

A Mini Project Report
on
SMART VISION RESUME ANALYSER

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BONAFIDE CERTIFICATE

This is to certify that the Mini project titled “SMART VISION RESUME ANALYSER” being submitted by Spoorthi Vadlakonda and Desineedi Vamsi Krishna, bearing 1602-21-748-052 and 1602-21-748-059 respectively, in partial fulfilment of the requirements of the V semester, Bachelor of Engineering in Computer Science & Engineering is a record of bonafide work carried out by him/her under my guidance.

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Abstract

Smart Vision is a cutting-edge platform designed to revolutionize the job application process by providing comprehensive assistance in crafting standout resumes. Leveraging advanced technologies such as Natural Language Processing (NLP), the platform analyses resume, offers personalized course recommendations, and provides interview tips. Unlike existing solutions that focus on resume building, Smart Vision takes a unique approach by critically evaluating existing resumes and offering actionable advice for improvement. The project also features a showcase of relevant technologies in a portfolio, enhancing a user's visibility in the competitive job market. With a user-friendly interface and a commitment to career advancement, Smart Vision aims to empower individuals in navigating the intricacies of modern hiring practices. This project not only addresses the current gap in resume analysis tools but also envisions a future where users can receive tailored advice based on specific job descriptions, thereby further enhancing their professional success.

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1. Introduction:

Smart Vision Resume Analyzer is a cutting-edge platform designed to revolutionize the job application process. In today's competitive job market, crafting the perfect resume is essential. Smart Vision leverages advanced Natural Language Processing (NLP) techniques to analyse resumes, providing invaluable insights for job seekers.

Our platform offers a range of features, including comprehensive resume scoring, skill recommendations, and personalized course suggestions. With a focus on enhancing resume visibility and improving job prospects, Smart Vision assists users in tailoring their resumes to specific job roles. From course recommendations to interview tips, our platform serves as a one-stop solution for career advancement.

Built on a robust technology stack, including NLP, Python, and web development tools, Smart Vision ensures a seamless user experience. The user-friendly interface allows for easy resume uploads, analysis, and access to a wealth of career-enhancing resources.

Whether you're a seasoned professional or a fresh graduate, Smart Vision empowers you to make informed decisions about your career trajectory. Join us on the journey to career success with Smart Vision Resume Analyzer.

1.1 Overview:

The Smart Vision Resume Analyzer is a cutting-edge platform designed to reshape the job application landscape. Leveraging sophisticated Natural Language Processing (NLP) techniques, it offers a suite of features, including detailed resume scoring, personalized skill suggestions, and customized course recommendations. The platform's core motivation lies in democratizing access to career opportunities, addressing the gaps in existing tools by not just aiding in resume creation but by providing an in-depth analysis to align resumes with modern hiring practices. Smart Vision serves as a holistic career companion, guiding users through the complexities of applicant tracking systems (ATS) and offering insights that empower individuals at every stage of their professional journey.

Motivated by a commitment to revolutionize the approach to job-seeking, Smart Vision emerges as a pioneering solution in a landscape dominated by basic resume builders. It fills a critical void by going beyond conventional template-based systems, offering a comprehensive analysis that enables users to present their unique skills confidently. By providing actionable advice, interview tips, and a seamless user experience, Smart Vision becomes more than just a tool—it becomes a beacon of empowerment, fostering inclusivity and unlocking avenues for career success for individuals from diverse backgrounds and experience.

1.2 Existing System:

Existing systems in the present world primarily offer resume building services, differentiating between free and premium versions. These platforms assist users in creating and formatting their resumes but lack comprehensive resume analysis functionalities. Smart Vision stands out as a distinctive project by introducing a resume analyser feature.

Smart Vision goes beyond conventional resume builders by incorporating advanced technologies, including Natural Language Processing (NLP). This enables the system to not only help users create well-structured resumes but also to analyse and benchmark them. The system provides valuable insights into the strengths and weaknesses of resumes, offering personalized recommendations for improvement.

By addressing the gap in existing systems and introducing innovative resume analysis capabilities, Smart Vision aims to enhance users' chances of success in the competitive job market. The project's unique selling proposition lies in its ability to guide users through Applicant Tracking System (ATS) challenges, ultimately improving their visibility and prospects in the digital hiring landscape.

1.3 Motivation:

Embarking on the Smart Vision project was fuelled by a deep-seated motivation to revolutionize the way individuals approach their professional journeys. Recognizing the struggles faced by job seekers in navigating the intricacies of modern hiring processes, we sought to address a critical need in the employment landscape.

The motivation behind Smart Vision lies in our commitment to democratizing access to opportunities. We aspire to empower individuals with insights and tools that elevate their chances of success. Witnessing the transformative impact, a well-crafted resume can have on one's career trajectory inspired us to leverage cutting-edge technologies like Natural Language Processing (NLP). Through this project, we aim to empower users to not only navigate applicant tracking systems effectively but also to present their unique skills and experiences with confidence.

Our motivation is rooted in the belief that everyone deserves a fair shot at their dream career. Smart Vision is not just a solution; it's a testament to our dedication to fostering career empowerment and unlocking doors to a brighter professional future for all.

1.4 Problem Definition:

In the current job market, existing career tools predominantly focus on aiding in resume creation, overlooking the crucial aspect of assessing and optimizing existing resumes. This limitation creates a significant hurdle for job seekers, as the emphasis is on generating templates rather than evaluating resumes to match modern hiring practices and applicant tracking systems (ATS). Job seekers lack guidance on whether their resumes effectively align with industry trends and specific job requirements, leading to missed opportunities and decreased chances of success in securing desired roles. This gap highlights the need for a comprehensive solution that goes beyond surface-level resume creation, offering in-depth analysis and optimization strategies to empower individuals in navigating the complexities of the digital hiring landscape effectively. Smart Vision aims to address this pressing issue by introducing a pioneering platform utilizing advanced Natural Language Processing (NLP) techniques to thoroughly analyse resumes and provide actionable insights, bridging the gap between resume creation and optimization for enhanced job prospects.

2. Literature Survey:

The current landscape of career-focused tools predominantly revolves around resume builders, leaving a noticeable void in the realm of resume analysis. While there are platforms that assist in creating resumes, the absence of robust systems for evaluating and enhancing existing resumes poses a significant limitation for job seekers.

Most existing projects concentrate on template-based resume generation, overlooking the crucial aspect of tailoring resumes to meet the demands of applicant tracking systems (ATS) and modern hiring practices. Job seekers are left with little guidance on how effectively their resumes align with industry trends and job requirements.

Smart Vision emerges as a pioneering solution to fill this void by introducing a comprehensive resume analysis system. Leveraging advanced technologies such as Natural Language Processing (NLP), our system goes beyond mere template creation.

The proposed system is not just a resume analyser; it's a career companion that offers actionable advice, course recommendations, and interview tips. Smart Vision aims to revolutionize the job-seeking experience by empowering individuals with the knowledge and tools needed to navigate the intricacies of the digital hiring landscape successfully. In doing so, it sets itself apart as a groundbreaking project in the field of career development.

3. System Design:

Hardware Requirements:

- Processor: Dual-core processor or equivalent
- Memory (RAM): 4 GB or higher
- Storage: 20 GB free disk space
- Internet Connection: Required for online features

Software Requirements:

- Operating System: Windows 10 or macOS
- Web Browser: Latest version of Google Chrome, Mozilla Firefox, or Safari
- Python: Version 3.7 or later
- Frameworks: Install the required Python libraries (specified in the documentation)
- Dependencies: Ensure the installation of necessary dependencies for NLP and image processing modules
- Integrated Development Environment (IDE): Recommended IDEs include PyCharm or Jupyter Notebook

4. Code / Implementation:

App.py:

```
import streamlit as st

import nltk

import spacy

nltk.download('stopwords')

nlp = spacy.load('en_core_web_sm')

import pandas as pd

import base64, random

import time, datetime

from pyresparser import ResumeParser

from pdfminer3.layout import LAParams, LTTextBox

from pdfminer3.pdfpage import PDFPage

from pdfminer3.pdfinterp import PDFResourceManager

from pdfminer3.pdfinterp import PDFPageInterpreter

from pdfminer3.converter import TextConverter

import io, random

from streamlit_tags import st_tags

from PIL import Image

import pymysql

from Courses import ds_course, web_course, android_course, ios_course,
uiux_course, resume_videos, interview_videos

import pafy

13
```

```

import plotly.express as px

import youtube_dl

def fetch_yt_video(link):

    try:

        video = pafy.new(link, ydl_opts={'verbose': True})

        return video.title

    except Exception as e:

        st.error(f"Error fetching video details: {e}")

        return None

def get_table_download_link(df, filename, text):

    csv = df.to_csv(index=False)

    b64 = base64.b64encode(csv.encode()).decode()

    href = f'<a href="data:file/csv;base64,{b64}"'
    download="{filename}">{text}</a>'

    return href

def pdf_reader(file):

    resource_manager = PDFResourceManager()

    fake_file_handle = io.StringIO()

    converter = TextConverter(resource_manager, fake_file_handle,
                              laparams=LAParams())

    page_interpreter = PDFPageInterpreter(resource_manager, converter)

    with open(file, 'rb') as fh:

        for page in PDFPage.get_pages(fh,

                                      caching=True,

                                      check_extractable=True):

```

```

        page_interpreter.process_page(page)

        print(page)

        text = fake_file_handle.getvalue()

    converter.close()

    fake_file_handle.close()

    return text

def show_pdf(file_path):

    with open(file_path, "rb") as f:

        base64_pdf = base64.b64encode(f.read()).decode('utf-8')

        pdf_display = F'<iframe src="data:application/pdf;base64,{base64_pdf}"
width="700" height="1000" type="application/pdf"></iframe>'

        st.markdown(pdf_display, unsafe_allow_html=True)

def course_recommender(course_list):

    st.subheader("**Courses & Certificates 🎓 Recommendations**")

    c = 0

    rec_course = []

    no_of_reco = st.slider('Choose Number of Course Recommendations:',
1, 10, 4)

    random.shuffle(course_list)

    for c_name, c_link in course_list:

        c += 1

        st.markdown(f"({c}) [{c_name}]({c_link})")

        rec_course.append(c_name)

        if c == no_of_reco:

            break

```

```

    return rec_course

connection = pymysql.connect(host='localhost', user='root', password='')

cursor = connection.cursor()

def insert_data(name, email, res_score, timestamp, no_of_pages,
reco_field, cand_level, skills, recommended_skills,

    courses):

    DB_table_name = 'user_data'

    insert_sql = "insert into " + DB_table_name + ""

    values (0,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)""

    rec_values = (

        name, email, str(res_score), timestamp, str(no_of_pages), reco_field,
cand_level, skills, recommended_skills,

        courses)

    cursor.execute(insert_sql, rec_values)

    connection.commit()

st.set_page_config(

    page_title="Smart Vision Resume Analyzer",

    page_icon='Logo\SV.ico',

)

def run():

    st.title("Smart Vision Resume Analyser")

    st.sidebar.markdown("# Choose User")

    activities = ["Normal User", "Admin"]

    choice = st.sidebar.selectbox("Choose among the given options:",
activities)

```



```

img = Image.open('Logo\SV.jpg')

img = img.resize((250, 250))

st.image(img)

db_sql = """CREATE DATABASE IF NOT EXISTS SRA;"""

cursor.execute(db_sql)

connection.select_db("smartvision")

DB_table_name = 'user_data'

table_sql = "CREATE TABLE IF NOT EXISTS " + DB_table_name + """
        (ID INT NOT NULL AUTO_INCREMENT,
        Name varchar(100) NOT NULL,
        Email_ID VARCHAR(50) NOT NULL,
        resume_score VARCHAR(8) NOT NULL,
        Timestamp VARCHAR(50) NOT NULL,
        Page_no VARCHAR(5) NOT NULL,
        Predicted_Field VARCHAR(25) NOT NULL,
        User_level VARCHAR(30) NOT NULL,
        Actual_skills VARCHAR(300) NOT NULL,
        Recommended_skills VARCHAR(300) NOT NULL,
        Recommended_courses VARCHAR(600) NOT NULL,
        PRIMARY KEY (ID));
        """

cursor.execute(table_sql)

if choice == 'Normal User':

    pdf_file = st.file_uploader("Choose your Resume", type=["pdf"])

```

```

if pdf_file is not None:

    save_image_path = './Uploaded_Resumes/' + pdf_file.name

    with open(save_image_path, "wb") as f:

        f.write(pdf_file.getbuffer())

    show_pdf(save_image_path)

    resume_data =
ResumeParser(save_image_path).get_extracted_data()

    if resume_data:

        resume_text = pdf_reader(save_image_path)

        st.header("***Resume Analysis***")

        st.success("Hello " + resume_data['name'])

        st.subheader("***Your Basic info***")

        try:

            st.text('Name: ' + resume_data['name'])

            st.text('Email: ' + resume_data['email'])

            st.text('Contact: ' + resume_data['mobile_number'])

            st.text('Resume pages: ' + str(resume_data['no_of_pages']))

        except:

            pass

        cand_level = ""

        if resume_data['no_of_pages'] == 1:

            cand_level = "Fresher"

            st.markdown('"<h4 style=\'text-align: left; color: #d73b5c;\'>You
are looking Fresher.</h4>"',

                        unsafe_allow_html=True)

```

```

elif resume_data['no_of_pages'] == 2:

    cand_level = "Intermediate"

    st.markdown("""<h4 style='text-align: left; color: #1ed760;'>You
are at intermediate level!</h4>""",

                unsafe_allow_html=True)

elif resume_data['no_of_pages'] >= 3:

    cand_level = "Experienced"

    st.markdown("""<h4 style='text-align: left; color: #fba171;'>You
are at experience level!""",

                unsafe_allow_html=True)

st.subheader("***Skills Recommendation🧐***")

keywords = st_tags(label='### Skills that you have',

                  text='See our skills recommendation',

                  value=resume_data['skills'], key='1')

ds_keyword = ['tensorflow', 'keras', 'pytorch', 'machine learning',
'deep Learning', 'flask',

              'streamlit']

web_keyword = ['react', 'django', 'node js', 'react js', 'php',
'laravel', 'magento', 'wordpress',

              'javascript', 'angular js', 'c#', 'flask']

android_keyword = ['android', 'android development', 'flutter',
'kotlin', 'xml', 'kivy']

ios_keyword = ['ios', 'ios development', 'swift', 'cocoa', 'cocoa
touch', 'xcode']

uiux_keyword = ['ux', 'adobe xd', 'figma', 'zeplin', 'balsamiq', 'ui',
'prototyping', 'wireframes',

               'storyframes', 'adobe photoshop', 'photoshop', 'editing',
'adobe illustrator',

```

```

        'illustrator', 'adobe after effects', 'after effects', 'adobe
premier pro',

        'premier pro', 'adobe indesign', 'indesign', 'wireframe',
'solid', 'grasp',

        'user research', 'user experience']

recommended_skills = []

reco_field = "

rec_course = "

for i in resume_data['skills']:

    if i.lower() in ds_keyword:

        print(i.lower())

        reco_field = 'Data Science'

        st.success("*** Our analysis says you are looking for Data
Science Jobs.**")

        recommended_skills = ['Data Visualization', 'Predictive
Analysis', 'Statistical Modeling',

                                'Data Mining', 'Clustering & Classification',
'Data Analytics',

                                'Quantitative Analysis', 'Web Scraping', 'ML
Algorithms', 'Keras',

                                'Pytorch', 'Probability', 'Scikit-learn',
'Tensorflow', "Flask",

                                'Streamlit']

        recommended_keywords = st_tags(label='###
Recommended skills for you.',

                                        text='Recommended skills generated
from System',

                                        value=recommended_skills, key='2')

```

```

st.markdown(
    """<h4 style='text-align: left; color: #1ed760;'>Adding this
skills to resume will boost🔗 the chances of getting a Job📁</h4>""",
    unsafe_allow_html=True)

rec_course = course_recommender(ds_course)

break

elif i.lower() in web_keyword:

    print(i.lower())

    reco_field = 'Web Development'

    st.success("*** Our analysis says you are looking for Web
Development Jobs ***")

    recommended_skills = ['React', 'Django', 'Node JS', 'React
JS', 'php', 'laravel', 'Magento',

                           'wordpress', 'Javascript', 'Angular JS', 'c#',
'Flask', 'SDK']

    recommended_keywords = st_tags(label='###
Recommended skills for you.',

                                   text='Recommended skills generated
from System',

                                   value=recommended_skills, key='3')

st.markdown(
    """<h4 style='text-align: left; color: #1ed760;'>Adding this
skills to resume will boost🔗 the chances of getting a Job📁</h4>""",
    unsafe_allow_html=True)

rec_course = course_recommender(web_course)

break

elif i.lower() in android_keyword:

```

```

        print(i.lower())

        reco_field = 'Android Development'

        st.success("** Our analysis says you are looking for
Android App Development Jobs **")

        recommended_skills = ['Android', 'Android development',
'Flutter', 'Kotlin', 'XML', 'Java',

                                'Kivy', 'GIT', 'SDK', 'SQLite']

        recommended_keywords = st_tags(label=###
Recommended skills for you.',

                                text='Recommended skills generated
from System',

                                value=recommended_skills, key='4')

        st.markdown(

            '''<h4 style='text-align: left; color: #1ed760;'>Adding this
skills to resume will boost🚀 the chances of getting a Job📁</h4>''',

            unsafe_allow_html=True)

        rec_course = course_recommender(android_course)

        break

    elif i.lower() in ios_keyword:

        print(i.lower())

        reco_field = 'IOS Development'

        st.success("** Our analysis says you are looking for IOS
App Development Jobs **")

        recommended_skills = ['IOS', 'IOS Development', 'Swift',
'Cocoa', 'Cocoa Touch', 'Xcode',

                                'Objective-C', 'SQLite', 'Plist', 'StoreKit', "UI-
Kit", 'AV Foundation',

                                'Auto-Layout']

```

```

recommended_keywords = st_tags(label='###
Recommended skills for you.',

                                text='Recommended skills generated
from System',

                                value=recommended_skills, key='5')

st.markdown(

    '''<h4 style='text-align: left; color: #1ed760;'>Adding this
skills to resume will boost🔗 the chances of getting a Job📁</h4>''',

    unsafe_allow_html=True)

rec_course = course_recommender(ios_course)

break

elif i.lower() in uiux_keyword:

    print(i.lower())

    reco_field = 'UI-UX Development'

    st.success("** Our analysis says you are looking for UI-UX
Development Jobs **")

    recommended_skills = ['UI', 'User Experience', 'Adobe XD',
'Figma', 'Zeplin', 'Balsamiq',

                           'Prototyping', 'Wireframes', 'Storyframes',
'Adobe Photoshop', 'Editing',

                           'Illustrator', 'After Effects', 'Premier Pro',
'Indesign', 'Wireframe',

                           'Solid', 'Grasp', 'User Research']

    recommended_keywords = st_tags(label='###
Recommended skills for you.',

                                text='Recommended skills generated
from System',

                                value=recommended_skills, key='6')

```

```

st.markdown(
    """<h4 style='text-align: left; color: #1ed760;'>Adding this
skills to resume will boost🔗 the chances of getting a Job👛 </h4>""",
    unsafe_allow_html=True)

rec_course = course_recommender(uiux_course)

break

ts = time.time()

cur_date = datetime.datetime.fromtimestamp(ts).strftime('%Y-
%m-%d')

cur_time =
datetime.datetime.fromtimestamp(ts).strftime('%H:%M:%S')

timestamp = str(cur_date + '_' + cur_time)

st.subheader("***Resume Tips & Ideas💡**")

resume_score = 0

if 'Objective' in resume_text:

    resume_score = resume_score + 20

    st.markdown(
        """<h4 style='text-align: left; color: #1ed760;'>[+] Awesome!
You have added Objective</h4>""",
        unsafe_allow_html=True)

    else:

        st.markdown(
            """<h4 style='text-align: left; color: #fab10;'>[-] According to
our recommendation please add your career objective, it will give your
career intension to the Recruiters.</h4>""",
            unsafe_allow_html=True)

        if 'Declaration' in resume_text:

```



```

resume_score = resume_score + 20

st.markdown(

    """<h4 style='text-align: left; color: #1ed760;'>[+] Awesome!
    You have added Declaration🔗/h4>""",

    unsafe_allow_html=True)

else:

    st.markdown(

        """<h4 style='text-align: left; color: #fab10;'>[-] According to
        our recommendation please add Declaration🔗. It will give the assurance
        that everything written on your resume is true and fully acknowledged by
        you</h4>""",

        unsafe_allow_html=True)

    if 'Hobbies' or 'Interests' in resume_text:

        resume_score = resume_score + 20

        st.markdown(

            """<h4 style='text-align: left; color: #1ed760;'>[+] Awesome!
            You have added your Hobbies🎮</h4>""",

            unsafe_allow_html=True)

        else:

            st.markdown(

                """<h4 style='text-align: left; color: #fab10;'>[-] According to
                our recommendation please add Hobbies🎮. It will show your personality to
                the Recruiters and give the assurance that you are fit for this role or
                not.</h4>""",

                unsafe_allow_html=True)

            if 'Achievements' in resume_text:

                resume_score = resume_score + 20

```

```

        st.markdown(
            """<h4 style='text-align: left; color: #1ed760;'+>[+] Awesome!
            You have added your Achievements 🏆 </h4>""",
            unsafe_allow_html=True)
    else:
        st.markdown(
            """<h4 style='text-align: left; color: #fab111;'+>[-] According to
            our recommendation please add Achievements 🏆. It will show that you
            are capable for the required position.</h4>""",
            unsafe_allow_html=True)
    if 'Projects' in resume_text:
        resume_score = resume_score + 20
        st.markdown(
            """<h4 style='text-align: left; color: #1ed760;'+>[+] Awesome!
            You have added your Projects 🧑💻 </h4>""",
            unsafe_allow_html=True)
    else:
        st.markdown(
            """<h4 style='text-align: left; color: #fab111;'+>[-] According to
            our recommendation please add Projects 🧑💻. It will show that you have
            done work related the required position or not.</h4>""",
            unsafe_allow_html=True)
    st.subheader("**Resume Score 📊**")
    st.markdown(
        """
        <style>

```

```

        .stProgress > div > div > div > div {

            background-color: #d73b5c;

        }

</style>""",

    unsafe_allow_html=True,

)

my_bar = st.progress(0)

score = 0

for percent_complete in range(resume_score):

    score += 1

    time.sleep(0.1)

    my_bar.progress(percent_complete + 1)

st.success('** Your Resume Writing Score: ' + str(score) + '**')

st.warning(

    """ Note: This score is calculated based on the content that
    you have added in your Resume. """

)

st.balloons()

insert_data(resume_data['name'], resume_data['email'],
str(resume_score), timestamp,

            str(resume_data['no_of_pages']), reco_field, cand_level,
str(resume_data['skills']),

            str(recommended_skills), str(rec_course))

st.header("**Bonus Video for Resume Writing Tips💡**")

resume_vid = random.choice(resume_videos)

st.video(resume_vid)

```

```

st.header("***Bonus Video for Interview👤👜 Tips💡**")

interview_vid = random.choice(interview_videos)

st.video(interview_vid)

connection.commit()

else:

    st.error('Something went wrong..')

else:

    st.success('Welcome to Admin Side')

    ad_user = st.text_input("Username")

    ad_password = st.text_input("Password", type='password')

    if st.button('Login'):

        if ad_user == 'smart_vision' and ad_password == '5259':

            st.success("Welcome Admin SV")

            cursor.execute("SELECT * FROM user_data")

            data = cursor.fetchall()

            st.header("***User's👤👜 Data**")

            df = pd.DataFrame(data, columns=['ID', 'Name', 'Email',
            'Resume Score', 'Timestamp', 'Total Page', 'Predicted Field', 'User Level',
            'Actual Skills', 'Recommended Skills', 'Recommended Course'])

            st.dataframe(df)

            st.markdown(get_table_download_link(df, 'User_Data.csv',
            'Download Report'), unsafe_allow_html=True)

            query = 'SELECT * FROM user_data;'

            plot_data = pd.read_sql(query, connection)

            labels = plot_data['Predicted_Field'].unique()

```

```

        values = plot_data['Predicted_Field'].value_counts().values

        st.subheader("📊 **Pie-Chart for Predicted Field Recommendations**")

        fig = px.pie(plot_data, values=values, names=labels,
                    title='Predicted Field according to the Skills')

        st.plotly_chart(fig)

        labels = plot_data['User_level'].unique()

        values = plot_data['User_level'].value_counts().values

        st.subheader("📊 **Pie-Chart for User's 🧑🏻💻 Experienced Level**")

        fig = px.pie(plot_data, values=values, names=labels, title="Pie-Chart📊 for User's 🧑🏻💻 Experienced Level")

        st.plotly_chart(fig)

    else:

        st.error("Wrong ID & Password Provided")

run()

```

index.html:

```

<!DOCTYPE html>

<html lang="en">

    <head>

        <meta charset="utf-8" />

        <meta name="viewport" content="width=device-width, initial-scale=1,
        shrink-to-fit=no" />

```

```

<meta name="description" content="" />

<meta name="author" content="" />

<title>Smart Vision</title>

<link rel="icon" type="image/x-icon" href="assets/favicon.ico" />

<link href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.5.0/font/bootstrap-icons.css" rel="stylesheet" />

<link
href="https://fonts.googleapis.com/css?family=Merriweather+Sans:400,70
0" rel="stylesheet" />

<link
href="https://fonts.googleapis.com/css?family=Merriweather:400,300,300it
alic,400italic,700,700italic" rel="stylesheet" type="text/css" />

<link
href="https://cdnjs.cloudflare.com/ajax/libs/SimpleLightbox/2.1.0/simpleLig
htbox.min.css" rel="stylesheet" />

<link href="css/styles.css" rel="stylesheet" />

</head>

<body id="page-top">

<nav class="navbar navbar-expand-lg navbar-light fixed-top py-3"
id="mainNav">

<div class="container px-4 px-lg-5">

<a class="navbar-brand" href="#page-top">Smart Vision</a>

<button class="navbar-toggler navbar-toggler-right"
type="button" data-bs-toggle="collapse" data-bs-
target="#navbarResponsive" aria-controls="navbarResponsive" aria-
expanded="false" aria-label="Toggle navigation"><span class="navbar-
toggler-icon"></span></button>

<div class="collapse navbar-collapse" id="navbarResponsive">

<ul class="navbar-nav ms-auto my-2 my-lg-0">

```

```
        <li class="nav-item"><a class="nav-link"
href="#about">About</a></li>
```

```
        <li class="nav-item"><a class="nav-link"
href="#services">Why us?</a></li>
```

```
        <li class="nav-item"><a class="nav-link"
href="#portfolio">Tech Stack</a></li>
```

```
        <li class="nav-item"><a class="nav-link"
href="#contact">Contact</a></li>
```

```
    </ul>
```

```
  </div>
```

```
</div>
```

```
</nav>
```

```
<header class="masthead">
```

```
  <div class="container px-4 px-lg-5 h-100">
```

```
    <div class="row gx-4 gx-lg-5 h-100 align-items-center justify-
content-center text-center">
```

```
      <div class="col-lg-8 align-self-end">
```

```
        <h1 class="text-white font-weight-bold">Confused about
whether your resume is perfect or not?</h1>
```

```
        <hr class="divider" />
```

```
      </div>
```

```
      <div class="col-lg-8 align-self-baseline">
```

```
        <a class="btn btn-primary btn-xl" href="#about">Find Out
More</a>
```

```
      </div>
```

```
    </div>
```

```
  </div>
```

```

</header>

<section class="page-section bg-primary" id="about">

  <div class="container px-4 px-lg-5">

    <div class="row gx-4 gx-lg-5 justify-content-center">

      <div class="col-lg-8 text-center">

        <h2 class="text-white mt-0">We've got what you
need!</h2>

        <hr class="divider divider-light" />

        <p class="text-white-75 mb-4">At Smart Vision, we
specialize in guiding you through ATS challenges. Our mission is to boost
the visibility of your resume, improving your chances of securing the job
you deserve in today's digital hiring landscape.</p>

      </div>

    </div>

  </div>

</section>

<section class="page-section" id="services">

  <div class="container px-4 px-lg-5">

    <h2 class="text-center mt-0">Things We give you</h2>

    <hr class="divider" />

    <div class="row gx-4 gx-lg-5">

      <div class="col-lg-3 col-md-6 text-center">

        <div class="mt-5">

          <div class="mb-2"><i class="bi-gem fs-1 text-
primary"></i></div>

          <h3 class="h4 mb-2">Course Recommendations</h3>

```


<p class="text-muted mb-0">Assists you in identifying courses that can strengthen your resume.</p>

</div>

</div>

<div class="col-lg-3 col-md-6 text-center">

<div class="mt-5">

<div class="mb-2"><i class="bi-laptop fs-1 text-primary"></i></div>

<h3 class="h4 mb-2">Resume Tips</h3>

<p class="text-muted mb-0">We utilize NLP to analyze and benchmark your resume, generating a detailed assessment.</p>

</div>

</div>

<div class="col-lg-3 col-md-6 text-center">

<div class="mt-5">

<div class="mb-2"><i class="bi-globe fs-1 text-primary"></i></div>

<h3 class="h4 mb-2">Interview tips</h3>

<p class="text-muted mb-0">Looking to excel in your interview and secure your dream job? Look no further – we've got you covered!</p>

</div>

</div>

<div class="col-lg-3 col-md-6 text-center">

<div class="mt-5">

<div class="mb-2"><i class="bi-heart fs-1 text-primary"></i></div>

```

        <h3 class="h4 mb-2">Actionable advice</h3>

        <p class="text-muted mb-0">Personalized guidance on
enhancing your resume.</p>

    </div>

</div>

</div>

</div>

</section>

<div id="portfolio">

    <div class="container-fluid p-0">

        <div class="row g-0">

            <div class="col-lg-4 col-sm-6">

                <a class="portfolio-box"
href="assets/img/portfolio/fullsize/1.jpg" title="">

                    <div class="portfolio-box-caption">

                        <div class="project-category text-white-50"></div>

                        <div class="project-name">NLP</div>

                    </div>

                </a>

            </div>

            <div class="col-lg-4 col-sm-6">

                <a class="portfolio-box"
href="assets/img/portfolio/fullsize/download.png" title="">

```

```

        <div class="portfolio-box-caption">

            <div class="project-category text-white-50"></div>

            <div class="project-name">Python</div>

        </div>

    </a>

</div>

<div class="col-lg-4 col-sm-6">

    <a class="portfolio-box"
href="assets/img/portfolio/fullsize/2.jpg" title="">

        <div class="portfolio-box-caption">

            <div class="project-category text-white-50"></div>

            <div class="project-name">Web Stack</div>

        </div>

    </a>

</div>

</div>

</div>

<div class="page-section bg-dark text-white">

    <div class="container px-4 px-lg-5 text-center">

```

```

        <h2 class="mb-4">Check it Out!</h2>

        <a class="btn btn-light btn-xl" href="http://localhost:8501">Click
Here</a>

    </div>

</section>

<section class="page-section" id="contact">

    <div class="container px-4 px-lg-5">

        <div class="row gx-4 gx-lg-5 justify-content-center">

            <div class="col-lg-8 col-xl-6 text-center">

                <h2 class="mt-0">Let's Get In Touch!</h2>

                <hr class="divider" />

            </div>

        </div>

        <div class="row gx-4 gx-lg-5 justify-content-center mb-5">

            <div class="col-lg-6">

                <form id="contactForm" data-sb-form-api-
token="API_TOKEN">

                    <div class="form-floating mb-3">

                        <input class="form-control" id="name" type="text"
placeholder="Enter your name..." data-sb-validations="required" />

                        <label for="name">Full name</label>

                        <div class="invalid-feedback" data-sb-
feedback="name:required">A name is required.</div>

                    </div>

                    <div class="form-floating mb-3">

```

```
<input class="form-control" id="email" type="email"
placeholder="name@example.com" data-sb-validations="required,email"
/>
```

```
<label for="email">Email address</label>
```

```
<div class="invalid-feedback" data-sb-
feedback="email:required">An email is required.</div>
```

```
<div class="invalid-feedback" data-sb-
feedback="email:email">Email is not valid.</div>
```

```
</div>
```

```
<div class="form-floating mb-3">
```

```
<input class="form-control" id="phone" type="tel"
placeholder="(123) 456-7890" data-sb-validations="required" />
```

```
<label for="phone">Phone number</label>
```

```
<div class="invalid-feedback" data-sb-
feedback="phone:required">A phone number is required.</div>
```

```
</div>
```

```
<div class="form-floating mb-3">
```

```
<textarea class="form-control" id="message"
type="text" placeholder="Enter your message here..." style="height:
10rem" data-sb-validations="required"></textarea>
```

```
<label for="message">Message</label>
```

```
<div class="invalid-feedback" data-sb-
feedback="message:required">A message is required.</div>
```

```
</div>
```

```
<div class="d-none" id="submitSuccessMessage">
```

```
<div class="text-center mb-3">
```

```
<div class="fw-bolder">Form submission
successful!</div>
```

```
To activate this form, sign up at
```

```

        <br />

        <a href="https://startbootstrap.com/solution/contact-forms">https://startbootstrap.com/solution/contact-forms</a>

    </div>

</div>

    <div class="d-none" id="submitErrorMessage"><div class="text-center text-danger mb-3">Error sending message!</div></div>

    <div class="d-grid"><button class="btn btn-primary btn-xl disabled" id="submitButton" type="submit">Submit</button></div>

</form>

</div>

</div>

<div class="row gx-4 gx-lg-5 justify-content-center">

    <div class="col-lg-4 text-center mb-5 mb-lg-0">

        <i class="bi-phone fs-2 mb-3 text-muted"></i>

        <div>+91 7801123549</div>

    </div>

</div>

</div>

</div>

</section>

<footer class="bg-light py-5">

    <div class="container px-4 px-lg-5"><div class="small text-center text-muted">Mini Project - Spoorti Vamsi</div></div>

</footer>

<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js"></script>

```

```
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/SimpleLightbox/2.1.0/simpleLigh  
tbox.min.js"></script>
```

```
<script src="js/scripts.js"></script>
```

```
<script src="https://cdn.startbootstrap.com/sb-forms-  
latest.js"></script>
```

```
</body>
```

```
</html>
```

5. Results / Screenshots:

Front page:

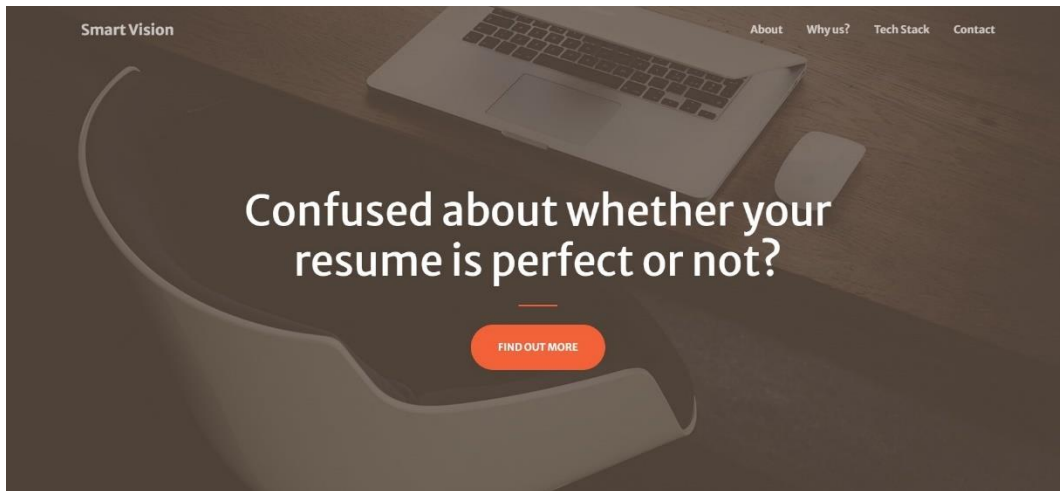


Fig. 6.1

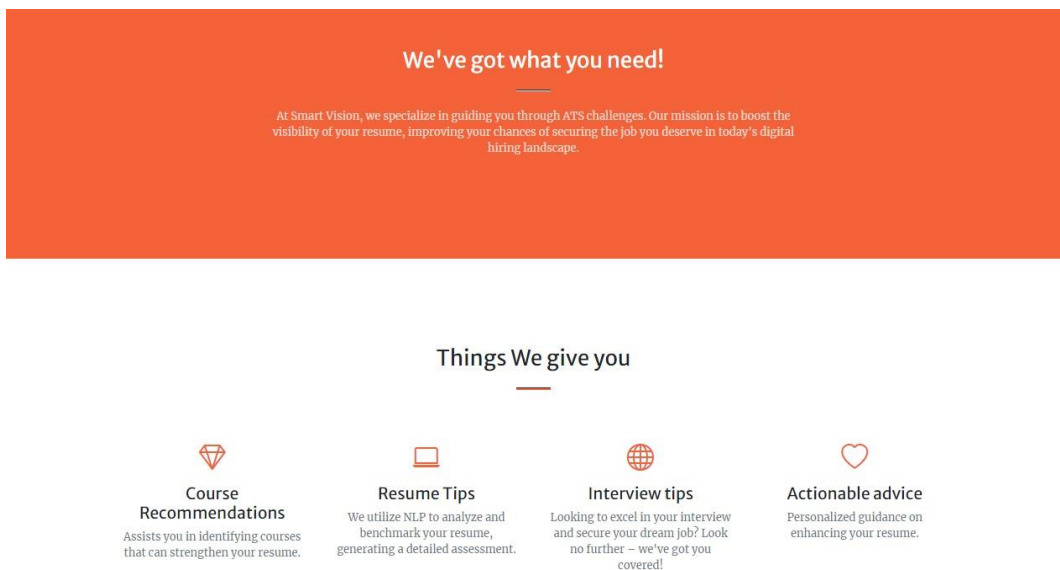


Fig 6.2

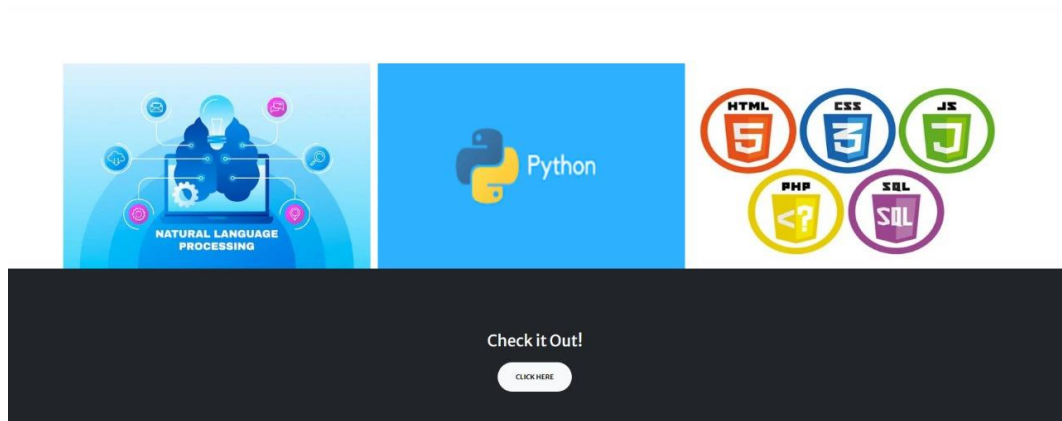



Fig 6.3

Let's Get In Touch!


+91 7801123549

Mini Project - Spoorti Vamsi

Fig 6.4

User Page:

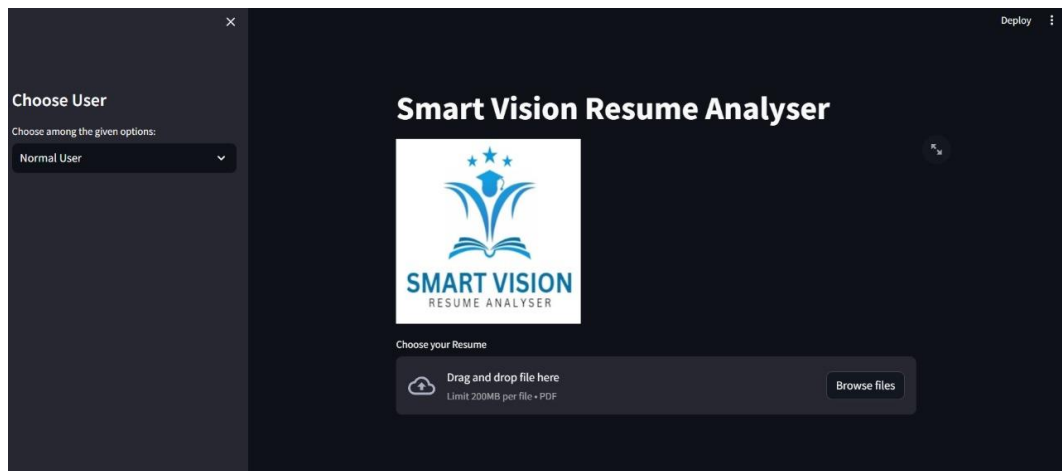


Fig 6.5

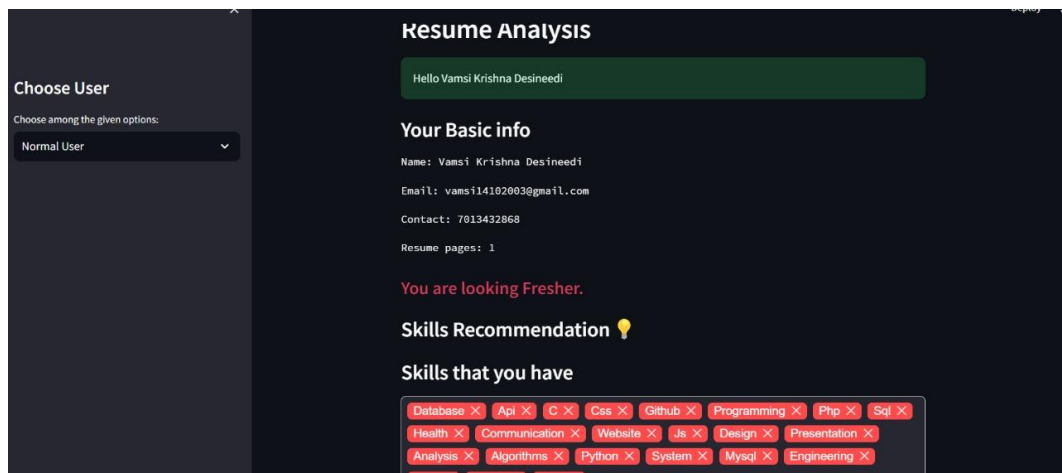


Fig 6.6

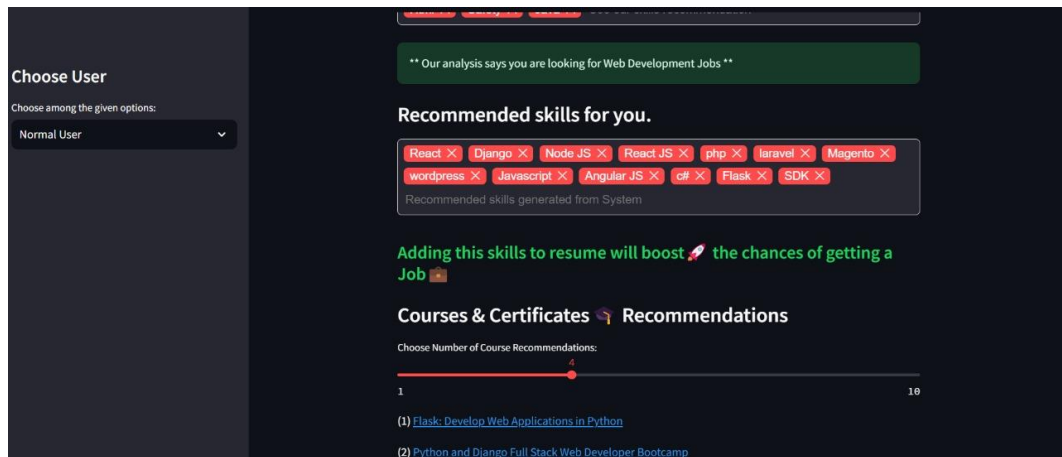


Fig 6.7

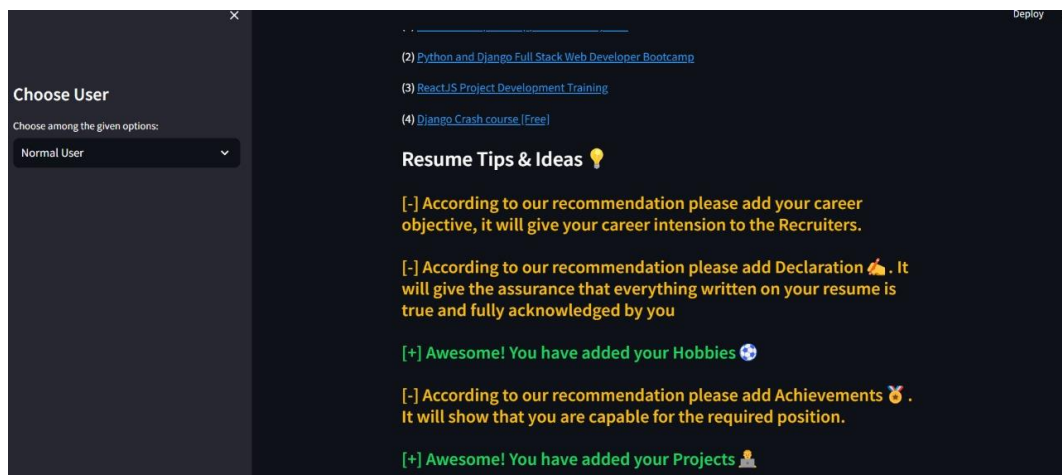


Fig 6.8



Fig 6.9

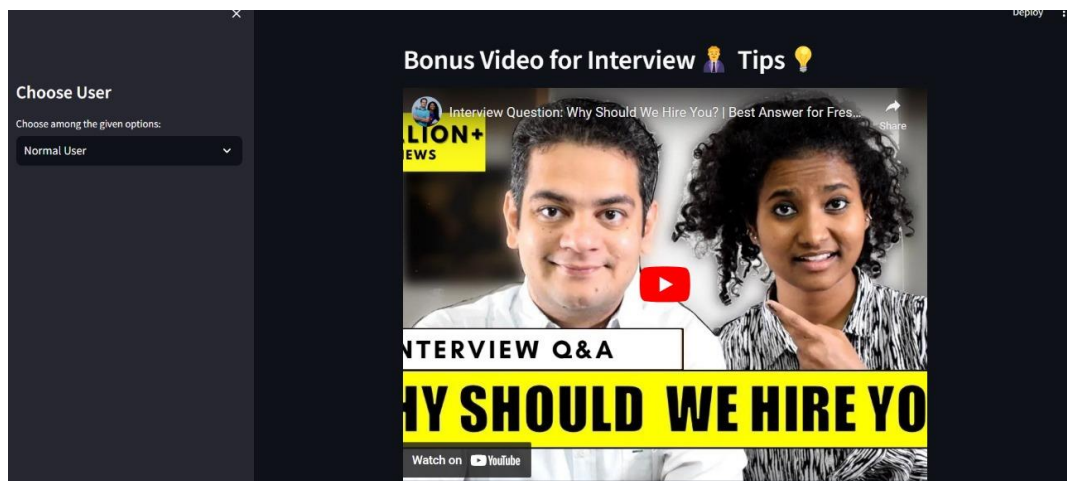


Fig 6.10

Admin Side:



Fig 6.11

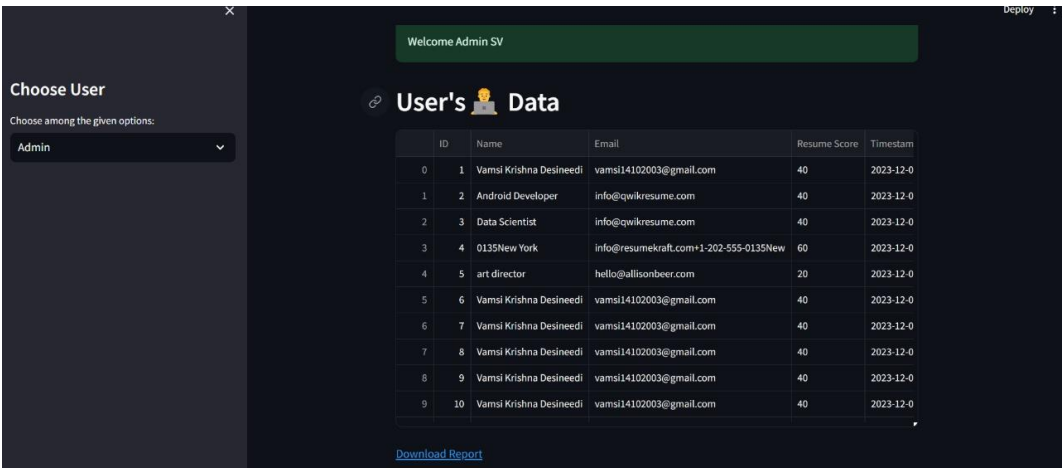


Fig 6.12

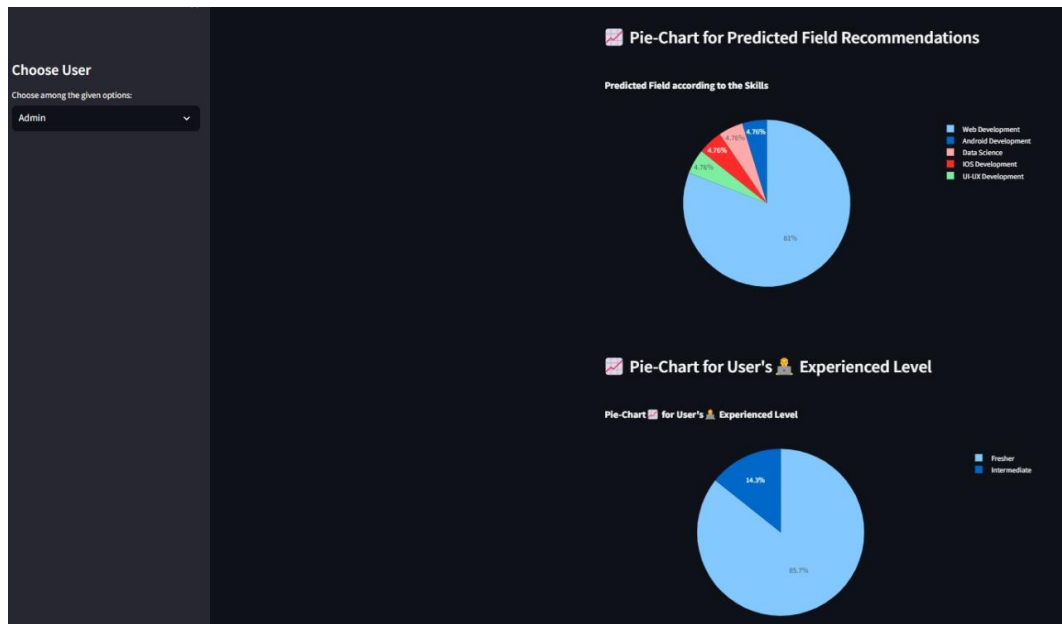


Fig 6.13

User_Data.csv - Excel														
Vamsi Krishna														
Tell me what you want to do														
File Home Insert Page Layout Formulas Data Review View Help														
Calibri 11 A A Wrap Text														
B U Font Merge & Center Alignment Number General Conditional Formatting Styles Cell Styles Insert Delete Format Cells Sort & Find Filter Select Add-ins														
A1														
ID	Name	Email	Resume Size	Timestamp	Total Page	Predicted User Level	Actual Skill	Recommended Course						
1	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['C', 'Prese', 'React', 'C']	Front End Web Developer by Udacity	'Django Crash course [Free]', 'Node.js and Express.js [Free]				
2	Android D	info@qwil	40	2023-12-0	2	Android D	Intermedi	['Cloud', 'Y', 'Android']	Building an Android App with Architecture Components	'Android Development for Beginners [Free]				
3	Data Scien	info@qwil	40	2023-12-0	2	Data Scien	Intermedi	['Analytics', 'Data Visi', 'Introduction to Data Science', 'Data Scientist Master Program of Simplilearn (IBM)', 'Machine Learning for Data Scientists']						
4	0135New	info@resu	60	2023-12-0	2	iOS Deve	Intermedi	['Soap', 'Itr', 'iOS', 'IOS']	Objective-C Crash Course for Swift Developers	'Mobile App Development with Swift', 'Learn Swift'				
5	5 art direct	hello@ailli	20	2023-12-0	1	UI-UX Dev	Fresher	['Photosh', 'UI', 'User']	The Complete App Design Course - UX, UI and Design Thinking	'Adobe XD Tutorial: User Experience Design'				
6	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['Html', 'H', 'React', 'C']	Node.js and Express.js [Free]	'Become a React Developer by Udacity', 'Full Stack Web Developer by Udacity'				
7	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['Html', 'H', 'React', 'C']	React Crash Course [Free]	'Full Stack Web Developer - MEAN Stack', 'Python and Django Full Stack Web Developer Bootcamp'				
8	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['Health', 'I', 'React', 'C']	Python and Django Full Stack Web Developer Bootcamp	'Full Stack Web Developer - MEAN Stack', 'Full Stack Web Developer by Udacity'				
9	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['Health', 'I', 'React', 'C']	Python and Django Full Stack Web Developer Bootcamp	'Full Stack Web Developer by Udacity', 'Full Stack Web Developer - MEAN Stack'				
10	Vamsi Kris	vamsi141c	40	2023-12-0	1	Web Deve	Fresher	['Github', 'I', 'React', 'C']	Full Stack Web Developer - MEAN Stack	'React Crash Course [Free]', 'Become a React Developer by Udacity'				
11	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Php', 'Alg', 'React', 'C']	ReactJS Project Development Training	'Full Stack Web Developer by Udacity', 'React Crash Course [Free]				
12	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Php', 'C', 'I', 'React', 'C']	React Crash Course [Free]	'Become a React Developer by Udacity', 'Node.js and Express.js [Free]				
13	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Php', 'C', 'I', 'React', 'C']	Django Crash course [Free]	'Full Stack Web Developer - MEAN Stack', 'React Crash Course [Free]				
14	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Js', 'Algo', 'React', 'C']	ReactJS Project Development Training	'Node.js and Express.js [Free]', 'Front End Web Developer by Udacity'				
15	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Js', 'Algo', 'React', 'C']	Full Stack Web Developer - MEAN Stack	'Flask: Develop Web Applications in Python', 'Django Crash Course [Free]				
16	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Js', 'Algo', 'React', 'C']	Django Crash course [Free]	'React Crash Course [Free]', 'Front End Web Developer by Udacity'				
17	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Python', 'I', 'React', 'C']	Front End Web Developer by Udacity	'React Crash Course [Free]', 'Full Stack Web Developer - MEAN Stack'				
18	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Website', 'I', 'React', 'C']	Django Crash course [Free]	'Front End Web Developer by Udacity', 'Full Stack Web Developer - MEAN Stack'				
19	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Website', 'I', 'React', 'C']	Flask: Develop Web Applications in Python	'Full Stack Web Developer - MEAN Stack', 'ReactJS Project Development Training'				
20	Vamsi Kris	vamsi141c	40	2023-12-1	1	Web Deve	Fresher	['Java', 'Cs', 'React', 'C']	Flask: Develop Web Applications in Python	'React Crash Course [Free]', 'Full Stack Web Developer - MEAN Stack'				
User Data														

Fig 6.14 Data That Is Stored

6. Conclusion:

In the culmination of our mini project, Smart Vision stands as a testament to innovation in career development. This resume enhancement tool not only addresses the challenges posed by Applicant Tracking Systems (ATS) but also provides users with invaluable insights into refining their professional profiles. The amalgamation of Natural Language Processing (NLP) and intelligent analysis of resumes empowers individuals to optimize their job applications effectively.

Smart Vision's multifaceted approach, encompassing course recommendations, resume tips, interview guidance, and personalized advice, ensures a comprehensive strategy for career success in the digital era. The inclusion of technologies like NLP, Python, and web stack further highlights our commitment to staying at the forefront of advancements in the tech landscape.

As we conclude this project, we envision Smart Vision as a valuable asset for job seekers, enabling them to navigate the complexities of modern hiring processes with confidence. This endeavour has not only expanded our technical skills but has also ignited a passion for creating solutions that make a tangible impact on individuals' professional journeys. Smart Vision represents our dedication to innovation, learning, and contributing to the evolving landscape of career development tools.

Future Scope:

Looking ahead, Smart Vision is poised for continuous evolution, with an exciting future scope that aims to revolutionize the job application process further. Our vision includes implementing a dynamic feature where users can input specific job descriptions, and Smart Vision, leveraging advanced algorithms and machine learning, will provide tailored recommendations to enhance their resumes.

This enhancement goes beyond general advice, offering personalized insights aligned with the intricacies of the desired role. Users will receive targeted suggestions to optimize their resumes, ensuring alignment with industry trends and specific employer expectations. Additionally, Smart Vision will extend its support by providing tailored preparation tips, aiding users in gearing up for interviews associated with their chosen job profiles.

This ambitious expansion aligns with our commitment to continually empower users in their career pursuits. By incorporating a more personalized and dynamic dimension, Smart Vision aspires to become an indispensable companion for individuals navigating the competitive job market, offering guidance that is not only comprehensive but also uniquely tailored to their professional aspirations.

7. References:

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