

ResuBot- Your Career, Perfectly Told

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Abstract

1 Introduction

The introduction of artificial intelligence into the interview process is an added opportunity for the evolution of recruitment and talent acquisition functions. This paper presents a novel AI powered interview bot to expedite the pre-interview evaluations. By parsing a resume uploaded by an interviewee, the bot extracts useful data and creates a more intelligent reply to a sequence of questions by an interviewer.

This AI solution looks to deliver a holistic view of the candidate's qualifications and experiences by serving up accurate and relevant responses for the resume content. This method not only streamlines the interview process, but also helps the interviewers in decision making by reducing human bias, thus significantly enhancing the quality of assessment. It also communicates with websites like fact-checking to check the response too keeping the track on user common question of can we rely on AI?

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2 Traditional Interview Process vs. AI-Powered Interview Bot

2.1 Traditional Interview Process

A traditional interview is mostly a victim of irregularity and arbitrariness. The same resume may be interpreted inconsistently by different interviewers, causing the assessments to be biased and inconsistent. It affects hiring because of human errors, unconscious bias, resulting into qualified candidates being sidelined and unsuited candidates progressing in the interview stage.

2.2 AI-Powered Interview

In contrast, the AI powered interview bot ensures consistency and objectivity in the hiring process, as it analyses resumes against predefined criteria and algorithms. By standardization of the test content, this will make sure all of the testers can be assessed based on the same measure, so bias and errors influenced by the human factor can be minimized. Additionally, as mentioned above the bot can double-check facts based on facts from the fact-check websites - which makes the candidate evaluations even more trustworthy and accurate. . ??

2.3 Why the AI-Powered Process Excels

Hiring the right people is so important, but the traditional resume screening process can be really hit-or-miss. With AI technology, we're able to standardize how candidate applications are initially evaluated. This ensures everyone is graded fairly and consistently right from the start - no More unfair biases creeping in. The AI handles the routine tasks, freeing up human reviewers to really focus on assessing the candidates' personalities, culture fit, and other hard-to-quantify factors that make or break a successful hire. By combining AI screening with human evaluation, companies can make much

more informed hiring decisions overall. At the end of the day, you get a stronger talent pool and better hires that stick around for the long haul. . ?? . ??

3 Preparation of AI Powered Interview

Step-wise explanation:

- 1) **Break It Down:** We start by taking the candidate's resume and breaking it up into bite-sized chunks using some Python wizardry.
- 2) **Embed the Knowledge:** Next, we feed each little chunk into a special AI model that converts the text into a numeric embedding - kind of like an ultra-compressed version that captures the essence.
- 3) **Store the Embeddings:** Those embeddings then get squirreled away in a fancy vector database designed for lightning-fast searches.
- 4) **Embed the Questions:** When an interviewer has a question, we run it through the same embedding model to get a numerical representation.
- 5) **Search for Relevance:** Using the question embedding, we scan the vector database to find the stored resume chunks that are most relevant.
- 6) **Gather the Context:** We pull out those top-matching chunks to provide helpful context.
- 7) **Generate an Answer:** Finally, we send the question along with the relevant context over to a different AI model that can read through it all and formulate a response tailored to the specific interview question.

4 Tools and Models Used

Following are the tools or methods used:

- 1) **For embeddings**, we use powerful AI models like those from **OpenAI** or **Hugging Face**.
- 2) The **question-answering is handled** by an **advanced language model from OpenAI**.
- 3) And **the vector database** is a slick system called **Pinecone** designed for searching through vast amounts of embeddings

5 References

Below are few references that inspired the building of this project:

- 1) **AI in Recruitment:**
Dastin, J. (2018). "Amazon Scraps Secret AI Recruiting Tool That Showed Bias Against Women". Reuters. Retrieved from Reuters.
- 2) **Interview Automation:**
Zhang, L., Wang, K., Xu, Z. (2017). "Automatic Generation of Personalized Interview Questions". In Proceedings of the 26th International Conference on World Wide Web Companion (pp. 287-293).

References