

# **AICTE PROJECT**

## ***Travel agent***

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# Outline

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- ▶ End users
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# Problem Statement

Researchers, students, and professionals often struggle to stay updated with the rapidly growing volume of academic publications, technical articles, datasets, and evolving research trends. Manually reviewing, filtering, and synthesizing information across multiple domains is time-consuming and inefficient.

## Proposed Solution:

An AI Research Agent that uses Natural Language Processing (NLP), Retrieval-Augmented Generation (RAG), to assist users in conducting efficient literature reviews, generating summaries, identifying research gaps, and recommending relevant papers, datasets, or collaborators.

# **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 research time, improve the quality of literature reviews, help early-stage researchers find direction, and foster interdisciplinary collaboration by making knowledge more accessible and actionable.

## Unique features:

Semantic search across research papers, journals, and datasets

Auto-summarization of selected papers

Citation and reference analysis to trace influence

Recommendation of research papers based on a user's current topic

Trend analysis over time for specific keywords or domains.

Collaboration mapping: suggests potential co-authors or institutions based on similar research interests.

# **End users**

- ▶ Academic Researchers
- ▶ Research Institutions and Universities
- ▶ Industry R&D Teams
- ▶ Educators

# Results

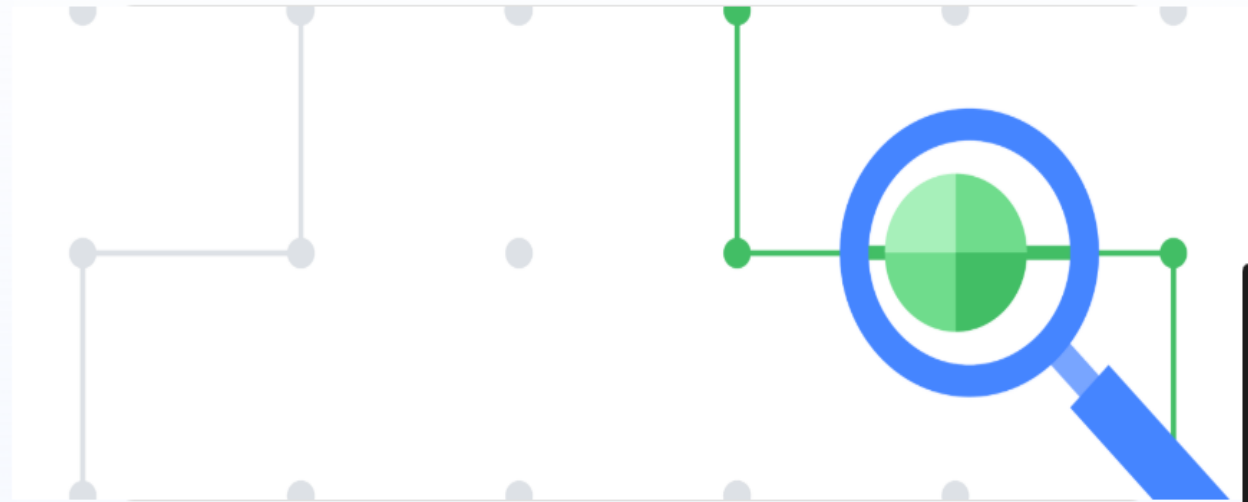
## Agent preview



Travel Agent 05:41 PM

Welcome to Travel Agent

Change this description to reflect your particular agent



Type something...





# Results



You 06:33 PM

what is the cost of accomodation at ooty



Travel Agent 06:33 PM

To provide an accurate cost for accommodation in Ooty, I would need more specific information such as the type of lodging (luxury, budget, etc.) and the duration of stay. However, according to recent data, the average cost for a hotel room in Ooty can range from around ₹500 to ₹2,000 per night, depending on the season and the hotel's rating. For a more precise quote, I recommend using a hotel booking website or contacting local hotels directly.

Type something...



# Results



You: 05:39 PM

plan a 5 day trip to kerala



Travel buddy 05:39 PM

Here's a revised 5-day trip plan to Kerala, considering your interest in a more detailed itinerary:

## Day 1: Arrival in Kochi

- Arrive at Cochin International Airport.
- Check into your hotel, such as the CGH Earth's Vivanta by Taj Malabar or a similar option based on your budget.
- Visit the historic Fort Kochi area, including the St. Francis Church, the Dutch Palace, and the Chinese Fishing Nets.
- Enjoy a traditional Kathakali dance performance in the evening.

|Type something...



# Results

## Deployed AI Agent

Travel Agent

✓ Deployed

Online

API reference

Test


Preview

New chat +

M

You 06:59 PM

PLAN A 5 DAY TRIP TO KERALA



Travel Agent 06:59 PM

Here's a basic outline for a 5-day trip to Kerala, India:

Day 1: Arrival in Kochi

- Arrive at Cochin International Airport.
- Check into your hotel.

Type something...



# Conclusion

- ▶ The agent can generate reports, suggest hypotheses, and even draft sections of research papers.
- ▶ It saves time by automating repetitive tasks like citation management and data extraction.
- ▶ Research Agents enhance efficiency, accuracy, and innovation in both academic and industrial R&D.



# Future Scope

- ▶ Multilingual Research Support
- ▶ Voice-Activated Research Assistant
- ▶ Real-Time Collaboration Features
- ▶ Research Gap and Novel Topic Identification
- ▶ Integration with Publishing Platforms
- ▶ AI-Assisted Paper Drafting

# IBM Certifications

In recognition of the commitment to achieve  
professional excellence



Mohana Sri Premnath

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 17, 2025  
Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/2d0b7845-bd24-4f73-b211-d8500bb16d76>



# Rag Certificate

IBM **SkillsBuild** Completion Certificate



This certificate is presented to

**Mohana Sri  
Premnath**

for the completion of

**Lab: Retrieval  
Augmented Generation  
with LangChain**

(ALM-COURSE\_3824998)

According to the Adobe Learning Manager system of record

Completion date: 25 Jul 2025 (GMT)

Learning hours: 20 mins



# GitHub Link

▶ <https://github.com/Mohana-Sri-Premnath2006>





**THANK YOU**