

IBM PROJECT

INTERVIEW PREP AI AGENT

- **Presented By:**
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 - **College Name & Department : SMVITM ,ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

OUTLINE

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

PROBLEM STATEMENT

An Interview Trainer Agent, powered by RAG (Retrieval-Augmented Generation), prepares users for job interviews by generating tailored question sets and preparation strategies based on their profile name, experience level, and job role. It retrieves role-specific interview questions, industry expectations, behavioral scenarios, and HR guidelines from recruitment portals, professional networks, and company interview databases. Users can input their resume or job title, and the agent provides targeted questions, model answers, and improvement tips. It supports both technical and soft skill assessment, ensuring a comprehensive interview prep experience. This AI-driven assistant builds user confidence, sharpens responses, and increases success rates in competitive hiring environments.

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 interview preparation time, improve the quality of candidate responses, help job seekers at all experience levels gain confidence, and foster career growth by making interview knowledge more personalized and actionable.

Unique features:

- **Role-specific question retrieval** from recruitment portals, professional networks, and company databases
- **Customized question sets** based on user profile, job role, experience level, and uploaded resume
- **Auto-generation of model answers** tailored to industry expectations and job-specific competencies
- **Behavioral scenario simulations** using STAR (Situation, Task, Action, Result) methodology
- **HR and soft skills guideline integration**, covering communication, teamwork, leadership, and more
- **Technical skill assessment** aligned with current job market requirements and technologies

END USERS

- Job seekers (graduates, mid-career professionals, senior candidates)
- Career changers
- Students and interns
- Freelancers and gig workers
- Career coaches and mentors
- University career centers
- HR teams and recruiters
- Training and upskilling platforms

RESULTS

IBM watsonx

Upgrade ⓘ 🔔

Harsharaj.'s Account ▾ Dallas ▾ H. ▾

Projects / AuraPrep / AuraInterviewPrep

Share feedback ⓘ Autosave on 📁 ▾ New agent + Deploy 🔗 🔒 ⓘ

Build

AI Model: llama-3-3-70b-instruct 🔍 ⚙️ <

Setup

Configuration

FrameworkArchitectureLangGraph ▾ ReAct ▾

Instructions

Advanced configuration

You are a helpful assistant that uses tools to answer questions in detail. When greeted, say "Hi, I am AuraInterviewPrep agent. How can I help you?"

The Interview Trainer Agent is an AI-powered assistant designed to help users prepare for job interviews through personalized, interactive sessions. Upon receiving a user's job title, experience level, or uploaded resume, the agent analyzes the input to

Knowledge

Tools

Add a tool Create custom tool

Added tools (4)

Google search⚙️ 🗑️

Retrieve information from the internet with the Google search engine.

DuckDuckGo search🗑️

Retrieve information from the internet with the DuckDuckGo search engine.

Wikipedia search⚙️ 🗑️


Retrieve information from Wikipedia articles.

Agent preview

AuraInterviewPrep 12:26 PM

Welcome to AuraInterviewPrep

To boost interview success with personalized, AI-driven prep and expert strategies



Sample questions

What is a programming language? →

What is the difference between hardware and software? →

Can you tell me about yourself? →

What is the internet? →

Type something... 🔗 ➤

Deployment has started

Your AI service deployment has started.

[View status](#)

Timestamp 12:23:31 PM

RESULTS

IBM watsonx

Upgrade ⓘ 🔔

Harsharaj.'s Account ▾ Dallas ▾ H.

Deployment spaces / interview / AuraInterviewPrep /

AuraInterviewPrep ✓ Deployed Online


API reference Test **Preview**

New chat +

AuraInterviewPrep 12:26 PM

Welcome to AuraInterviewPrep

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Quick start samples

What is a programming language? →

What is the difference between hardware and software? →

Can you tell me about yourself? →

What is the internet? →

Type something... ➤

About this deployment ×

Name ✎

AuraInterviewPrep

Description ✎

To boost interview success with personalized, AI-driven prep and expert strategies.

Deployment Details

Deployment ID: `1a3771ba-582f-42...` ✎

Serving name: ✎

No serving name.

Software specification: ✎

`runtime-24.1-py3.11` ⚙️

Hardware specification: ✎

Extra extra small: 1 CPU and 2 GB RAM


Copies: ✎

1

Tags ✎

`wx-agent`

Associated asset ✎

 [AuraInterviewPrep](#)

`4e3549d1-78ef-48ad-8001-dafaf264b471`







Last modified

2 minutes ago


Created on

Aug 3, 2025


RESULTS

[Share feedback](#)   Autosaved 12:50 PM   [New agent](#) + [Deploy](#)  

< Agent preview


 You: 12:50 PM



What is a programming language?

 AuraInterviewPrep 12:50 PM

A programming language is a system of notation for writing source code such as used to produce a computer program. It allows a programmer to develop human-readable content that can be consumed by a computer but only after translation via an automated process that enables source code to be executable. Programming languages allow software to be written in a human-readable manner and are designed to express algorithms that can be understood more easily by humans. They have evolved over time, from early machine languages to high-level languages like Fortran, which was invented in 1957 and is considered the first compiled high-level programming language.

► How did I get this answer?



RESULTS

Deployed AI Agent

IBM watsonx

Upgrade ? 🔔

Harsharaj.'s Account ▾ Dallas ▾ H

Deployment spaces / interview / AuraInterviewPrep /

AuraInterviewPrep ✓ Deployed Online

API reference

Test

Preview

New chat +

H

You 12:52 PM

What is the internet?

⚡

AuraInterviewPrep 12:52 PM

The internet is a global system of interconnected computer networks that uses the Internet protocol suite (TCP/IP) to communicate between networks and devices. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries a vast range of information resources and services, such as the interlinked hypertext documents and applications of the World Wide Web (WWW), electronic mail, internet telephony, streaming media, and file sharing. The origins of the Internet date back to research that enabled the time-sharing of computer resources, the development of packet switching in the 1960s, and the design of computer networks for data communication. The set of rules (communication protocols) to enable internetworking on the Internet arose from research and development commissioned in the 1970s by the Defense Advanced Research Projects Agency (DAR

Type something

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wx-agent

Associated asset ✎

AuraInterviewPrep

CONCLUSION

- Empowers users with personalized and role-specific interview preparation
- Enhances confidence and performance through targeted question-answer practice
- Supports both technical and soft skill development for well-rounded readiness
- Benefits a wide range of users, from students to experienced professionals
- Valuable for institutions like universities, HR teams, and training platforms
- Increases success rates in competitive hiring processes through AI-driven guidance

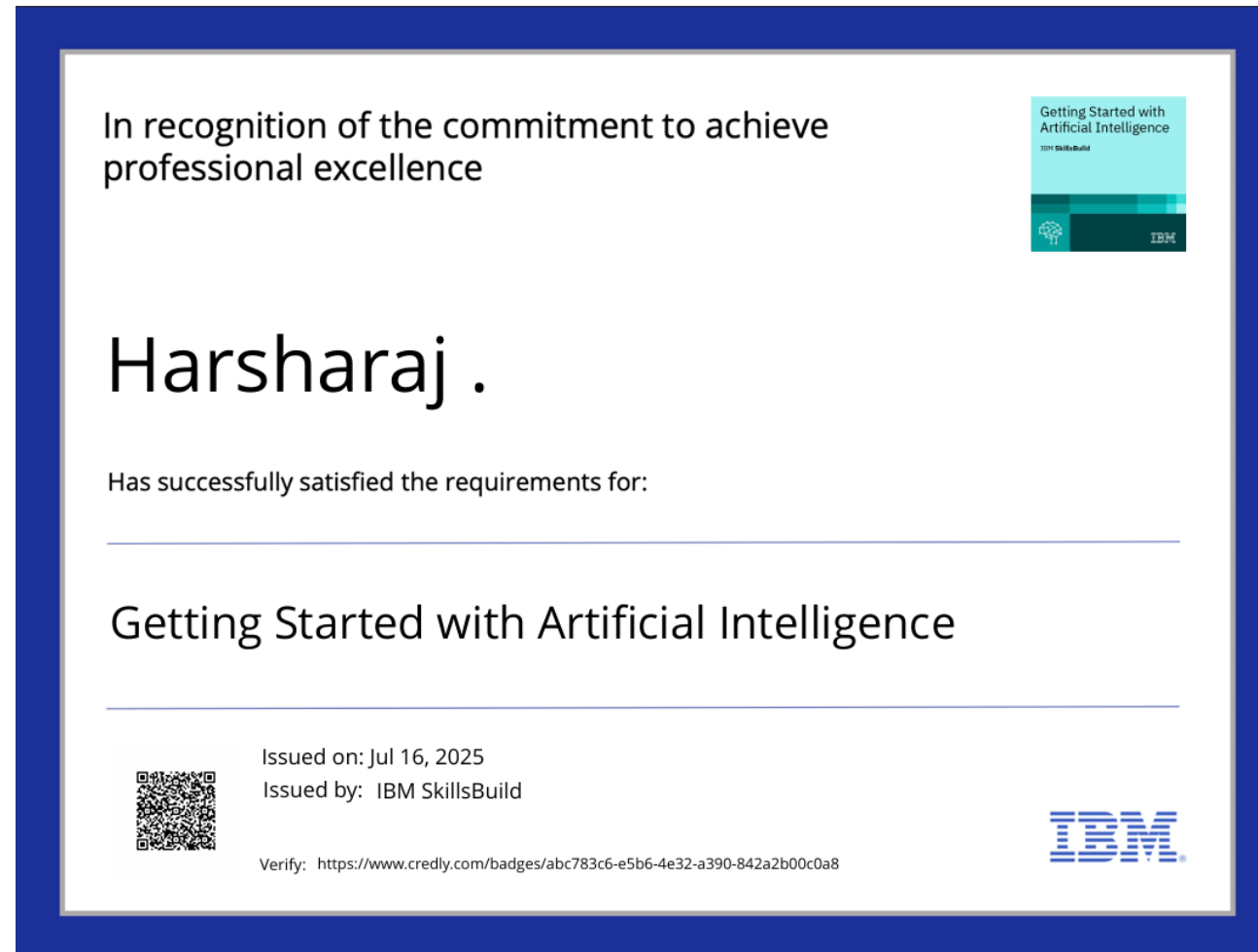
GITHUB LINK

- `git@github.com:HarsharajJ/ibm.git`

FUTURE SCOPE

- Mock Interview Mode (Voice/Video) for realistic, real-time simulation
- Multilingual Support to prepare users for global job markets
- Persona-based Interview Simulation (e.g., HR, technical lead, casual manager)
- Resume Analyzer & Optimizer with ATS compatibility checks
- Gamified Learning Paths for motivation and engagement

IBM CERTIFICATIONS



Getting Started with Artificial Intelligence

In recognition of the commitment to achieve
professional excellence



Harsharaj .

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/f32235fd-8705-4ac9-9d37-97738afd9907>



Journey to Cloud: Envisioning your Solution

IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Harsharaj .

for the completion of

Lab: Retrieval Augmented Generation with LangChain

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 18 Jul 2025 (GMT)

Learning hours: 20 mins

Lab: Retrieval Augmented Generation with Langchain



THANK YOU