

AI Integrated Smart Interview Preparation and Evaluation Portal : A Review

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Abstract: *The increasing reliance on artificial intelligence in education and career development has opened new pathways for enhancing interview preparation and candidate assessment. This paper introduces an AIIntegrated Smart Interview Preparation and Evaluation Portal, a web-based system designed to simulate real interview experiences using intelligent automation. The proposed system enables users to practice both HR and technical interviews through an AI-driven interviewer that generates context-aware questions, analyzes responses, and provides automated feedback with performance scoring. The architecture integrates secure user authentication, session tracking, and an interactive dashboard for reviewing progress and historical performance. Built using React, Node.js, and Drizzle ORM, the platform ensures a seamless, responsive, and secure user experience, with optional speech-to-text functionality for natural communication. The system aims to bridge the gap between theoretical learning and practical interview performance, providing an accessible, scalable, and efficient tool for career readiness enhancement.*

Keywords: Artificial Intelligence (AI), Interview Preparation, Natural Language Processing, Machine Learning, Performance Evaluation, Web Application, Speech Recognition, Human–Computer Interaction

