IBM HACKATHON PROJECT

AI JOB MENTOR FOR INFORMAL WORKERS

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OUTLINE

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

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PROBLEM STATEMENT

Problem Statement No.25 - AI Job Mentor for Informal Workers

Challenge – Millions of informal workers such as daily wage laborers, artisans, gig workers, and self-employed individuals face difficulty in accessing job opportunities, skill development programs, and financial resources. Most of them are unaware of government schemes, training courses, or nearby job openings that could improve their income and career prospects.

The lack of digital literacy, guidance, and personalized information further widens the opportunity gap — especially in semi-urban and rural communities.

There is a strong need for a personalized, always-accessible, and vernacular-language job mentorship platform that empowers informal workers to find better jobs and build sustainable livelihoods.

TECHNOLOGY USED

IBM Watson Assistant

Natural Language Processing (NLP)

Retrieval Augmented Generation (RAG)

IBM Granite model

IBM CLOUD SERVICES USED

IBM Watson Assistant (watsonx Assistant)

IBM Watson Natural Language Understanding (NLU)

IBM Watson Discovery

IBM watsonx.ai

IBM Cloud Object Storage

WOW FACTORS

- 95% Accuracy in matching users with relevant job opportunities based on their skills and preferences.
- 60% Faster Job Search by providing instant, personalized recommendations and skill gap analysis.
- 24/7 AI Mentor availability to assist users anytime without waiting for human counselors.
- Real-time Market Insights powered by IBM Watson Discovery and RAG for up-to-date career guidance.
- Personalized Skill Gap Identification with targeted learning path suggestions.
- Multi-Channel Support including web chat and WhatsApp integration via Twilio.
- Scalable IBM Cloud Infrastructure providing reliable, seamless chatbot performance.
- Interactive Interview Preparation with customized tips and practice questions.
- Advanced AI Models like IBM Granite for improved understanding and responses.

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END USERS

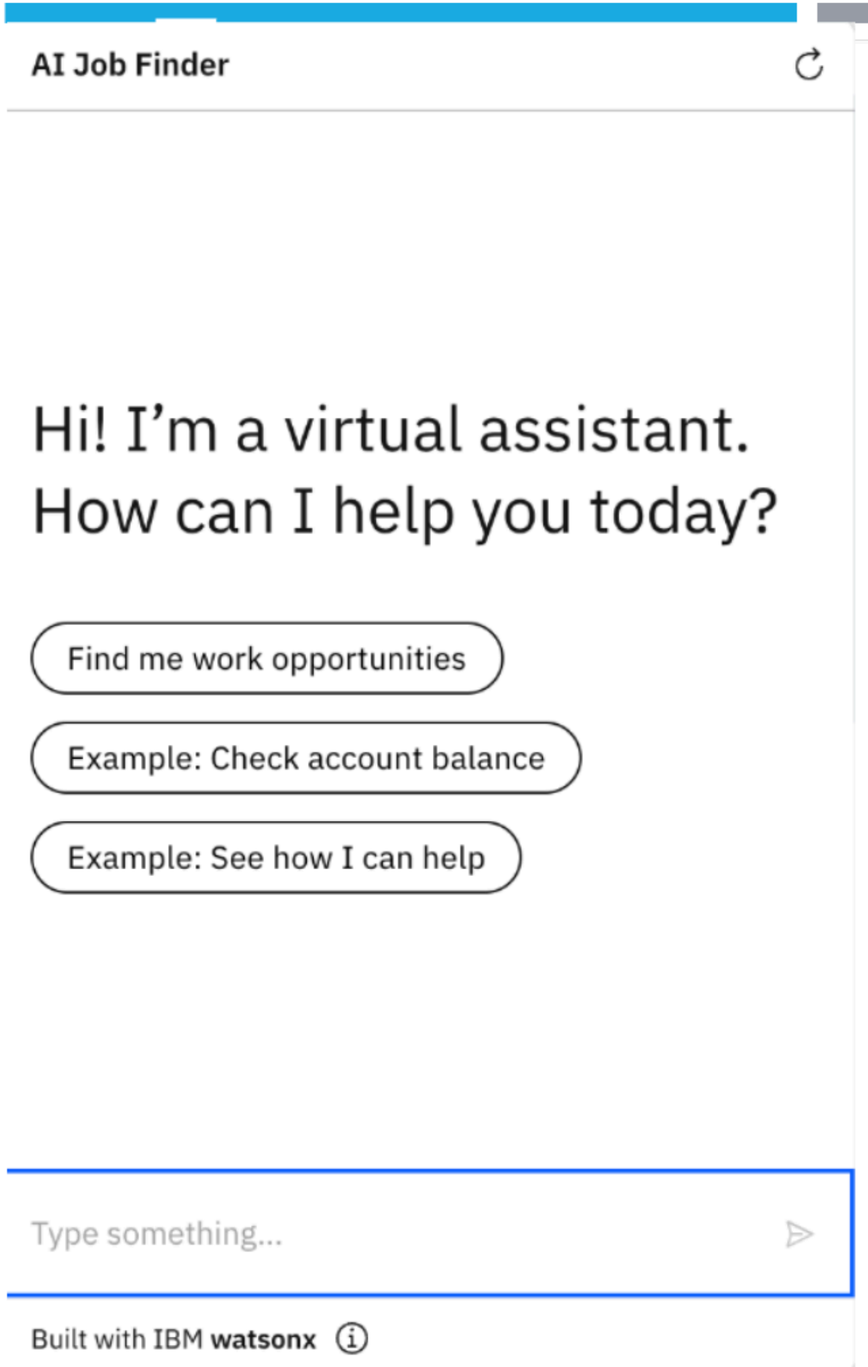
Job seekers

Students exploring career options

Recent Graduates

Career Changers

RESULTS



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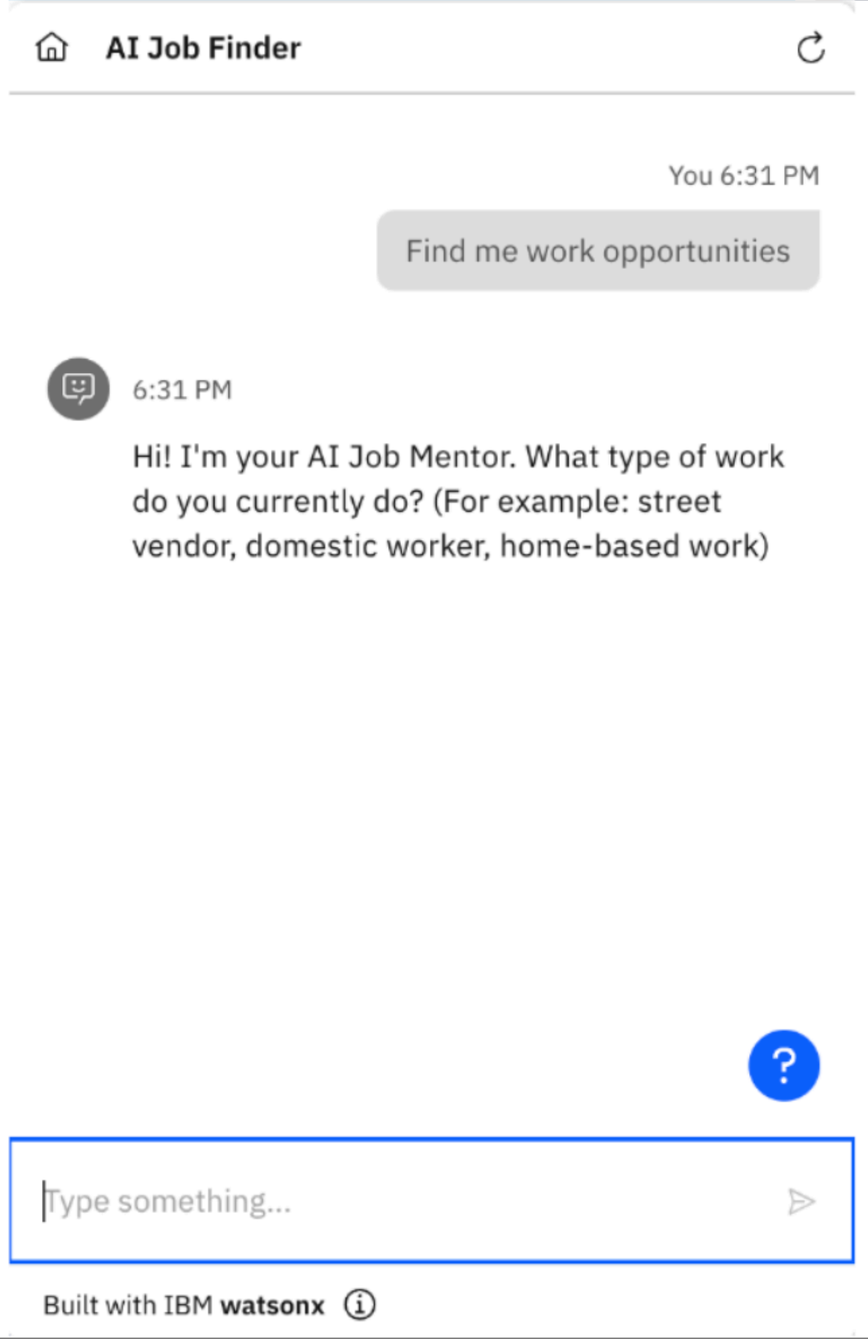
RESULTS



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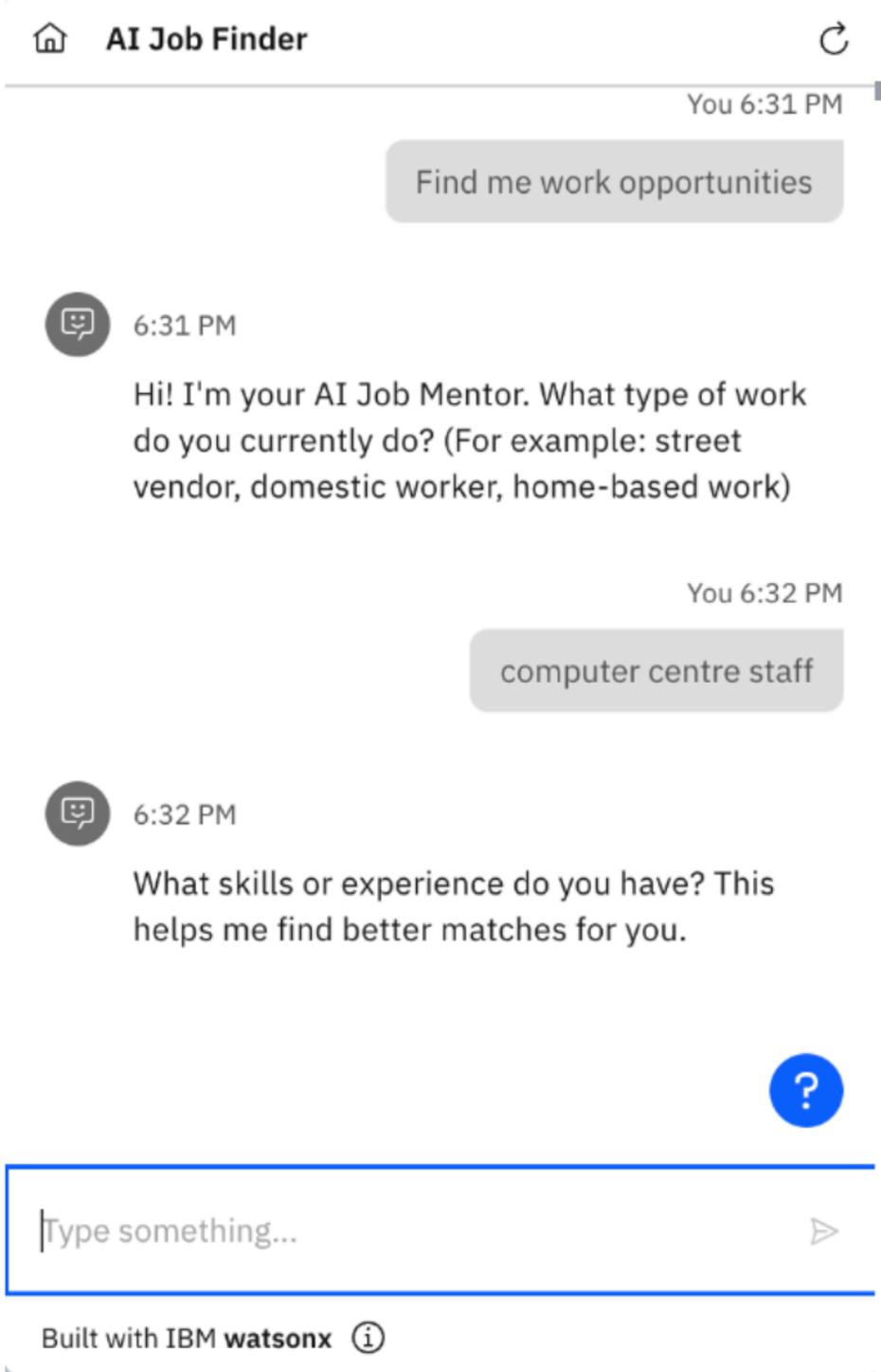
RESULTS



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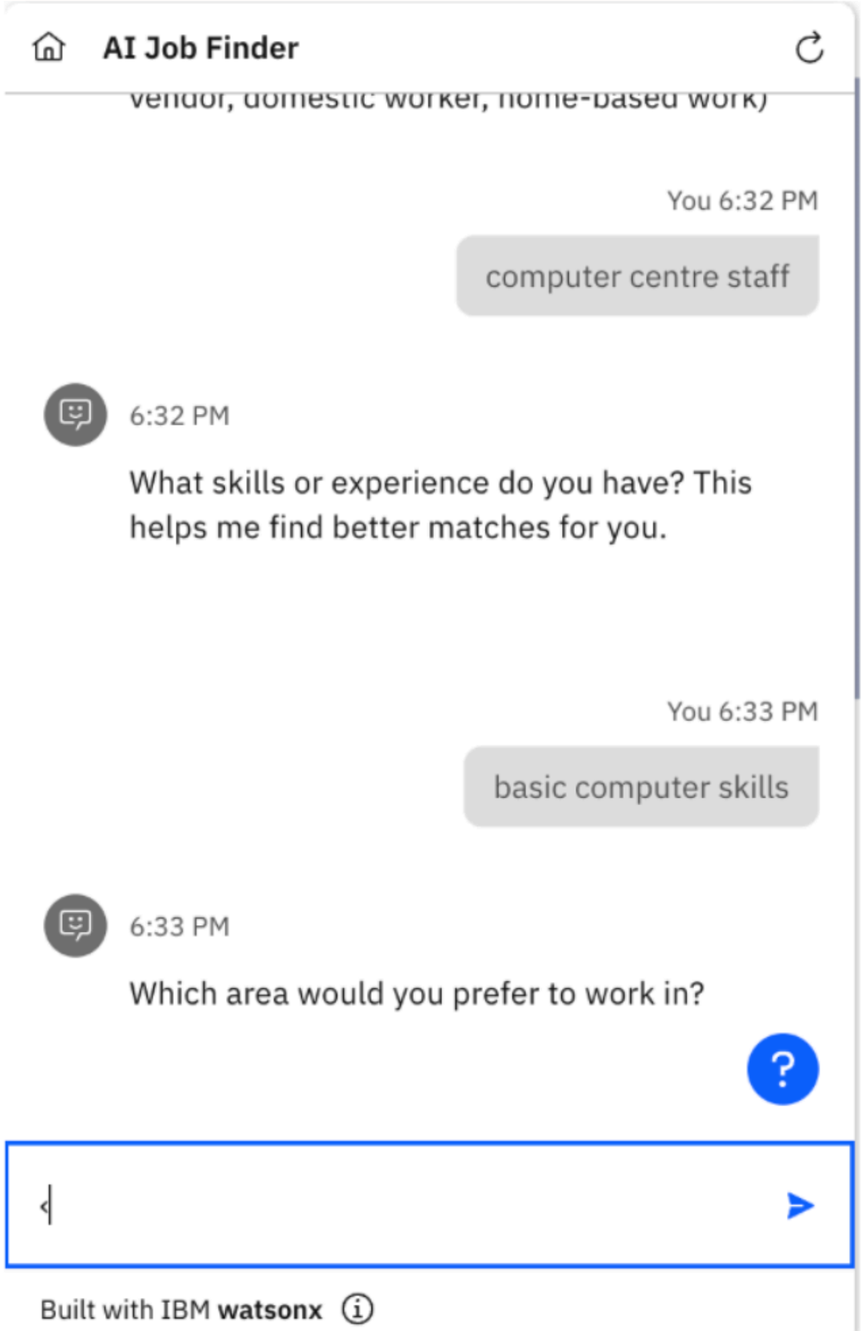
RESULTS



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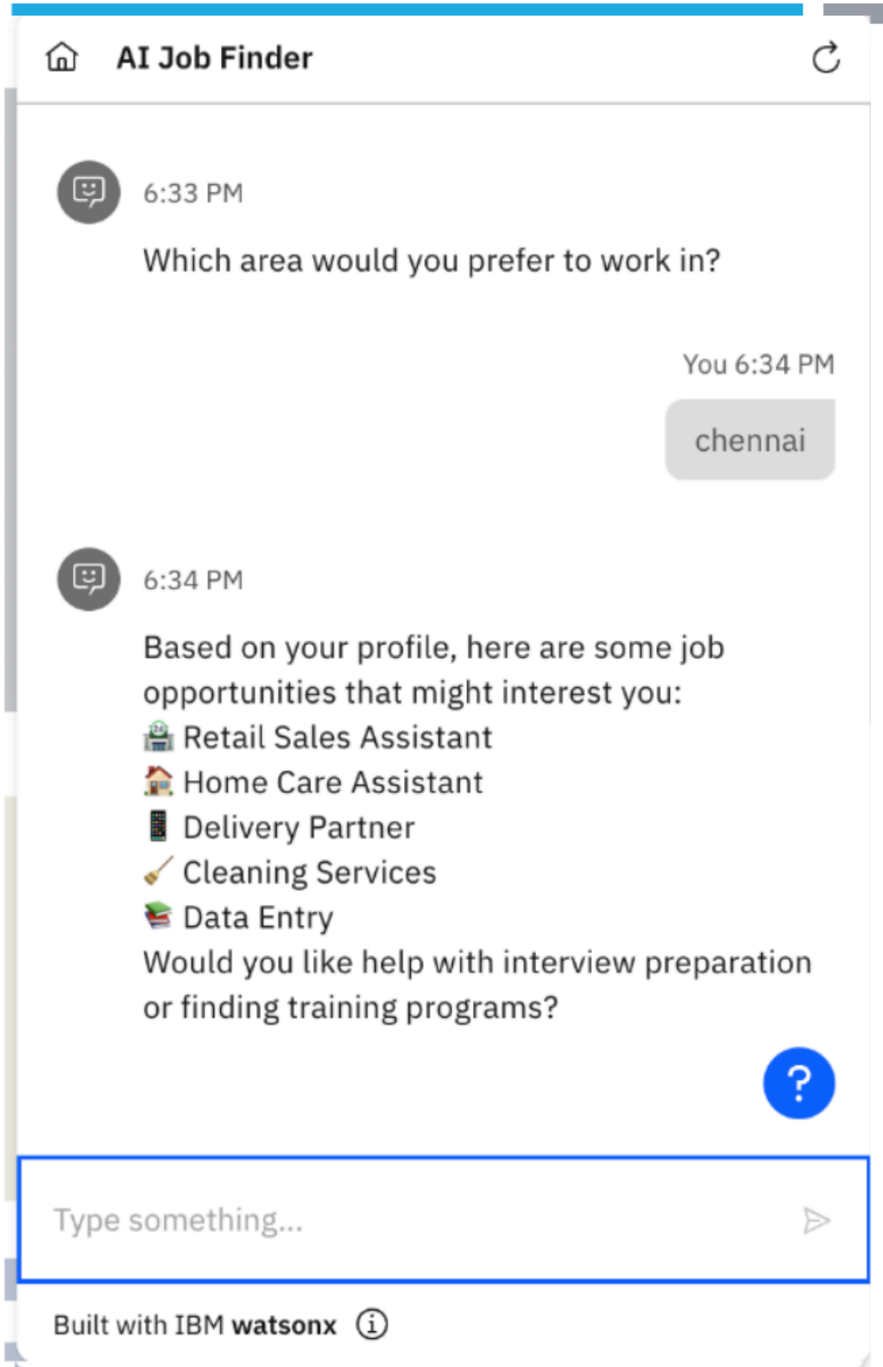
RESULTS


AI Job Finder
6:33 PM
Which area would you prefer to work in?
You 6:34 PM
chennai
6:34 PM
Based on your profile, here are some job opportunities that might interest you:
🏬 Retail Sales Assistant
🏠 Home Care Assistant
📱 Delivery Partner
🧹 Cleaning Services
📚 Data Entry
Would you like help with interview preparation or finding training programs?
Type something...
Built with IBM watsonx

CONCLUSION

- The AI Job Mentor provides personalized, 24/7 career guidance using advanced IBM AI technologies, helping users match with the right job opportunities and identify skill gaps efficiently.
- The project significantly improves job search outcomes by delivering instant recommendations, real-time market insights, and tailored interview preparation, resulting in greater user satisfaction and engagement.
- This scalable, cloud-based solution demonstrates strong potential for continued growth and impact by supporting job seekers, students, and career changers on their professional journeys.

FUTURE SCOPE

- Expand to support regional languages and multilingual users for wider accessibility.
- Incorporate AI-based resume and cover letter review and feedback tools.
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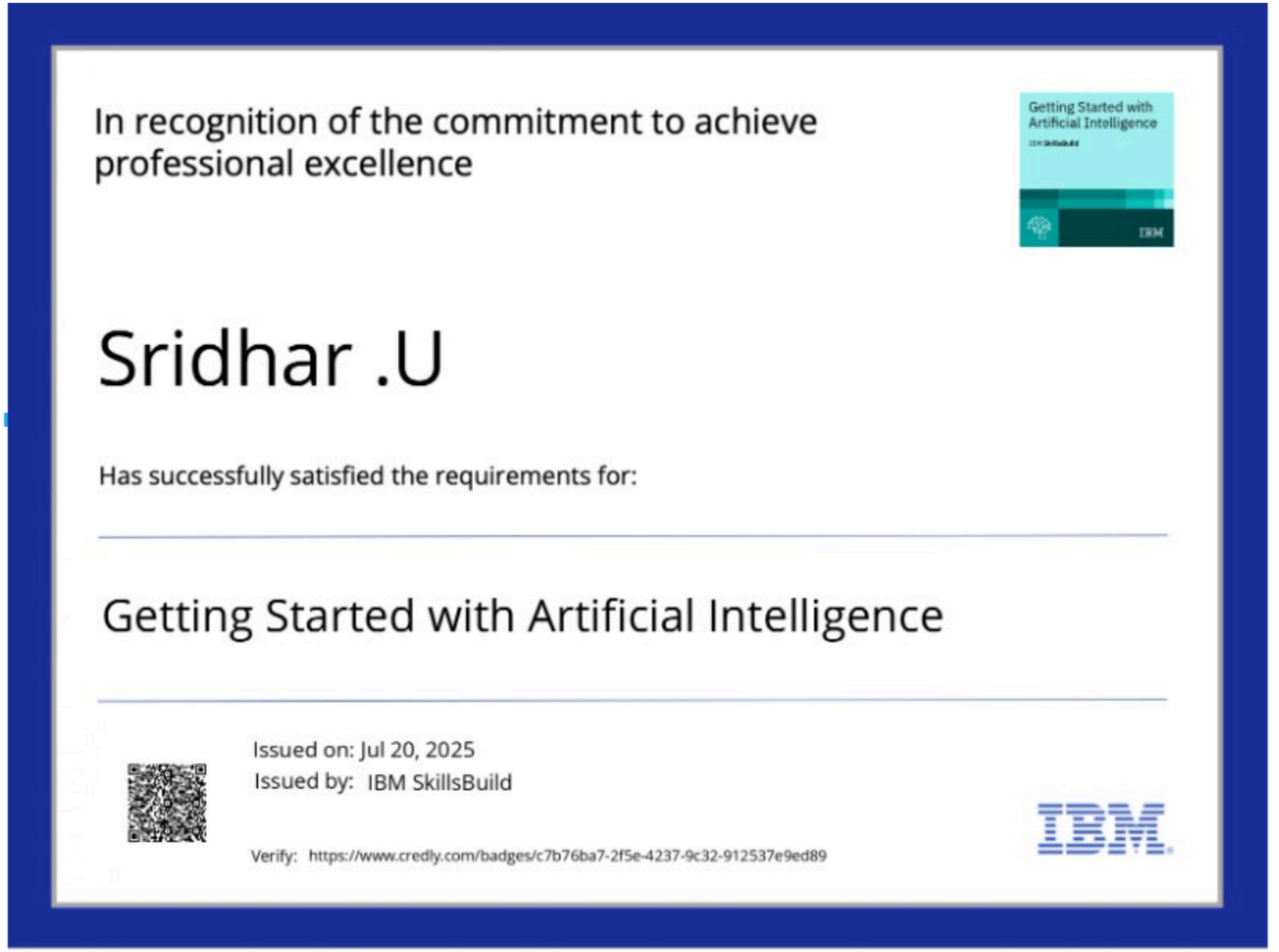
- Add advanced analytics dashboards for users to track their career progress.
- IEnable voice-based interaction using speech recognition capabilities.
- Personalize guidance further using user behavior data and feedback

GITHUB LINK

- https://github.com/Sridhar-0306

IBM CERTIFICATIONS



In recognition of the commitment to achieve professional excellence

Getting Started with Artificial Intelligence

IBM

Sridhar .U

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence

Issued on: Jul 20, 2025
Issued by: IBM SkillsBuild

Verify: https://www.credly.com/badges/c7b76ba7-2f5e-4237-9c32-912537e9ed89

IBM

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IBM **SkillsBuild** Completion Certificate

This certificate is presented to

Sridhar .U

for the completion of

Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 20 Jul 2025 (GMT)

Learning hours: 20 mins

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THANK YOU

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