

Talent Bridge: A Smart Solution for Streamlined Recruitment

Prof. Niketa Mahajan¹, Atharva Salunke², Mitali Bhole³, Rajkumar Chavan⁴, Bhavik Patil⁵

^{2,3,4,5}Student, Department of Computer Engineering

¹Assistant Professor, Department of Computer Engineering

Alard College of Engineering and Management, Pune, Maharashtra, India

Abstract: In today's competitive job market, traditional recruitment methods struggle with inefficiencies such as manual resume screening, biased candidate evaluation, and mismatches between job requirements and applicant skills. To address these challenges, we introduce Talent Bridge – A Smart Solution for Streamlined Recruitment, an NLP powered platform that enhances the hiring process by leveraging Natural Language Processing (NLP) techniques. The system automates resume parsing, candidate screening, and job matching, ensuring a faster and more accurate selection process.

Talent Bridge integrates a custom-trained Named Entity Recognition (NER) model for extracting critical details such as skills, experience from resumes and job descriptions. Additionally, Star System is used to evaluate candidate responses, while NLP-Based ranking systems help recruiters prioritize the best-fit candidates. The platform also features chatbots for preliminary interviews, reducing recruiter workload, and smart scheduling (Time & Date Slots) for efficient interview coordination. By making recruitment data-driven and automated, Talent Bridge ensures a seamless experience for both recruiters and job seekers.

This paper details the technical implementation, system architecture, and key functionalities of Talent Bridge, highlighting its effectiveness in reducing hiring time, improving candidate-job alignment, and enhancing overall recruitment quality. The study emphasizes the role of NLP- Based recruitment solutions in transforming hiring processes, making them more efficient, fair, and responsive to industry demands..

Keywords: NLP, Resume Parsing, Smart Hiring, Star System

