
CAPSTONE PROJECT

COLLEGE ADMISSION AGENT

Presented By:

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OUTLINE

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Problem Statement

Navigating the college admissions process can be overwhelming for prospective students due to the complex eligibility criteria, varying deadlines, program-specific requirements, and institutional policies. Human advisors are often overburdened, and existing online resources are static, fragmented, or outdated. This results in confusion, missed opportunities, and inefficiencies for both applicants and institutions.

Problem

Applicants frequently struggle with:

- Understanding program-specific eligibility and documentation requirements.
- Keeping track of deadlines and submission guidelines.
- Finding personalized, timely, and accurate answers to their questions.
- Preparing and submitting required materials in a correct and complete manner.

Simultaneously, college admissions offices face:

- High volumes of repetitive queries that could be automated.
- Inconsistent advising quality due to human limitations or staff shortages.
- Difficulty in offering 24/7 support and scalable communication.

Proposed Solution

An **intelligent, agentic AI assistant** purpose-built to support prospective college applicants throughout the admissions journey. The agent will serve as a responsive, policy-compliant, and domain-constrained digital advisor—capable of interacting with users in real time to provide accurate, timely, and personalized guidance on the admissions process.

Impact & Benefits :

- **For Students:** Reduces stress, increases confidence, minimizes errors, and makes the admissions journey more accessible and navigable.
- **For Institutions:** Lowers administrative load, increases engagement rates, and improves applicant quality through better-prepared submissions.

TECHNOLOGY USED

Technology Used :

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

System Requirements:

- Compatible with modern web browsers and devices.

IBM CLOUD SERVICES USED

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

WOW FACTORS

- **24/7 Instant Support** – No wait times, ever.
- **Hyper-Personalized Guidance** – Tailored answers for each applicant.
- **Always Up-to-Date** – Auto-syncs with real-time admission policies.
- **Smart Document Checking** – Validates transcripts, SOPs, etc.
- **Strict Domain Focus** – Refuses off-topic or risky questions.
- **Customizable for Any Institution** – Easily adapted to any institution's rules.
- **Multilingual** – Supports global applicants in their native language.
- **Seamless Integration with Existing Systems** – Easily connects to institutional portals, calendars, and document systems

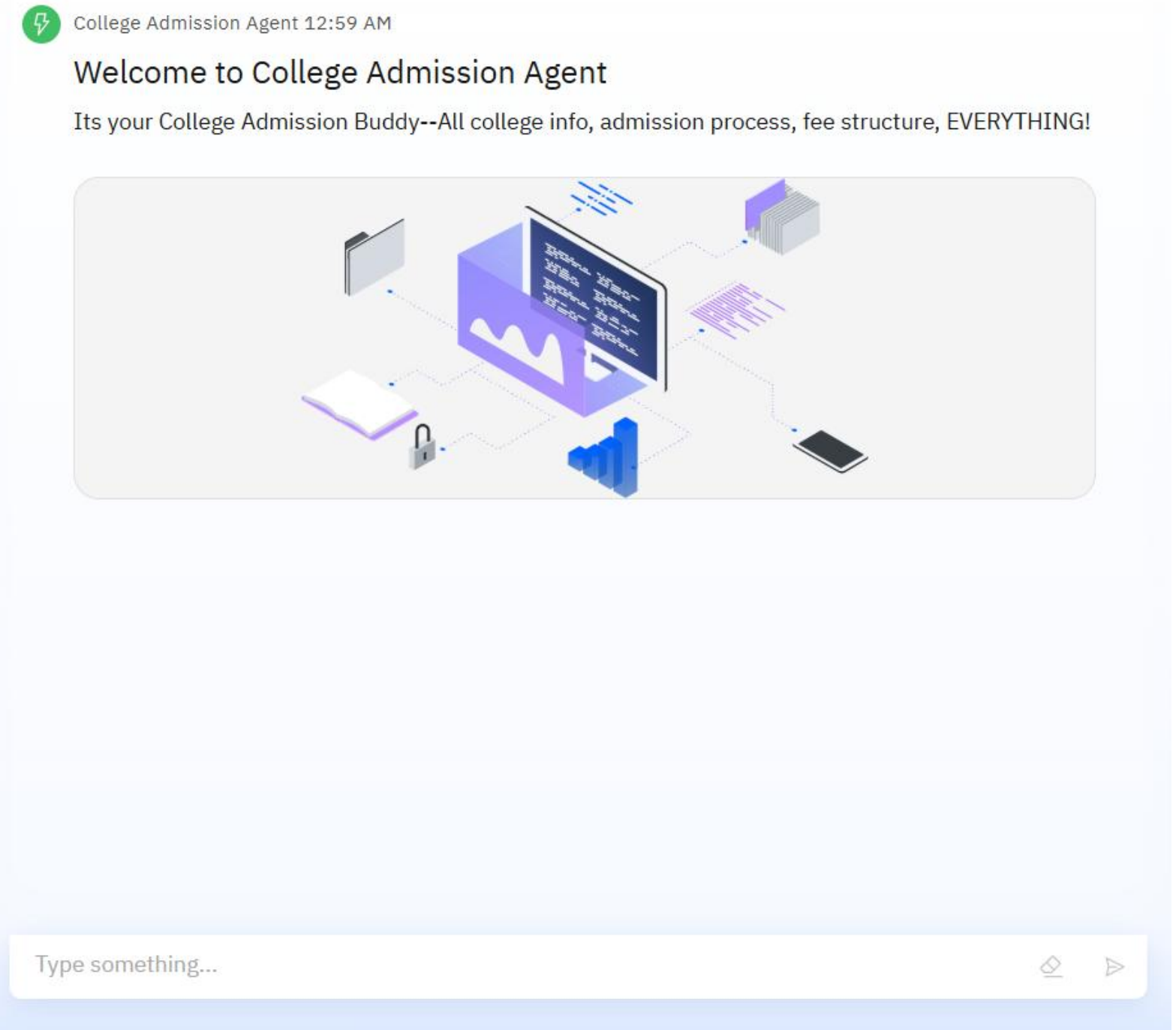
END USERS

- Students & Applicants
- Adult Learners
- Parents and Guardians
- Educators
- Third-Party EdTech Platforms

Result

- Developed a college admission agent aimed at simplifying and enhancing the application process for prospective students.
- Facilitates intuitive and efficient interaction through natural language processing capabilities.
- Enhances user experience by providing timely and accurate information tailored to individual queries.

Agent preview



Result

Agent preview



You: 12:58 AM

Give me the info of Rajasthan Technical University?



College Admission Agent 12:58 AM

As an AdmissionsAI, I can provide information about Rajasthan Technical University (RTU) based on publicly available data.

Rajasthan Technical University (RTU) is a public university located in Kota, Rajasthan, India. It was established in 1999 and is recognized by AICTE (All India Council for Technical Education). The university offers a wide range of undergraduate, postgraduate, and doctoral programs in various engineering, technology, management, and other specialized fields.

Here are some key details:

1. **Programs Offered:** RTU offers more than 100 courses across various streams including Engineering, Technology, Management, Computer Applications, Pharmacy, and more.
2. **Admission:** Admission to most programs is based on performance in national or state-level entrance exams such as JEE Main, JEE Advanced, or state-specific exams. Some programs may have their own entrance tests.
3. **Affiliated Colleges:** RTU has over 180 affiliated colleges across Rajasthan.
4. **Campus:** The main campus is located in Kota, but the university also has extension centers in other parts of Rajasthan.
5. **Ranking:** RTU is consistently ranked among the top technical universities in India.

Type something...



Agent preview

► How did I get this answer?



You: 12:58 AM

What are the courses offered?



College Admission Agent 12:58 AM

Rajasthan Technical University (RTU) offers a diverse range of courses across various disciplines. Here are some of the main areas of study and examples of courses within each:







1. **Engineering:** B.Tech, B.E. in various branches such as Civil Engineering, Mechanical Engineering, Electrical Engineering, Electronics and Communication Engineering, Computer Science and Engineering, and many more.
2. **Technology:** Diploma Courses in Engineering, B.Sc. in Engineering, M.Sc. in Engineering.
3. **Management:** MBA (Master of Business Administration) in various specializations like Finance, Marketing, HR, Operations, and Information Technology.
4. **Computer Applications:** BCA (Bachelor of Computer Applications), MCA (Master of Computer Applications), and B.Tech in Computer Science and Engineering.
5. **Pharmacy:** B.Pharm, M.Pharm.
6. **Architecture:** B.Arch.
7. **Law:** LL.B (Bachelor of Legislative Law).

Type something...



Result

[Deployment spaces](#) / [Admission_AI](#) / [College Admission Agent](#) /



College Admission Agent ✓ Deployed Online

API reference

Test


Preview

[New chat](#) +

K

You 12:14 AM

Give me the info of Rajasthan Technical University?



College Admission Agent 12:14 AM

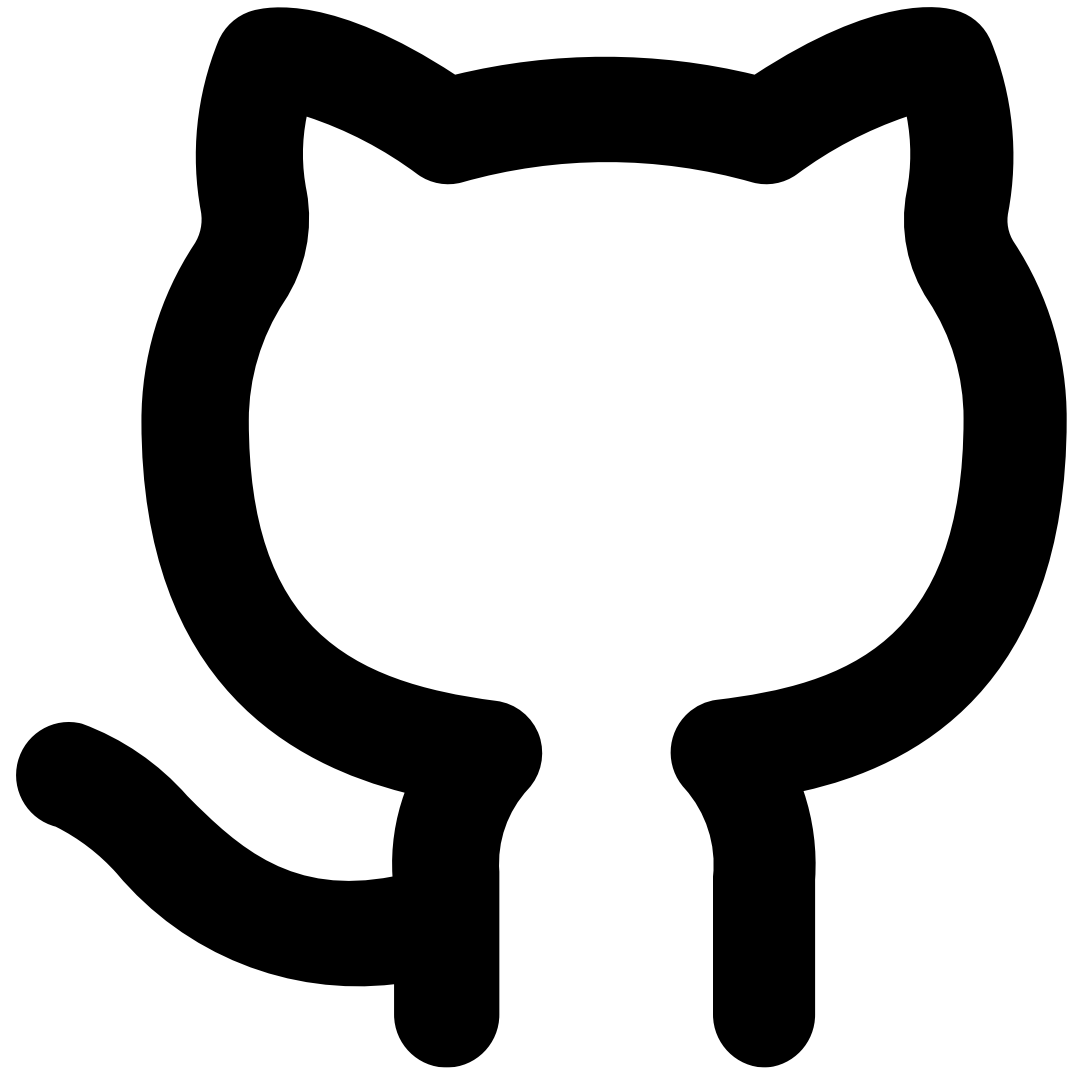
Rajasthan Technical University (RTU), formerly known as Board of Technical Education (BTE), is a public state university located in Kota, Rajasthan, India. It was established in 1999 and offers a wide range of undergraduate, postgraduate, and doctoral programs in engineering, technology, management, and other specialized fields.

Here are some key details:

- **Programs Offered:** RTU offers 47 postgraduate courses, 141 postgraduate diploma courses, 109 master of technology courses, 109 M.Phil. courses, and 78 doctoral (Ph.D.) programs. It also offers undergraduate courses in various engineering disciplines.
- **Admission:** Admission to most programs is based on performance in national entrance exams such as JEE Main and state-level exams. Some programs may have their own entrance tests.
- **Affiliated Colleges:** RTU has over 180 affiliated colleges across Rajasthan.
- **Campus:** The main campus is located in Kota, but the university also has regional centers in Udaipur, Ajmer, and Bikaner.

After Deployment

Project Link



GitHub: [https://github.com/Karanv777/College Admission Agent-Karan-Verma](https://github.com/Karanv777/College_Admission_Agent-Karan-Verma)

Conclusion

- The college admission agent represents a significant advancement in improving accessibility and user experience in the admission process.
- By leveraging AI-powered natural language processing, it effectively addresses the informational needs of prospective students.
- Offers a scalable solution to accommodate future enhancements and adapt to evolving user requirements.
- Contributes to a streamlined and efficient admission process that benefits both applicants and the institution.

Future scope

- **Voice-Based Interaction:** Enable voice assistants or phone-based support using natural language speech processing, making the agent even more accessible to students with limited digital literacy or disabilities.
- **Post-Admission Support:** Extend the agent's utility beyond admission—helping with onboarding, orientation schedules, housing, and course registration.
- **Personalized Assistance:** Implement machine learning algorithms to offer personalized recommendations and adaptive guidance.
- **Multilingual Support:** Integrate language translation capabilities to cater to diverse applicant demographics.
- **AI-Powered Essay and SOP Coaching:** Provide students with structured feedback on their Statement of Purpose or admission essays, improving their quality while still encouraging original thinking.

References

- IBM watsonx Assistant tutorial

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In recognition of the commitment to achieve
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IBM CERTIFICATIONS

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to
Karan Verma

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM- COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 01 Aug 2025 (GMT)

Learning hours: 20 mins



THANK YOU