
CAPSTONE PROJECT

AI RESUME & PORTFOLIO BUILDER

Presented By:

- 1. Student Name - Srinidhi Aganti**
- 2. College Name - Pragati Engineering College**
- 3. Department - CSE**

OUTLINE

- **Problem Statement** (Should not include solution)
- **Proposed System/Solution**
- **System Development Approach** (Technology Used)
- **Algorithm & Deployment**
- **Result**
- **Conclusion**
- **Future Scope**
- **References**

PROBLEM STATEMENT

- Many students struggle to present their skills and projects in an attractive, professional format.
- Generic resume templates don't highlight individual strengths.
- A generative AI solution is needed that can automatically generate tailored resumes, cover letters, and portfolios based on student data, improving job and internship opportunities.

PROPOSED SOLUTION

- The proposed system is an **AI-powered Resume & Portfolio Builder** that:
- Collects structured user information
- Generates ATS-optimized resumes
- Creates personalized cover letters
- Builds digital portfolio content
- Suggests improvements based on job role
- Exports resumes in PDF/DOCX format
- The system ensures professional formatting, keyword enhancement, and customization for different job roles.

SYSTEM APPROACH

Technology Used :

- **Frontend:** Streamlit (for creating the user interface)
- **Backend:** Python (for processing data and application logic)
- **AI Model:** OpenAI API / Hugging Face (for generating resume content)
- **Resume Formatting:** python-docx / PDF libraries
- **Version Control:** GitHub
- **Deployment:** Streamlit Cloud

ALGORITHM & DEPLOYMENT

Algorithm Steps

- User enters academic & professional details
- System preprocesses and structures input data
- AI model generates resume content
- Keyword optimization based on job role
- Resume formatted into professional template
- Export file generated (PDF/DOCX)

Deployment

- Hosted on Streamlit Cloud
- Source code maintained on GitHub
- Public access via deployment link

RESULT

- Successfully generates professional resumes within seconds
- Improves ATS compatibility
- Creates customized cover letters
- Enhances presentation of projects and skills
- User-friendly and efficient system
- The system significantly reduces resume preparation time.

CONCLUSION

- The AI Resume & Portfolio Builder simplifies resume creation using generative AI techniques.
- It enhances employability by generating professional, tailored, and ATS-optimized resumes.
- The system bridges the gap between student skills and recruiter expectations.

FUTURE SCOPE

- LinkedIn profile auto-optimization
- AI-based interview question generator
- Resume analytics & performance scoring
- Multi-language resume generation
- Direct integration with job portals
- Industry-specific resume customization

REFERENCES

Hugging Face – The AI community building the future.

Streamlit • A faster way to build and share data apps

Welcome to Python.org

1. Supervised learning — scikit-learn 1.8.0
documentation

GITHUB LINK

- ***Github Link*** : <https://github.com/SrinidhiAganti/AI-RESUME-PORTFOLIO-BUILDER.git>
- ***Deployment Link:***
<https://ai-resume-portfolio-builder-tapptyqgafxqvlqgkagvvakm.streamlit.app/>



THANK YOU