

ResumeEnhancer - AI-Powered Resume Optimization

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Elevate Your Data Career with **ResumeEnhancement** App!



Project Overview

- **Overview:**
 - AI-powered system to optimize resumes based on current job market demands.
 - Focus areas:
 - Web scraping
 - Machine learning
 - Resume generation
 - End goal: Help job seekers enhance resumes for better market alignment.



Key Objectives

1. Data Collection: Scrape job postings from SimplyHired.
2. Data Processing: Analyze key skills and trends.
3. Model Development: Train ML models on job descriptions.
4. Resume Enhancement: Generate optimized resumes.
5. User Interface: Build an easy-to-use platform for users.



Key Tasks and Procedure

- Web Scraping:
 - Collect data (job titles, skills, experience).
 - Store results in CSV files for analysis.
- Data Cleaning:
 - Handle missing values, extract key features.
- ML Model Development:
 - Use NLP for pattern recognition and text classification.
 - Supervised and unsupervised learning techniques.



Tools and Technologies

Technologies:

- Web Scraping: Selenium
- Data Processing: Pandas
- Machine Learning: Scikit-learn, TensorFlow
- NLP: BERT NER
- Web Framework: Gradio

Data:

- 1,000+ job postings from SimplyHired
- Job titles, skills, experience levels, job descriptions



Resume Enhancement System

- **System Features:**
 - Parse and analyze input resumes.
 - Compare resumes against job market trends.
 - Suggest changes and enhancements based on ML model outputs.
 - Template-driven resume formatting.



Expected Outcomes

1. Functional web scraper for job data collection.
2. Trained ML model analyzing job requirements.
3. Resume enhancement system providing tailored suggestions.
4. Deploy via Hugging Face w/ user-friendly interface for job seekers.
5. Improved job application success rates for users.



Web App Live Demo

Running

Resume Enhancement Tool



Resume Enhancement Tool

Upload your resume and specify a job title to optimize your resume for that position.

Upload your resume (Word or PDF)



Drop File Here

- or -

Click to Upload

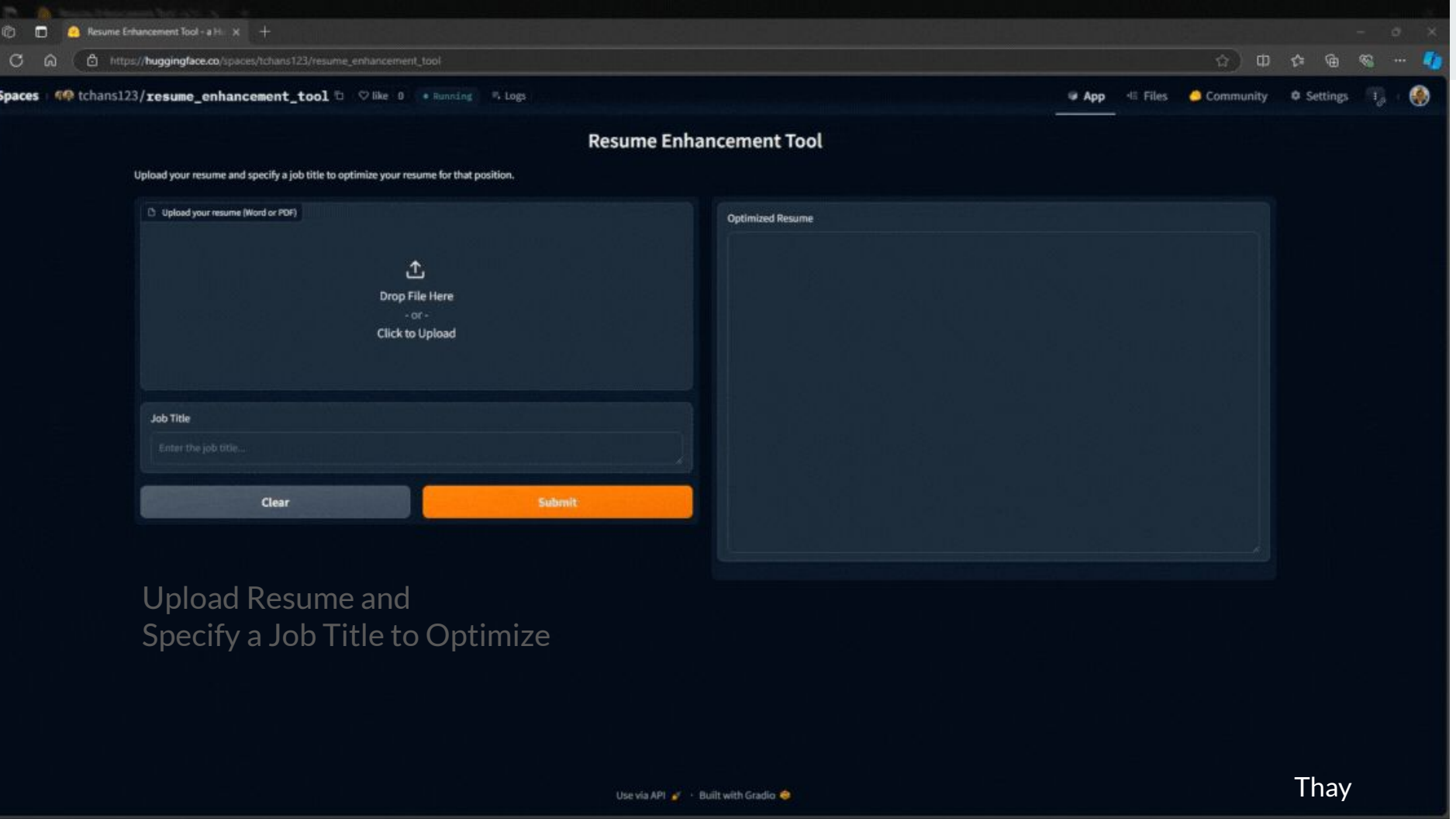
Job Title

Enter the job title...

Clear

Submit

Optimized Resume



Upload your resume and specify a job title to optimize your resume for that position.

Upload your resume (Word or PDF)

Drop File Here
- OR -
Click to Upload

Job Title

Enter the job title...

Clear Submit

Optimized Resume

Upload Resume and
Specify a Job Title to Optimize

Questions?

