

# **AI RESUME ANALYZER USING NATURAL LANGUAGE PROCESSING**

# Our Team -

49

BATCH

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# Mr. Mallikarjuna Nandi Sir

*Project Guide*

# Abstract –

AI Resume Analyzer using NLP proposes the development of an AI-based resume analyzer that uses natural language processing (NLP) to extract information from resumes and match them to job descriptions. The analyzer would be able to extract information such as the applicant's skills, education, experience, and keywords. It would then use this information to match the applicant to relevant job openings. The analyzer would also be able to provide the applicant with feedback on their resume, such as suggestions for improving their skills or experience.

# Existed System -

- Indeed Resume Checkup
- Taleo
- Hiretual
- Jobscan
- Rezi

These Systems can be

- Biased
- Not always Accurate
- Not always Transparent
- Cost Expensive

# Proposed System -

- A Natural language processing (NLP) engine that would be used to **Extract relevant information** from resumes, such as skills, experience, and education.
- **User interface** that would allow recruiters to upload resumes, view the results of the analysis, and filter resumes based on their criteria.
- **Open source**: The project is open source, which means that anyone can contribute to it or use it for free.
- **Accurate**: The project uses a variety of NLP techniques to ensure that the results are accurate
- **User-friendly**: The project is user-friendly, which means that it is easy to use even if you are not familiar with NLP.
- **Cost Effective**

# Purpose –

The purpose of this project is to help students make their resume preparation better and correct. The project will use natural language processing (NLP) to extract information from resumes and match them to job descriptions. The project will also be able to provide applicants with feedback on their resumes, such as suggestions for improving their skills or experience.

This project will be beneficial for students because it will help them to:

- Improves the Quality of their resumes
- Increases their chances of getting hired
- Learn about the hiring process

# Features –

- **Resume parsing:** The project uses NLP to parse information from a resume, such as the applicant's name, contact information, education, work experience, skills, and keywords.
- **Keyword matching:** The project uses keyword matching to identify the applicant's skills and experience that are relevant to a specific job opening.
- **Sector clustering:** The project clusters the applicant's keywords into sectors, such as IT, finance, or healthcare.
- **Recommendations:** The project provides recommendations to the applicant on how to improve their resume, such as adding more keywords or highlighting their skills.
- **Predictions:** The project predicts the applicant's chances of getting an interview for a specific job opening.
- **Analytics:** The project provides analytics on the applicant's resume, such as the number of keywords, the number of sectors, and the predicted chances of getting an interview.

# Techologies Used –

- Python
- Natural Language Processing
- Django
- Streamlit
- MySQL
- HTML
- CSS



# WorkFlow –

This work by using natural language processing (NLP) to **Extract information** from resumes and match them to job descriptions. The NLP model would then be able to extract information from new resumes, such as the applicant's skills, experience, and education.

Once the information has been extracted, the project would then match the applicant to relevant job openings. The matching process would be based on the applicant's skills, experience, and education. The project would also be able to provide applicants with **Feedback** on their resumes, such as **Suggestions** for improving their **Skills** or experience.

The project would be implemented using a combination of **Python**, **Django** and **Streamlit**. Python would be used for the NLP and machine learning techniques, while Django and Streamlit would be used to create a web application that would allow users to upload their resumes and receive feedback.

The project would be evaluated using a number of metrics, including the **accuracy** of the resume matching, the time savings of the resume screening process, and the satisfaction of applicants with the feedback they receive.

1. **Data collection**
2. **Model training**
3. **Resume parsing**
4. **Job matching**
5. **Feedback generation**
6. **Web application development**

# Input -

Name\*

Anil Kumar Mallem

Mail\*

mallemanil7@gmail.com

Mobile Number\*

7032041421

## Upload Your Resume, And Get Smart Recommendations

Choose your Resume



Drag and drop file here

Limit 200MB per file • PDF

Browse files



Anil\_Kumar Mallem\_Resume.pdf 54.9KB



PgplbmRzdHJlY...

1 / 1



85%



Anil Kumar Mallem



Drag and drop file here

Limit 200MB per file • PDF

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### Anil Kumar Mallem

✉ mallemanil7@gmail.com ☎ +916301039701 in Anil Kumar Mallem 🔄 Anils117 🔗 Anils117

#### Profile

As a Computer Science undergraduate, I am highly motivated to secure an internship where I can effectively utilize my knowledge and skills for professional growth and contribute to the betterment of both the organization and myself.

#### Education

**Rajiv Gandhi University of Knowledge and Technologies Ongole,** 2020 – 2024  
Bachelor of Technology Computer Science CGPA - 9.2 Ongole, India

**ZPHS Tummalacheruvu, Secondary Education** 2018  
Completed Secondary Education at ZPHS Tummalacheruvu GPA - 10 Tummalacheruvu, India

#### Skills

##### Programming Languages

Python, Java, C++, Html, Css, Php.

##### Familiar

Problem Solving, AWS, Django, Bash, Git & Github.

# Output -

## Resume Analysis 🙌

Hello Anil Kumar

## Your Basic info 👁️

Name: Anil Kumar

Email: mallemanil7@gmail.com

Contact: 9163010397

Degree: None

Resume pages: 1

You are at Fresher level!!

## Skills Recommendation 💡

### Your Current Skills

Github ✕ Process ✕ C++ ✕ Training ✕ Css ✕ Php ✕ Java ✕  
Website ✕ Html ✕ Linux ✕ Django ✕ Analysis ✕ Metrics ✕ Mysql ✕  
Access ✕ Aws ✕ Api ✕ Python ✕ Programming ✕ System ✕ Javascript ✕  
Windows ✕ Database ✕ See our skills recommendation below

\*\* Our analysis says you are looking for Web Development Jobs \*\*

### Recommended skills for you.

React ✕ Django ✕ Node JS ✕ React JS ✕ php ✕ laravel ✕ Magento ✕  
wordpress ✕ Javascript ✕ Angular JS ✕ c# ✕ Flask ✕ SDK ✕

Recommended skills generated from System

Adding this skills to resume will boost 🚀 the chances of getting a Job 💼

# Output –

## Courses & Certificates Recommendations

Choose Number of Course Recommendations:



- (1) [Full Stack Web Developer - MEAN Stack](#)
- (2) [ReactJS Project Development Training](#)
- (3) [Django Crash course \[Free\]](#)
- (4) [React Crash Course \[Free\]](#)
- (5) [Flask: Develop Web Applications in Python](#)

## Resume Tips & Ideas

[+] Awesome! You have added Objective/Summary

[+] Awesome! You have added Education Details

[-] Please add Experience. It will help you to stand out from crowd

[-] Please add Internships. It will help you to stand out from crowd

[+] Awesome! You have added Skills

[-] Please add Hobbies. It will show your personality to the Recruiters and give the assurance that you are fit for this role or not.

[-] Please add Interest. It will show your interest other than that job.

[-] Please add Achievements. It will show that you are capable for the required position.

[+] Awesome! You have added your Certifications

[+] Awesome! You have added your Projects

## Resume Score



# Future Scope –

Future enhancements for the AI Resume Analyzer using NLP can focus on further improving its capabilities and expanding its functionalities. Here are three potential areas for enhancement:

- **Multilingual Support:** One future enhancement could be the incorporation of multilingual support. By expanding the system's language capabilities, it would become more versatile and able to analyze resumes written in different languages
- **Contextual Understanding and Sentiment Analysis:** Enhancing the NLP algorithms to have a deeper understanding of the contextual nuances and sentiment expressed in resumes would add value to the analysis process
- **Customization and Adaptability:** Providing customization options and adaptability would be another valuable enhancement. Organizations have unique hiring criteria and preferences, so allowing them to define their own specific requirements and preferences within the system would increase its flexibility.

**Thank You !!**