Artificial Intelligence based Interviewing and Proctoring System

Abstract:

Artificial intelligence (AI) integration within the recruitment process has gained momentum due to its potential to streamline assessments and reduce biases. However, existing AI-based interview systems often lack the ability to holistically evaluate a candidate's suitability for a role, leaving room for improvement. Our project endeavors to mitigate these limitations by developing an advanced AI-based interviewing and proctoring system. This system will synergize cutting-edge natural language processing with proctoring technologies like computer vision and machine learning. The primary goal is to conduct virtual interviews with candidates, enabling real-time assessment using a multifaceted evaluation approach. Beyond evaluating the content of responses, the system will analyze non-verbal cues like facial expressions and tone of voice to gauge a candidate's suitability for the role. Additionally, the proctoring component will actively monitor candidate behavior throughout the interview to ensure process integrity. It will include measures to detect unauthorized materials and track eye movements, ensuring the candidate's full engagement in the interview process. In essence, our AI-based interviewing and proctoring system aspire to provide a more comprehensive and equitable evaluation of candidates, empowering organizations to make informed and fairer hiring decisions.

Keywords:

Artificial Intelligence, NLP, Computer Vision, Proctoring technologies, AI-based interview Systems, Virtual Interviews, Real time Assessments, Multifaceted Evaluation, Facial Experessions, Behavior Monitoring, Tone of voice Analysis, Eye Movement Tracking, Unauthorized materials detection, Non-verbal cues