

RESUME ANALYZER REPORT

➤ INTRODUCTION

- ⇒ We created a model that analyses the resume on the basis of provided job description. It provides us a score on the basis of the requirements we put for job by further analyzing the resume. It also provides us with reason that on what basis it predicts the score.

➤ LIBRARIES IMPORTED

```
pip install langchain
pip install langchain_community
pip install google-ai-generativelanguage
pip install google-generativeai
pip install PyPDF2
```

✓ 7.0s Python

- ⇒ Langchain is used to create templates to provide info to chatbot
- ⇒ Google-generativeai is used to connect the api
- ⇒ PyPDF2 is used to read and access the PDF

➤ API CONNECTION

```
import os
os.environ['GOOGLE_API_KEY'] = 'AIzaSyB33jhrfhCqU3xRzJBRjjvq0bsdtmFADiU'
```

Python

```
from langchain.llms import GooglePalm
```

Python

- ⇒ Gemini is connected by generation an API key and connecting to it

➤ Template Of Analyzer

```
from langchain import LLMChain
from langchain import PromptTemplate
llm = GooglePalm(temperature=0.1, deprecation_schedule='default')

jd = '''We are seeking a highly skilled Senior Software Engineer to join our dynamic
team. The ideal candidate will have extensive experience in software development, a strong
understanding of modern programming languages, and a passion for building scalable
applications.'''

key_responsibilities = '''Focus on achievements and skills rather than just listing job duties.
Tailor your responsibilities to the job you're applying for, highlighting the most relevant skills and experiences.
Use a clear and concise writing style, avoiding jargon and overly technical language.'''

experience = "Consider as a positive point if the person has a prior experience in the field."

qualifications = 'Should be well qualified in the fields related to the job he/she is applying for.'

resume = "Should be concise and point should be explained to the point and should match the job requirement. Also the resume template should be attractive so that it is easy to review."

skills = "Should have strong hold on programming languages and should have a passion for building applications."

template = """You are a helpful and harmless AI assistant that is an expert at reviewing resumes and predicting candidate success based on the provided Job description assist me that.
Given the following resume information, please predict a score for this candidate on a scale of 1 to 10, where 1 is very unlikely to succeed, and 10 is extremely likely to succeed.
Please provide only the numerical score.

Job Description:
{jd}

Key Responsibilities:
{key_responsibilities}
```

```
Key Responsibilities:
{key_responsibilities}

Experience:
{experience}

skills:
{skills}

Qualifications:
{qualifications}

Resume Information:
{resume}

Score:
predict the numerical score and also give the explanation.
"""

# Create a prompt template object
prompt_template = PromptTemplate(input_variables=["resume"], template = template)
# Create a LLMChain object
llm_chain = LLMChain(llm=llm, prompt=prompt_template)
```

➔ A template is created which has different arguments on basis of which the resume is shortlisted. They are listed below:

1. Job Description(jd) : 'We are seeking a highly skilled Senior Software Engineer to join our dynamic team. The ideal candidate will have extensive experience in software development, a strong understanding of modern programming languages, and a passion for building scalable applications'
2. key_responsibilities = Focus on achievements and skills rather than just listing job duties. Tailor your responsibilities to the job you're applying for, highlighting the most relevant skills and experiences.
3. experience = Consider as a positive point if the person has a prior experience in the field.

4. qualifications = Should be well qualified in the fields related to the job he/she is applying for.
5. resume = Should be concise and point should be explained to the point and should match the job requirement. Also the resume template should be attractive so that it is easy to review it.
6. skills = Should have strong hold on programming languages and should be have a passion for building applications.

➤ READ AND ANALYSE THE RESUME

```
import PyPDF2
pdf_reader = PyPDF2.PdfReader(open('resume.pdf', 'rb'))
```

Python

```
resume_text = ""
for page in pdf_reader.pages:
    resume_text += page.extract_text()

score1 = llm_chain.run({"jd": jd, "key_responsibilities": key_responsibilities, "experience": experience, "qualifications": qualifications, "resume": resume_text, "skills": skills})
print(score1)
```

Python

```
c:\Users\chirag\AppData\Local\Programs\Python\Python312\lib\site-packages\langchain_core\api\deprecation.py:139: LangChainDeprecationWarning: The method `Chain.run` was deprecated in 1.
warn_deprecated(
8
```

The candidate has a strong background in software development, with experience in a variety of programming languages and technologies. They also have a passion for building scalable app

```
pdf_reader2 = PyPDF2.PdfReader(open('resume2.pdf', 'rb'))
```

Python

```
resume_text2 = ""
for page in pdf_reader2.pages:
    resume_text2 += page.extract_text()

score2 = llm_chain.run({"jd": jd, "key_responsibilities": key_responsibilities, "experience": experience, "qualifications": qualifications, "resume": resume_text2, "skills": skills})
print(score2)
```

Python

... 1

The candidate does not have any experience in software development.

```
pdf_reader3 = PyPDF2.PdfReader(open('resume3.pdf', 'rb'))
```

Python

```
resume_text3 = ""
for page in pdf_reader3.pages:
    resume_text3 += page.extract_text()

score3 = llm_chain.run({"jd": jd, "key_responsibilities": key_responsibilities, "experience": experience, "qualifications": qualifications, "resume": resume_text3, "skills": skills})
print(score3)
```

Python

2

The candidate does not have any experience in software development.

```
pdf_reader4 = PyPDF2.PdfReader(open('resume4.pdf', 'rb'))
```

Python

```
resume_text4 = ""
for page in pdf_reader4.pages:
    resume_text4 += page.extract_text()

score4 = llm_chain.run({"jd": jd, "key_responsibilities": key_responsibilities, "experience": experience, "qualifications": qualifications, "resume": resume_text4, "skills": skills})
print(score4)
```

Python

4

The candidate has a lot of experience in the field of software development and has a strong understanding of modern programming languages. However, they do not have any experience in bu

```
pdf_reader5 = PyPDF2.PdfReader(open('resume5.pdf', 'rb'))
```

Python

```
resume_text5 = ""
for page in pdf_reader5.pages:
    resume_text5 += page.extract_text()
```

```
... 8
The candidate has a strong background in software development, with experience in a variety of programming languages and technologies. They also have experience in system administration. However, the candidate does not have as much experience in building scalable applications as the ideal candidate would. This could be a potential weakness, as the position requires some experience in building scalable applications. Overall, the candidate is a good fit for the position of Senior Software Engineer. However, they may need to develop their skills in building scalable applications in order to be successful.

pdf_reader6 = PyPDF2.PdfReader(open('resume6.pdf', 'rb'))

resume_text6 = ""
for page in pdf_reader6.pages:
    resume_text6 += page.extract_text()

score6 = llm_chain.run({"jd": jd, "key_responsibilities": key_responsibilities, "experience": experience, "qualifications": qualifications, "resume": resume_text6, "skills": skills})
print(score6)
```

... 8

The candidate has a strong background in software development, with experience in a variety of programming languages and technologies. They also have experience in system administration. However, the candidate does not have as much experience in building scalable applications as the ideal candidate would. This could be a potential weakness, as the Senior Software Engineer position requires some experience in building scalable applications. Overall, the candidate has a strong background in software development and system administration, which makes them a good candidate for the Senior Software Engineer position. However, they may need to develop their skills in building scalable applications in order to be successful.

⇒ As we can see it reads and analyses the resume and further predicts a score out of 10 and also provides us the reason i.e. on what basis the score is predicted.

➤ Shortlisting The Resume With Max Score

```
max_score = max(scores)
max_index = scores.index(max_score)
print(f"Resume {max_index+1} is the best fit for the job, which corresponds to pdf_reader{max_index+1}.")
print(f"The resume has a score of: {max_score}")
```

✓ 0.0s Python

Resume 6 is the best fit for the job, which corresponds to pdf_reader6.
The resume has a score of: 8

The candidate has a strong background in software development, with experience in a variety of programming languages and technologies. They also have experience in system administration. However, the candidate does not have as much experience in building scalable applications as the ideal candidate would. This could be a potential weakness, as the Senior Software Engineer position requires some experience in building scalable applications. Overall, the candidate has a strong background in software development and system administration, which makes them a good candidate for the Senior Software Engineer position. However, they may need to develop their skills in building scalable applications in order to be successful.

⇒ By Creating an array of scores and getting the maximum value we get the best shortlisted resume and a corresponding resume to it.