advanced NLP models and document retrieval for deeper, human-like understanding.
- **Voice Assistance:** Integrate voice input/output for accessibility and ease of use.
- **Analytics Dashboard:** Track user queries, engagement patterns, and unanswered questions to improve services over time.
- **Dynamic Updates:** Connect with real-time databases to provide live updates on deadlines, results, and announcements.

# IBM CERTIFICATIONS(GETTING STARTED WITH AI)

In recognition of the commitment to achieve  
professional excellence



Aditya Kolluru

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 15, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/b60c1de5-7a66-4a36-99ce-2d84fd72afbe>



# IBM CERTIFICATIONS(JOURNEY TO CLOUD)

In recognition of the commitment to achieve  
professional excellence



Aditya Kolluru

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 15, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/cb948e7b-29d6-4e11-a165-8d8acf67d972>



# IBM CERTIFICATIONS(RAG LAB)

7/15/25, 6:47 PM

Completion Certificate | SkillsBuild

**IBM SkillsBuild**

Completion Certificate



This certificate is presented to

**Aditya Kolluru**

for the completion of

**Lab: Retrieval Augmented Generation with LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

**Completion date:** 15 Jul 2025 (GMT)

**Learning hours:** 20 mins



**THANK YOU**