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Career Prediction Application

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Abstract: *The widening gap between academic curricula and evolving industry requirements often leaves engineering graduates uncertain about their optimal career paths, leading to underemployment and inefficient recruitment processes. This paper presents the Student Career Prediction Application, a web-based platform designed to bridge this gap by automating the assessment of student employability. The system utilizes a multi-criteria weighted scoring algorithm to evaluate candidates across fifteen distinct technical and soft skill parameters— including algorithms, programming languages, and communication skills. Unlike generic aptitude tests, this application maps student inputs against pre-defined industry profiles (such as Data Scientist, Backend Engineer, and Product Manager) to calculate a specific "Match Confidence" percentage and a categorical "Readiness Level" (e.g., Industry Ready vs. Beginner). The architecture features a dual-interface design: a student portal that visualizes skill gaps using radar charts, and a recruiter dashboard that enables data-driven candidate filtering based on predicted roles and competency scores. By converting subjective self-assessments into objective, quantifiable data, the proposed system provides students with actionable upskilling roadmaps while significantly reducing the screening latency for talent acquisition teams.*

Keywords: Career Prediction System, Skill Gap Analysis, Weighted Scoring Model, Automated Recruitment, Employability Assessment, Web-Based Expert System, Role Recommendation

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