

## ABSTRACT

"Career Quest" is a pioneering platform leveraging AI algorithms and open-source datasets to offer personalized career guidance, with Python serving as the backbone of its backend infrastructure. Through the application of machine learning, it effectively matches individuals with suitable jobs, thereby enhancing decision-making in career paths. By tailoring recommendations based on skills, interests, and aptitudes, Career Quest enriches guidance for students, fostering efficient employment and career development. Python's robust capabilities in the backend enable the application to identify skill gaps and recommend relevant courses or training programs, thereby ensuring better preparation for future careers. With its advanced technology stack, Career Quest empowers users to navigate their career paths confidently, effectively transforming traditional guidance methods. Through the integration of AI technology, the platform delivers curated resources for personalized career insights, revolutionizing the landscape of career guidance. Students can now make more informed decisions about their educational and career paths, resulting in increased satisfaction and better alignment with their goals. The accuracy and efficiency of Career Quest enable users to explore various career options effectively, thereby enhancing career development. By providing tailored recommendations and bridging skill gaps, the platform empowers individuals to achieve their professional aspirations and unlock their full potential in the workforce.