IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 2, November 2025
Impact Factor: 7.67

Smart Career Recommendation System Powered by Artificial Intelligence for Optimized Career Planning and Decision-Making

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Abstract: *Smart Career Recommendation System Powered by Artificial Intelligence for Optimized Career Planning and Decision-Making.The paper presents the design and development of an AI-Powered Job Recommendation System that revolutionizes conventional recruitment processes through intelligent automation. The system deploys advanced machine learning algorithms to analyzes candidate profiles and job requirements, hence yielding accurate compatibility assessments and recommendations based on those. In this, the system integrates state-of-the-art resume parsing capabilities, real-time tracking of candidate applications, and multi-role functionality which caters to job seekers, recruiters, and administrators.Key innovations include a voice-assisted interface for enhanced accessibility, intelligent ranking systems for candidate screening, and comprehensive analytics dashboards for employment trend monitoring. Major improvements in recruitment efficiency are demonstrated, while manual screenings are reduced and the accuracy of matches between candidates and suitable positions increases accordingly.*
It has a strong architecture based on Spring Boot and React, maintaining scalability and data security at each operational module. Successful deployment consolidates the effectiveness of the system in creating a more transparent, efficient, and user-oriented recruitment ecosystem, thereby laying the foundation for future steps in AI-driven human resource solutions.

Keywords*:* Artificial Intelligence, Career Recommendation, Resume Parsing, Skill Matching, Natural Language Processing, Career Planning, Decision Support System, Voice Assistant, etc

DOI: 10.48175/IJARSCT-29708