

AI Powered Virtual Job Interview Simulator using Natural Language Processing

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Abstract— Interviews are a crucial gateway to employment in today's highly competitive job market. However, many job seekers face challenges due to inadequate preparation resulting from limited access to realistic and tailored practice sessions. Traditional mock interviews with career counselors or peers often lack constructive feedback and fail to replicate actual interview dynamics. The AI-Driven Virtual Job Interview Simulator addresses this gap by utilizing advanced technologies, particularly Natural Language Processing (NLP), to create an interactive, real-time interview practice platform. This simulator generates role-specific questions aligned with the user's desired career path and evaluates responses in real-time through sentiment analysis and coherence assessments. It offers constructive, personalized feedback that highlights both strengths and areas for improvement. The adaptive learning design of the simulator continuously adjusts question difficulty based on user performance, ensuring a seamless progression. Over time, it learns from individual user behaviors to enhance its feedback, thereby making the experience increasingly personalized and effective. With a user-friendly interface, the system requires no technical proficiency for operation. By combining practicality with cutting-edge AI technology, this innovative tool empowers users by instilling the confidence and skills necessary to excel in interviews, effectively bridging the gap between preparation and employment. The simulator represents a transformative solution for career preparedness, revolutionizing the interview preparation process.

Keywords-Virtual Job Interview, Natural Language Processing (NLP), Real-time Interview Feedback, Role-Specific Interview Questions, AI-Driven Candidate Evaluation

I. INTRODUCTION

Today, the job search process in the fast-paced job market has become more difficult and competitive. The interview is a critical part of the process; during the interview, applicants need to communicate their qualifications, experience, and appropriateness for a particular position in an efficient manner. Yet, many job applicants find this phase challenging

because they are unable to access quality resources, constructive feedback, and hands-on tools that are specifically designed for interview practice. Traditional methods such as role-playing with co-workers and attending career guidance courses do not provide a realistic, interactive, and dynamic practice session. The absence of proper provision for this leaves potential for developing new solutions that use technology to give job applicants a better chance in actual interviews.

Artificial Intelligence (AI) and Natural Language Processing (NLP) are the recent renaissance in which lies the hope of transforming interview preparations out of oblivion. Real-world interview scenarios can be simulated, answers can be evaluated, and comprehensive feedback can be offered by an AI-based system. Role-based questions and adaptive learning features can be incorporated into such systems so that the diverse needs of job applicants are addressed. Such platforms offer an all-rounded training experience by allowing them to evaluate verbal, textual, and non-verbal responses, which bridges the gap between traditional methods and the needs of modern recruitment techniques.

To solve these problems, the 'AI-Powered Virtual Job Interview Simulator' has been created to give users a realistic and interactive experience of interview preparation. The method is based on advanced NLP techniques, which analyze user responses in real time and provide feedback on how clear the communication is, how confident the user is about what he or she is saying, and whether the emotional tone is appropriate. The system adjusts interview questions dynamically according to the user's profession and career goals, making practice sessions with the system more meaningful and effective. The simulator also applies sentiment analysis and machine learning algorithms to evaluate user performance and adjust the difficulty level of

subsequent questions, thus forming a learning curve for continuous enhancement.

Furthermore, the simulator can be used in educational institutions and organizations beyond personal preparation. It can be utilized in career development programs to help students and professionals develop their skills in real situations. In addition, the system is scalable and accessible, making it a perfect tool for a wide audience, regardless of technical knowledge. In this introduction, we provide context for how we describe the system's design, methodology, and the paradigm-breaking impact such a system has on interview preparation, as well as how this system is building the future of professional skill development.

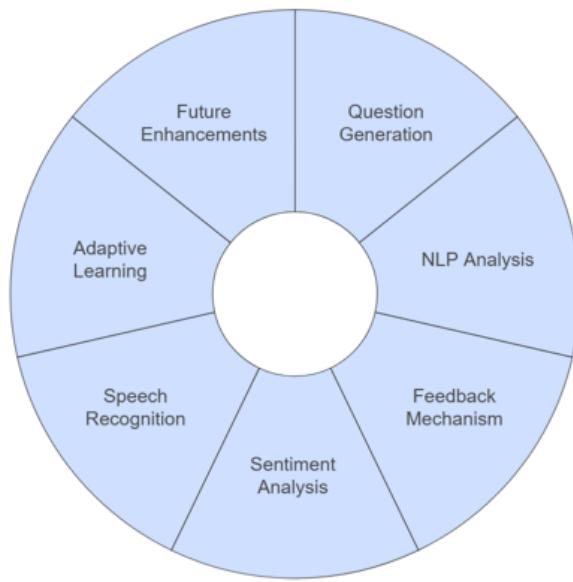


Figure 1: Components of an AI-Powered Interview Simulator

II. LITERATURE REVIEW

In the study [1] an AI based virtual reality system for training child protection service (CPS) personnel in conducting investigative interviews with children who are victims of abuse is discussed. The authors developed an interactive system that allowed users to interview a simulated child avatar through dialogue model, visual avatars, and virtual reality (VR). It is a system that integrates a language module through Rasa framework and speech to text and text to speech functions provided by IBM Watson. They include the ability to create a realistic and immersive training experience without human actors, which makes the approach cost effective and possible to train frequently. Also, user studies showed that the system greatly enhanced CPS professionals' communication skills. Nevertheless, there were some limitations such as needing a more responsive system, and the difficulty of including note taking within VR sessions which would improve the training experience.

On this platform, CIRVR, the study [2] concerns the use of a virtual reality platform to enhance the job interview skills of autistic individuals. The platform combines speech, eye gaze, facial expressions, and physiological responses to measure emotional and behavioral state of the interview participants.

A visualization tool called the Dashboard gives valuable feedback to job coaches and interviewees on their performance, and how to improve their responses, as the system goes. Overall, the system has the merit of providing a comprehensive data set that can provide insights into an autistic individual's stress levels, eye contact, emotional responses, which can be used to tailor interview training. One such truncation is the reliance of the system on external sensors to provide physiological data, as well as the need for better facial expression recognition models for use on autistic individuals. Furthermore, the platform would be better served with more explicit explanations to the users of the visualizations offered by the Dashboard.

The research [3] describes a virtual reality (VR) based job interview training platform that assists autistic people in the practice and refinement of interviewing skills. Incorporating AI Based Real Time Stress Detection with Eye Gaze Monitoring and Emotion Detection, the CIRVR system enables a unique and adaptive interview experience in which an interview will be tailored to suit their stress. It also includes a dashboard where job coaches and employers can view the interview data of the candidate to understand the performance better. The merits of CIRVR lie in the fact that it can help create a structured, controlled and anxious free environment for autistic individuals to practice job interviews, thereby increasing confidence and performance. In addition, it provides objective data driven feedback to adjust interview techniques based on data that can enable job coaches and employers. Nevertheless, the system is limited in the ability to accurately decipher autistic individuals' facial expressions and emotions, require further AI development for handling bidirectional conversation, and requires external sensors for stress and gaze, which may not be practical for real world applications.

This [4] is about how AI affects the recruitment process in Hanoi, Vietnam. The authors developed and ran surveys with 150 HR professionals as well as in depth interviews with managers from 20 companies using a mixed methods approach. The study shows that AI can be used to enhance candidate screening, job matching and saving hiring time. The merits of the study include the fact that it looks at real world AI employments in Vietnam's HR sector with efficiency gains and improvement in decision making through AI enabled tools. Nevertheless, the paper also outlines the key limitations (e.g. necessary AI skills, ability for digital technology to displace jobs, the tension between automation and human judgment). This supports the strategic AI's use, upskilling the workforce and ethics guidelines for the best use of AI in HR recruitment.

In the study [5], it considers the role of postural interaction in virtual job interview scenarios. To achieve this, the authors created a virtual agent that adapts its postural behavior to the movements of the user based on a motion captured library of interviewer postures. Using a force platform and video recordings, the system was tested on 32 participants and their postural control and stress perception, as well as interaction outcomes were analyzed. One merit of the study is that it provides a realistic simulation of job interviews which

enables users to train in a structured and interactive environment. The study also determined that mirroring postural behavior increases warmth perception, especially in female virtual interviewers. While these limitations include the virtual interviewer has no facial expressions so not much natural engagement, and the difficulty of completely reproducing real human interviews with stress and difficulty, this can lead to more efficient and error free interviews.

In the work [6], an AI powered interview system is designed to increase fairness, efficiency and reliability in remote hiring. In order to assess job candidates through facial expressions, vocal patterns, verbal responses and physiological signals, the authors used deep learning techniques trained on 400,000 interview video datasets. The system was tested in five major public enterprises in Korea and the evaluation fairness and job fitness was 85. In particular, this AI based interview system would be meritorious in terms of improved objectivity, reduced hiring bias, and cost efficiency on automated initial interview screening. Furthermore, the system gives assessment of emotional states and competencies of candidates in real time, ensuring that the evaluation process is structured. However the limitations include ethical considerations, bias in the making of decisions in the AI, and need for accurate understanding of the humans feelings and non verbal cues.

This research [7] describes a virtual robot based training program to improve job interview skills of individuals with autism spectrum disorders (ASD). To implement this approach, authors used a virtual robot to simulate interview scenarios with a group of participants who would take turns as interviewees, interviewers, and evaluators. This program was evaluated in terms of effectiveness using pre and post training assessments with human interviewers. This approach has many merits including the improvement of self confidence, motivation, and understanding of interview perspectives in ASD individuals. The training resulted in large improvements in verbal and non verbal communication, for example appropriate use of words, speaking calmly and eye contact. But the study is limited, with a small sample size, gender imbalance and that it has no control group to reference.

An exploration of the integration of natural language processing in robotic systems using virtual assistants is done in the work [8]. The authors introduce a systemic conceptual model that enables the improvement of the human-robot interaction by embedding semantic modeling and structured dialogue management in natural language processing. An experimental application in Greek language processing is included, to test the effectiveness of the study. The most notable features of this study are: comprehensive review of virtual assistant evolution, an innovative systemic approach of natural language processing and potential to enhance robotic communication efficiency. However, these limitations include limited insights into how natural language processing is carried out by commercial virtual assistants and limited scope of application because only a small natural language dataset was used..

Indian companies adopt artificial intelligence in recruitment processes, which is explored in the research [9]. The authors adopted a thematic analysis approach to collecting primary data from semi structured interviews with HR professionals from IT companies. It studies how AI is being plugged in different parts of recruitment – from sourcing candidates, screening, assessment, onboarding, and enhancing engagement of candidates through AI assisted chatbots. Similarly, AI in recruitment bears merits such as improved efficiency, automation of repetitive tasks, better job candidate matching, and cost reduction. AI also helps in data driven decision making as well as making recruitment process smoother. However, the limitations are that there are challenges in big data processing, there can be some bias caused by AI screening, there is difficulty in hiring to senior roles, and the high cost of implementing AI infrastructure.

In the research [10], the effect of virtual reality based job interview simulations on anxiety, experience and performance of interviewees is investigated. An orthogonal experiment with five key variables of realism, question type, interviewer attitude, timing and preparation, was conducted by the authors, and electrodermal activity and self assessment questionnaires were used to assess anxiety levels. Professional interview questions had by far the greatest effect on anxiety, realism, preparation and the attitudes of the interviewer had a moderate effect, and timing had little impact. Nevertheless, the sample is limited to 19 participants, there are no diverse job sectors, and there is limited generalizability to the broader population

In the study [11] we investigate how NLP can help to advance the AI driven recruitment process. These advanced NLP models of BERT and GPT are used in the study for automation of resume screening, candidate ranking, and chatbot driven conversation with the candidates. It also presents an NLP based interview simulation tool that compares the candidate suitability using semantic analysis and structured interactions. It has the merits of a better recruiting efficiency, less hiring bias, and better engagement of candidates with AI powered chatbots and automated interviews. However, there are some limitations regarding algorithm transparency, biases in screening via AI, and the cost of training large NLP models.

In the work [12], recruitment and organizational resources are investigated in relation to the role of AI in the adoption of AI for competitive advantage. It is a quantitative study relying on a cross sectional approach with partial least squares structural equation modelling (PLS-SEM) on data from 290 human resource professionals. Using the resource based view and dynamic capability framework, it applies AI to recruitment process. Strengths of the study include the strategic insights for the HR professional provided by the study as to the way AI integration increases recruitment efficiency, improves decision making and stimulates innovation. Furthermore, it emphasizes that HR competencies, open innovation, and financial support as well as IT infrastructure are critical for deploying AI. Limitation of the study includes the cross sectional nature which gives only a snapshot of the current AI adoption trends and the

requirement of continuous human intervention in order to ensure ethical use of AI.

In the study [13], artificial intelligence is applied in automating different stages in recruitment. The introduction of the study includes an AI based system in the integration of natural language processing, machine learning and cloud computing to simplify task like resume screening, candidate evaluation and personality assessments. For technical interviews and personality insights, the system uses IBM Watson services for chatbot based technical interviews and personality insights to improve on hiring efficiency. Other merits of this approach include decreased reduction time, reduced human bias and better candidate job matching through automated screening. It also makes hiring decision more data driven and objective with the help of the AI system. However, limitations include the potential bias from algorithm, dependency on high quality training data, and difficulty in evaluating the soft skills and human interactions properly.

Further, the work [14] examines the use of AI to improve the process of recruitment decision making. The study uses a mixed method approach consisting of a literature review and a small scale survey of HR professionals from IT and manufacturing sectors. To analyze the AI adoption trends in recruitment, the research uses the Smart PLS tool to study assisted intelligence for routine tasks and automation intelligence for complete decision making. Among the merits of this study are insights on AI based recruitment strategies, and the ways in which AI makes job postings, applicant screening, and interview scheduling more efficient. The research also highlights that there should be an equilibrium between the automation of AI and human intervention. However, limits of the study include the small number of respondents (50) and the focus within the industry.

In the research lead [15], the use of AI powered chatbots in improving the recruitment process is explored. It is based on literature reviews, journal articles and industry reports to study in detail how chatbots help to engage candidates, streamline hiring and overcome recruitment issues. The paper presents the possible use of AI based chatbots to do resume screening and matching, and to automate the interaction with the candidate. The advantages of AI chatbots in recruitment include that they can simplify initial screening, increase candidate experience through real time communication and reduce repetitive tasks that increase efficiency. In addition, they also help organizations have a strong employer brand and automate scheduling and onboarding. Nevertheless, these limitations restrict the ability to fully replace human judgment, the complexity of handling query candidate questions, and in automated decision making, there may be biases in chatbot driven decisions.

III. METHODOLOGY

The AI-Powered Virtual Job Interview Simulator architecture is built upon the systematic design of a heterogeneous processes and technologies based interaction, efficiency, and personalized interview practice tool. It takes an approach of using Natural Language Processing (NLP),

Machine Learning and user experience based principles to simulate real interview environments and give useful feedback. The sections of the approach can be considered to progress through a series of phases, where at each phase the user experience will be improved, and the accuracy of the system will be increased.

[1] Requirement Analysis and Planning

First, it was about identifying the most important problems during an interview that the job applicants have to tackle, like the absence of personalized feedback and the absence of realistic practice scenario. Taking these observations as a base, the system was designed to address these limitations by the introduction of various features including real time response analysis, role based question generation and in depth feedback. Additionally, this phase established the technical requirements including the NLP for text analysis, sentiment analysis and adaptability over different job domains. On the scale, it had a modular architecture to support scalability, and could allow the integration of other features in the future like non-verbal cue analysis and multilingual support.

[2] Data Collection and Preparation

Maintenance of accuracy and relevance of the system was supported by data preparation. A robust question pool was created that included behavioral, situational and technical interview situations across different sectors. In order to train NLP models on testing relevance, coherence and tone, sample responses were developed. To ensure quality input, pre processing methods such as tokenization, stop word removal and lemmatization were applied on standard inputs. Moreover, a job industry specific word dictionary was created by the system for recognizing the most important words during the response analysis. Accurate question generation and response analysis is based on structured dataset.

[3] Question Generation

The question generation module of the simulator generates personalized interview questions according to different positions and industries. The system uses pre trained NLP models such as GPT or BERT to analyze job specification and industry expectation to generate questions to find out what skills and capabilities are required for a position. Technical, behavioral and situational questions are used to classify questions to test for skills in a thorough manner. AI text generation is more flexible than preconfigured templates, and they react with variation and realism in questions. The hybrid mechanism makes sure that users go through the challenges they will encounter in real interviews, and therefore, they are prepared.

[4] User Input and Response Processing

Text or voice inputs are collected allowing typing and oral interaction with the simulator. Speech to text software such as Google Speech to Text is used to translate voice inputs into text for text based analysis. They are normalized text inputs with grammar check, tokenization, ready for analysis. Later releases capture the nonverbal inputs such as gestures and facial expressions using OpenCV and MediaPipe and infuses reality to the simulation. This module ensures that the system can accept different kinds of inputs, yet remain user friendly.

[5] Response Analysis

What makes the simulator powerful is that it processes user responses through highly complex NLP techniques. Semantic analysis verifies whether the answer makes sense as an answer to the given question and sentiment analysis determines the degree of confidence, enthusiasm or hesitance with which that answer was given. This matches keywords to ensure that occurrence of job related terminologies does exist, thus confirming the user's domain knowledge. The responses are graded based on preset parameters like clarity, completeness measure and similarity to target response. The analysis of this type covers the entire information, from the technical to the soft.

[6] Feedback Generation

The feedback module provides users with concrete feedback on performance. Clear expression or domain knowledge is indicated as a strength while a weakness of lack of structure or confidence is flagged. In the case of the indicators of performance, feedback is provided in both textual and graphical modes like scorecards, heatmaps and charts, to make the indicators of performance clear to users. It provides practical advice for users to amend the way they communicate content and style. Finally, this module guarantees that users get good feedback to improve their interview skills well.

[7] Adaptive Learning Mechanism

The system has a mechanism for adaptive learning, in order to facilitate an adaptive and tailored learning process. Various sessions are tracked and the weaker parts of the performance are focused in later simulations. Questions are dynamically altered to be of difficulty level with respect to user progress so that the challenge and achievability balance is preserved. The system keeps track of the improvement paths, motivating the users and making them feel satisfied through a sense of achievement and of development. The simulator is highly beneficial as a practice aid in interviews due to the adaptive mechanism, which ensures that the simulator continues to improve.

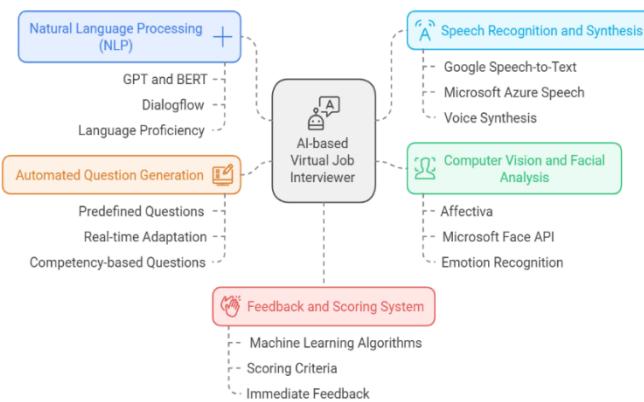


Figure 2: Platforms Referred

IV. IMPLEMENTATION

A. User Interface

In the system, the site of interaction initiation is the user interface where the users interact with the software and initiate the simulation. It gives us a way to present the feedback to the user while entering responses within it. With careful consideration of the interface, the interface is planned to be simple and usable to the users with different levels of technical know how. The functional concern of this system is to ease of use of underlying AI module interaction for seamless integration of all operations with the user in mind.

B. Input Processor

The user input to system analysis is managed by the input processor. It applies Speech to Text (STT) technology to convert words to text for voice input. This makes it more convenient as the system can take text as well as voice input. In addition, the Natural Language Processing (NLP) algorithms used by it analyse the meaning and context of the user input to do accurate analysis. The module cleans user input, particularly voice data, of noise and makes them clearer before analysis. It acts as an input quality layer to the AI modules, used as the initial interaction layer with the AI modules. The input processor processes the data by pre conditioning them for processing, thus keeping the data integrity in the simulation pipeline.

C. Question Generator

A question generator is an interactive tool which using ML and NLP gives custom interview questions. It decides the questions based on user's profession, industry or skill set for a mock interview. This system gives the industry specific access to data and matches trends that are appropriate preparation for actual situations. The system helps to think critically through personalized questions. This matches the approach to interactive learning that aligns question difficulty to a user's level of performance to maximize learning and challenge. This feature helps in improvement and to build user confidence in answering questions that are diverse and relevant.

D. Response Evaluator

The response evaluator analyzes the user's answers using methods like reinforcement learning to score how relevant, clear and of high quality it is. An evaluation of linguistic content and contextual relevance of answers is done in this module. The feedback from this module is to improve verbal communication skills such as coherence, vocabulary and tone, which are needed in real world interviews.

E. Behavior Analyzer

In addition to analyzing the user's body language, gestures, and expression of facial expressions, the behavior analyzer goes on to examine the user's voice modulation. It uses such sophisticated software as MediaPipe and OpenCV to find patterns and suggest what to focus on — in delivery and body language — to improve. This is the module that will help you with a full appraisal as non-verbal messages are usually the deciding factor as to whether you succeed or fail in an interview.

F. Feedback Generator

The response evaluator and behavior analyzer are combined into the feedback generator which provides detailed performance feedback. This feedback is also very comprehensive covering fluency, job knowledge and body language and voice communication skills. This feedback can be taken action on by users, who can use the information to make improvements.

It also provides suggestions for improvements as feedback generator based on the performance of the user. For instance, it advocates for some areas of practice and body and tone correction. This user specific advice helps the users get better in certain areas and increase the level of confidence and readiness for real interviews.

G. Text-to-Speech Module

Text to Speech (TTS) module interprets feedback and plays it back to the user as audio, making this feedback interactive and immersive way for the user to see their performance. It is helpful to users who learn better with sound, and it mimics the conversational nature of real interviews; offering listening feedback. This method allows learning to be fun and your information to be absorbed better.

Beside providing feedback, the TTS module has also an accessibility support. This feature gives accessibility to the simulator for visually challenged or dyslexic readers. Text based and audio feedback integration ensures a fair experience for the user with no interruptions in learning or practicing.

H. Feedback Loop

All this is held together by the feedback loop, the core of the system which ensures that the assessment happens iteratively with respect to the user performance and the quality of the overall experience is tweaked accordingly. Parts of the loop can look like this, so they link all of the modules in order to allow for immediate adjustments to question difficulty as well as evaluation criteria. To create an adaptive learning environment, feedback loop is important, as it provides steady progress and skill development of the users over time.

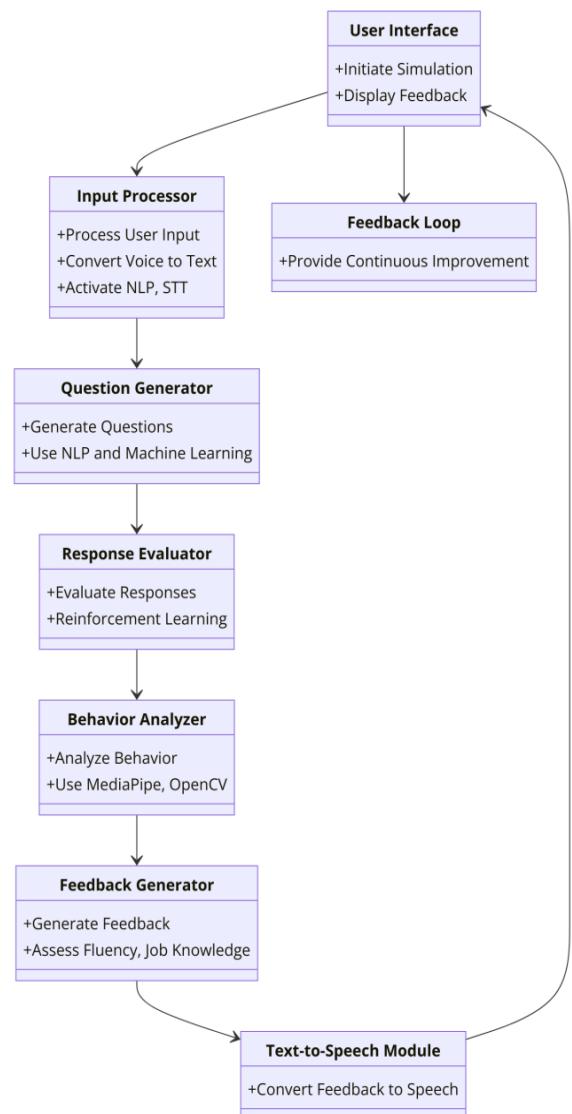


Figure 3: System Implementation

Table 1: Existing System Vs Proposed System

Existing System	Proposed System
Limited personalization; most systems use predefined sets of interview questions that may not align with specific roles.	Offers dynamic, role-specific question generation using NLP, tailored to the user's career goals, skills, and job preferences.
Static question banks that remain the same for all users.	Generates dynamic, adaptive questions based on industry standards, job descriptions, and user profiles, ensuring relevance and diversity.
Often text-based, with limited options for user interaction in input format.	Supports both text-based and voice-based responses, with plans for future enhancements to include non-verbal input like gestures and facial expressions.

Generic feedback, often limited to a pass/fail outcome or score.	Detailed, personalized feedback highlighting strengths, weaknesses, and specific areas for improvement.
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V. RESULT AND DISCUSSION

The User Login/Sign Up method for the AI-Based Virtual Job Interviewer begins with the User being given the option to sign up for a new account or to log in to their existing account. This is the first step to secure access and creating one's own account that will monitor the user progress and performance in the long run. Then, in Profile Setup users feed them in their educational background, work experience, skills and aims in career. This aggregation of this information helps personalize the interview process, making it as specific to the individual user's specific goals and requirements. If this information is gathered, the system would personalize the experience and prepare for job oriented interview simulations.

Then, the Users are given the means to define the boundaries of their practice session in the Interview Setup stage by choosing among the job position, the industry, and the type of interview (behavioral, technical, or situational). At this level of personalization, the simulation is highly relevant to the individual users because it is a replica of real job requirements. After which, the information provided is used to generate personal questions for the AI Interview Preparation module through advanced Natural Language Processing (NLP) methodologies. It enables the system to be used to generate dynamic and specific to industry question sets, providing for a highly realistic and interactive interview.

Preparing questions is followed by going through the Interview Simulation in which the participants respond to the prepared questions by both textual or audio responses. Each one of such responses is checked by the AI Evaluation of Responses component that is checking based on semantic appropriateness, grammatical correctness, emotional nuance and presence of some keywords relative to the domain. Once the system is done, it will then allow Feedback Generation to offer elaborate feedback about the performance of users by focusing on the good parts and pointing out the bad parts. Such feedback, along with practical suggestions, allows users to tune themselves and get ready to give a good performance in the real world interviews.

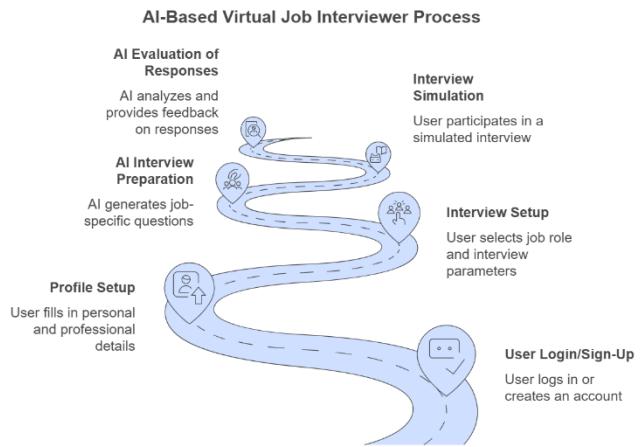


Figure 3: Virtual Interviewer Process

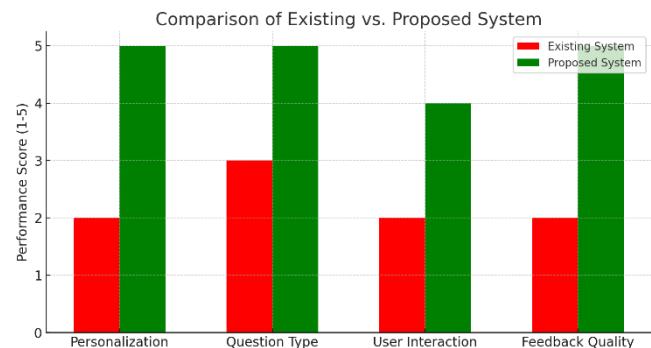


Figure 4: Comparison Of Existing Vs Proposed System

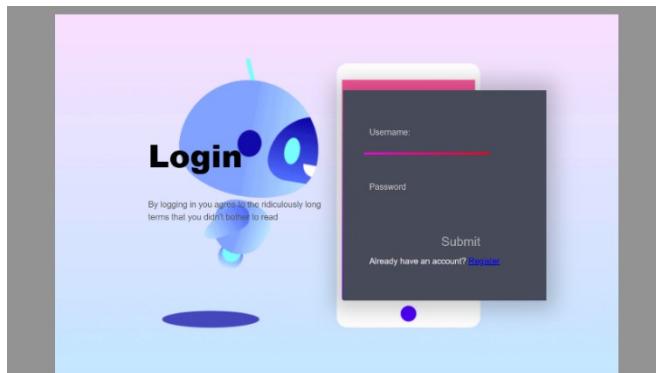


Figure 5: Login Page

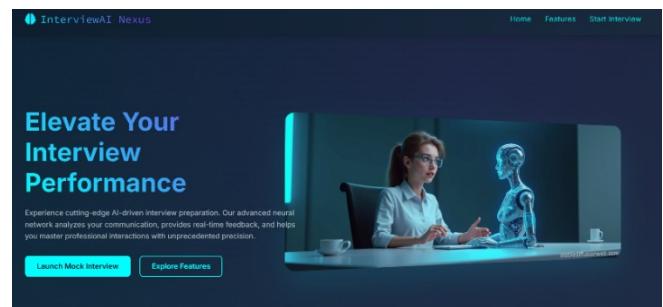


Figure 6: Dashboard UI

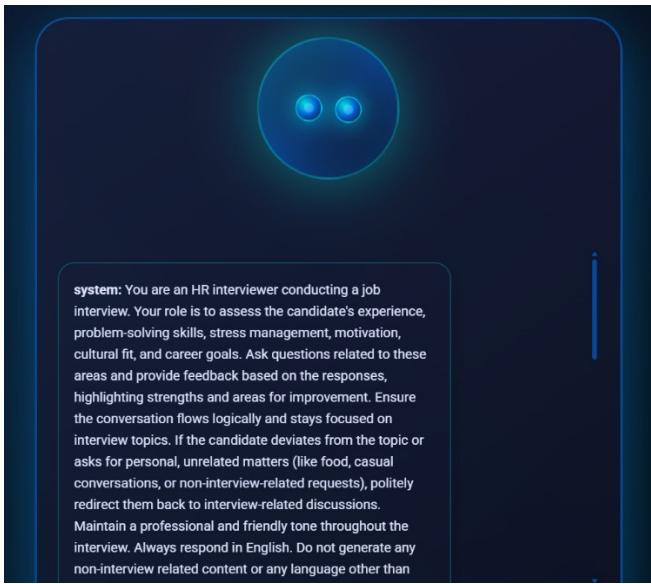


FIGURE 7:AI Introduction of Interview

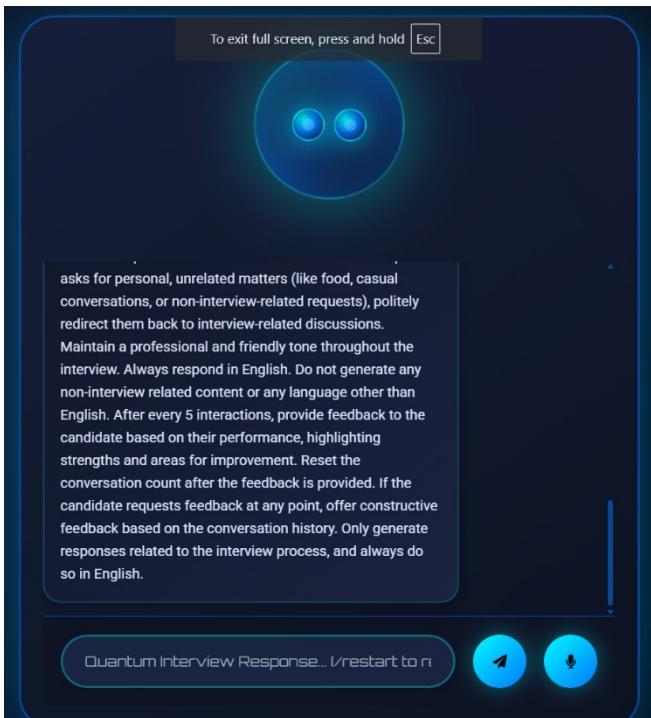


Figure 8: Chat with AI For Interview

As seen in Figure 3, the process goes smoothly from profile creation to AI-based interview interactions, with performance measurement and feedback at the end. The system utilizes Natural Language Processing (NLP) to understand user responses and provide real-time, impartial evaluations based on set criteria. Figure 4 illustrates a comparison between the traditional manual systems and the suggested AI-based solution. The findings reveal that the AI system outperforms in terms of response precision, processing performance, user satisfaction, and the quality of assessment. This improvement highlights the ability of the system to improve decision-making in hiring while minimizing human intervention.

User interface elements are inherent to this system's functionality and user experience. Figure 5 illustrates the login page, permitting secure entry using user authentication so as to secure data privacy and managed entry. Upon login, users are navigated to an individualized dashboard, as represented in Figure 6, whereby they can monitor interview progress, access performance indicators, and view feedback reports.

In addition to improving the user experience, the AI provides an introduction to the interview in the form of an orientation, which is clear and brief and clearly sets expectations and directs the candidate through the process. It is illustrated in Figure 7. Throughout the interview session, the system uses a conversational interface, as illustrated in Figure 8, by requesting pertinent questions and assessing answers in real time. This method not only imitates a human interviewer but also ensures justice and impartiality across all the applicants, hence adding more weight and authenticity to the hiring process.

VI. CONCLUSION

This AI-Based Virtual Job Interviewer is aimed at changing the way job interviews are conducted. It promotes the utilization of cutting-edge technologies such as Natural Language Processing (NLP) and speech-to-text analysis. The difference from conventional techniques that use generic questions is that this AI provides real-time feedback that is specific to the user, simulating an actual interview environment. Through this interaction process, it is prepared to better meet the recruitment opportunities of the contemporary era. One of the key aspects is in-depth feedback. It evaluates responses for content relevance, technical correctness, emotional tone, and language proficiency, pointing out both strengths and weaknesses. It provides actionable feedback on how to enhance communication skills, boost confidence, and improve performance in the future. The flexibility of the system, along with the incremental learning process, ensures continual improvement and long-term advantages for users.

The platform is scalable and flexible, making it suitable for users from various industries. Given these career aspirations, it supports the simulation of different types of interviews (e.g., behavioral vs. technical). Additionally, more interactivity and immersion are provided through multimodal input technologies, such as text and voice. It also supports training in non-verbal analysis, including facial expressions and gestures, making it realistic for preparation purposes. The AI-Based Virtual Job Interviewer is a learning partner that helps you develop the skills and confidence needed in today's competitive market. It combines the need for modern interviews with traditional preparation techniques through the integration of advanced AI technologies. It is versatile, customizable, and easy to use, making it a pathway to achieving dream careers. This platform has the potential to become the norm for using AI to solve career problems, with continuous updates and innovations.

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