#### PROJECT REPORT CAREERCRAFT ATS-OPTIMIZED RESUME ANALYZER

**Introduction**

CareerCraft is an innovative tool designed to help job seekers enhance their resumes and align them with job descriptions. Using advanced Applicant Tracking System ATS technology, this project allows users understand how their resumes compare to job postings, suggests improvements, and offers guidance for career growth. Powered by the Gemini Pro model, CareerCraft simplifies the job application process and provides a competitive edge in the job market.

**Features Overview**

1 Resume Optimization

CareerCraft analyzes resumes and job descriptions to determine a compatibility percentage. It identifies missing keywords and offers suggestions to align resumes with job requirements. This feature ensures that applicants can improve their chances of landing interviews.

2 Skill Enhancement

For users aiming to upskill, CareerCraft compares their current qualifications with industry standards. It highlights gaps in skills and provides personalized suggestions to help users meet the demands of their chosen career paths.

3 Career Progression Guidance

CareerCraft supports career advancement by analyzing users professional profiles. It offers insights into potential career trajectories and recommends skills and experiences to propel users toward their goals.

**How It Works**

Step 1 User Input : Users interact with an intuitive interface to input their resumes and job descriptions.

Step 2 Data Handling : The user input is securely transmitted to the backend using a Google API key.

Step 3 Model Processing : The Gemini Pro pre-trained model analyzes the input, generates relevant insights, and prepares actionable outputs.

Step 4 Results Display : The processed data is sent back to the front end, where users see a clear and user-friendly report with suggestions and recommendations.

**What I Learn**

1 Understanding ATS Technology I gained a deeper understanding of how ATS systems work and their importance in modern recruitment processes.

2 Generative AI Concepts I explored various aspects of generative AI

3 Integration of APIs Learning to generate and securely handle API keys, especially with Google API integration, was a crucial skill I developed.

4 Working with Pre-Trained Models Interfacing with the Gemini Pro pre-trained model taught me how to use advanced machine learning tools for real-world applications.

5 Application Deployment Deploying the application using Streamlit allowed me to understand the importance of creating intuitive user interfaces and hosting solutions.

6 Problem-Solving and Organization From setting up the project structure to debugging issues, I learned how to approach complex problems systematically and effectively.

**Conclusion**

CareerCraft is a practical and user-friendly tool aimed at improving job application outcomes. By optimizing resumes, identifying skill gaps, and offering career advice, it empowers users to navigate their career paths with confidence. With the integration of the Gemini Pro model and streamlined deployment, CareerCraft stands out as a reliable solution for job seekers and professionals alike.