# 📘 AI-Powered YouTube Script & Thumbnail Generator

🎓 Prompt Engineering Internship Project Documentation

Niche: Deepfakes & Cyber Ethics Explained Simply

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Final Output: Fully AI-generated YouTube video (Script + Voice + Visuals + Music + Edit)

## ✅ Project Overview

This project showcases how AI tools and well-structured prompt chains can be used to create an entire YouTube video from scratch. The focus was on breaking down a complex creative workflow into modular prompt-based tasks.

## 🛠️ Tools Used

|  |  |
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| Tool | Purpose |
| ChatGPT | Scriptwriting & Prompt Generation |
| ElevenLabs | AI Voiceover Generation |
| Leonardo AI / DALL·E | Scene-Based Image Generation |
| PromeAI / PixVerse | Image-to-Video Animation |
| Pixabay | Royalty-Free Background Music |
| Canva | Final Video Editing |
| YouTube | Video Display |
| Word / Notion | Prompt Chain Documentation |

## 🔗 Prompt Chain Documentation

### 🔹 1. Niche Selection & Script Generation – ChatGPT

Prompt 1:  
Write a 4–5 minute YouTube script based on the niche "Deepfakes & Cyber Ethics Explained Simply". Use a single narrator and write in an engaging, educational style.

Prompt 2 (Refined):  
Structure the script into scenes, use modern examples, and keep it beginner-friendly. Maintain paragraph-style delivery with no back-and-forth dialogues.

🎯 Output: Final 5-minute script broken into 6 scenes

### 🔹 2. AI Voiceover – ElevenLabs

Script uploaded to ElevenLabs and converted into a realistic voiceover using a professional, neutral-toned AI voice model. No specific prompt required; used intuitive interface.

### 🔹 3. Scene-Based Image Generation – Leonardo AI / DALL·E

Scene 1 – Intro:  
Prompt: A hyper-realistic 3D image of a young person watching a shocking video on their phone, glowing neon light on their face, digital glitch effects in the background.

Scene 2 – What is a Deepfake?:  
Prompt: Split face of a human: one side real, one side glitching with digital distortion. Background shows matrix-like data lines. Neon blue and red tones.

Scene 3 – Spotting the Fakes:  
Prompt: Face glitching with mismatched lip-sync and robotic eyes, surrounded by red error icons. Blurry jawline, vibrant digital glitch effects.

Scene 4 – The Misinformation Problem:  
Prompt: A fictional newsroom showing chaotic glitchy media feeds, AI avatars on distorted screens, social media reaction icons, and warning signs in red. Hyper-realistic crowd.

Scene 5 – Ethics of AI:  
Prompt: A symbolic forked road in a digital world: one path glowing green marked 'Responsible AI', another path flickering red marked 'Manipulation'. A person stands deciding.

Scene 6 – Final Call to Action:  
Prompt: A confident young adult facing a digital wall with glowing text: 'Think Before You Share'. Background shows matrix code and calm blue hues.

Scene 7 – Thumbnail:  
Prompt: "A cinematic YouTube thumbnail showing a hyper-realistic human face split vertically — one side a normal human face, the other side a glitching AI-generated face with digital artifacts, pixel distortion, and matrix-like green code. The background is dark with neon lighting (blue and red glow). Bold text in the center reads 'Can You Tell It's FAKE?' in large, futuristic font. The image should be colorful, 3D, sharp, and stylized like a viral tech thumbnail."

### 🔹 4. Animation of Static Images – PromeAI / PixVerse

Prompt (applied via UI or textbox):  
Convert static AI images into animated scenes with glitch effects, parallax movement, subtle facial motions, and flowing digital light overlays. Maintain cinematic 3D style.

### 🔹 5. Background Music – Pixabay

Search Query Prompt:  
Futuristic ambient background music, cinematic and minimal, with light tech-inspired tension and hopeful undertones. Royalty-free.

### 🔹 6. Final Editing – Canva

Imported:  
- AI voiceover  
- Animated visuals  
- Background music  
Then:  
- Synced visuals to audio  
- Added transitions and overlay text (e.g., “Subscribe”, “Stay Smart”)  
- Rendered final HD video

### 🔹 7. Video Uploading- Youtube

🎬 Finally, the video was uploaded to YouTube along with the thumbnail image generated using Leonardo.AI.

## 🎁 Final Deliverables

|  |  |
| --- | --- |
| Asset | Format |
| 📜 Video Script | Text (.txt / .docx) |
| 🔊 Voiceover | Audio (.mp3) |
| 🖼️ Scene Images | Image (.png / .jpg) |
| 🎞️ Animated Scenes | Video Clips (.mp4) |
| 🎶 Music | Audio (.mp3) |
| 📽️ Final Video  📜 Prompt Chain Documentation  (provided in word file/notion format) | Full video (.mp4) edited via Canva |