

Project 71: Cover Letter Generator

Description:

This smart assistant writes personalized, professional, and compelling cover letters tailored to the job, company, and your experience. Just input a job title, description, and your background—it handles the rest.

cover_letter_generator.py

```
import openai
import os
import gradio as gr

# Load the OpenAI API Key securely
openai.api_key = os.getenv("OPENAI_API_KEY")

# Function to generate a custom cover letter
def generate_cover_letter(job_title, job_description, user_background):
    # Prompt the AI to act like a career writing coach
    messages = [
        {
            "role": "system",
            "content": (
                "You are a professional career assistant helping write personal cover letters."
                "Use the job title and description to align the candidate's background with the job requirements."
                "The letter should have an intro, skills paragraph, alignment paragraph, and a closing."
            )
        },
        {
            "role": "user",
            "content": (
                f"Job Title: {job_title}\n"
                f"Job Description: {job_description}\n"
                f"My Background: {user_background}"
            )
        }
    ]
```

```

try:
    # Generate the letter using OpenAI
    response = openai.ChatCompletion.create(
        model="gpt-3.5-turbo",
        messages=messages
    )

    return response["choices"][0]["message"]["content"].strip()

except Exception as e:
    return f"Error: {str(e)}"

# Gradio UI
iface = gr.Interface(
    fn=generate_cover_letter,
    inputs=[
        gr.Textbox(label="Job Title (e.g. Software Engineer, Marketing Manager)",
        gr.Textbox(label="Paste Job Description"),
        gr.Textbox(label="Your Background (skills, experience, achievements)"),
    ],
    outputs="text",
    title="📄 Cover Letter Generator",
    description="Provide the job info and your background—I'll generate a comp
)

# Launch the cover letter writer
iface.launch()

```