

ATS-Friendly AI-Powered Resume Feedback System

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Abstract: *In today's competitive job market, Applicant Tracking Systems (ATS) play a crucial role in the hiring process by filtering resumes based on predefined criteria such as keywords, formatting, and structure. However, many job seekers struggle to create resumes that effectively pass through these automated systems. This paper proposes an AI-powered Resume Feedback System designed to help users optimize their resumes for ATS compliance while enhancing overall readability and relevance.*

The system leverages Natural Language Processing (NLP) and Machine Learning (ML) techniques to analyze resumes against job descriptions, providing instant feedback on keyword optimization, formatting, grammatical accuracy, and section structuring. By integrating real-time AI-driven suggestions, users can tailor their resumes to improve their chances of securing interviews.

This research highlights the challenges posed by ATS filters, evaluates existing resume optimization tools, and introduces a user-friendly AI-based solution that bridges the gap between job seekers and hiring algorithms. The proposed system aims to enhance resume effectiveness, ensuring a fairer and more efficient recruitment process. Future advancements may include integration with job portals and LinkedIn for seamless job application improvements.

Keywords: ATS, Resume Optimization, AI-Powered Feedback, Natural Language Processing, Machine Learning, Job Market

