Abstract

Resume Parser and Job Recommendation using ML

Resume Parser and Job Recommendation is a tool designed to automate and streamline the job search process by extracting relevant skills and qualifications from a candidate's resume and recommending job opportunities that closely align with their extracted skill set.

It automatically extracts key skills and qualifications from a user's resume and suggests job opportunities that best match their profile. It not only streamlines the job search process but also enhances decision-making by providing personalized and data-driven job recommendations.

The user uploads their resume to the system, which then uses NLP libraries to extract relevant skills. These extracted skills, along with job descriptions, are processed into a TF-IDF matrix, and the KNN algorithm is applied to identify jobs with similar skill requirements.

Dataset: https://www.kaggle.com/datasets/promptcloud/indeed-job-posting-dataset

TechStack:

- Frontend: HTML, CSS, Javascript, Bootstrap
- Backend: Python
- Machine Learning and NLP Libraries: scikit-learn, pandas, NumPy, spaCy, pdfminer.six, TF-IDF Vectorizer
- IDE & Tools: VS Code, Jupyter Notebook

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