InnovAIte Interview Guardian

AI Lie Detection & Intelligent Interview Evaluation System

1. Introduction

With the rapid growth of remote work, online interviews have become a standard part of recruitment. However, virtual hiring introduces serious challenges such as fake resumes, exaggerated skills, and dishonest interview responses. Traditional online interviews rely heavily on human judgment, which can be subjective, inconsistent, and prone to bias. This creates a strong need for a reliable, data-driven support system to assist recruiters.

2. Problem Statement

Organizations face increasing difficulty in verifying candidate authenticity during online interviews. Fake resumes, scripted answers, and intentional deception often lead to poor hiring decisions, financial losses, and reduced organizational productivity. Recruiters also struggle to differentiate between normal interview nervousness and deliberate dishonesty.

3. Proposed Solution

InnovAIte Interview Guardian is an AI-assisted interview evaluation system designed to support HR professionals. The system analyzes resumes, interview responses, and behavioral indicators to generate structured insights and a truth probability score. It does not replace human decision-making but acts as an intelligent decision-support tool.

4. Key Features

- Resume verification and skill matching
- Interview answer consistency analysis
- Differentiation between stress and possible deception
- Rule-based dynamic follow-up questions
- Truth Probability Score (0–100%)
- HR-friendly evaluation reports

5. Technologies Used

The system is developed using PHP for backend logic, MySQL for data storage, and HTML, CSS, and JavaScript for the frontend interface. Rule-based intelligent logic and scoring algorithms are used instead of complex machine learning tools, ensuring transparency and simplicity.

6. Artificial Intelligence Approach

The AI component of the system is based on explainable, rule-driven logic. Behavioral patterns, answer clarity, and resume consistency are evaluated using predefined rules and weighted scoring methods. This ensures ethical, fair, and understandable results for HR professionals.

7. Market Value and Impact

The system is highly suitable for HR firms, recruitment agencies, freelancing platforms, and organizations conducting remote hiring. It helps reduce fake hiring risks, saves recruitment costs, and improves trust in online interview processes.

8. Ethical Considerations

Candidate consent is mandatory before evaluation. The system does not automatically accept or reject candidates. All decisions remain under human control, ensuring fairness, transparency, and ethical use of AI.

9. Conclusion

InnovAIte Interview Guardian provides a practical and ethical solution to modern recruitment challenges. By supporting recruiters with structured insights and data-driven evaluation, the system improves hiring accuracy and strengthens trust in remote recruitment environments.