

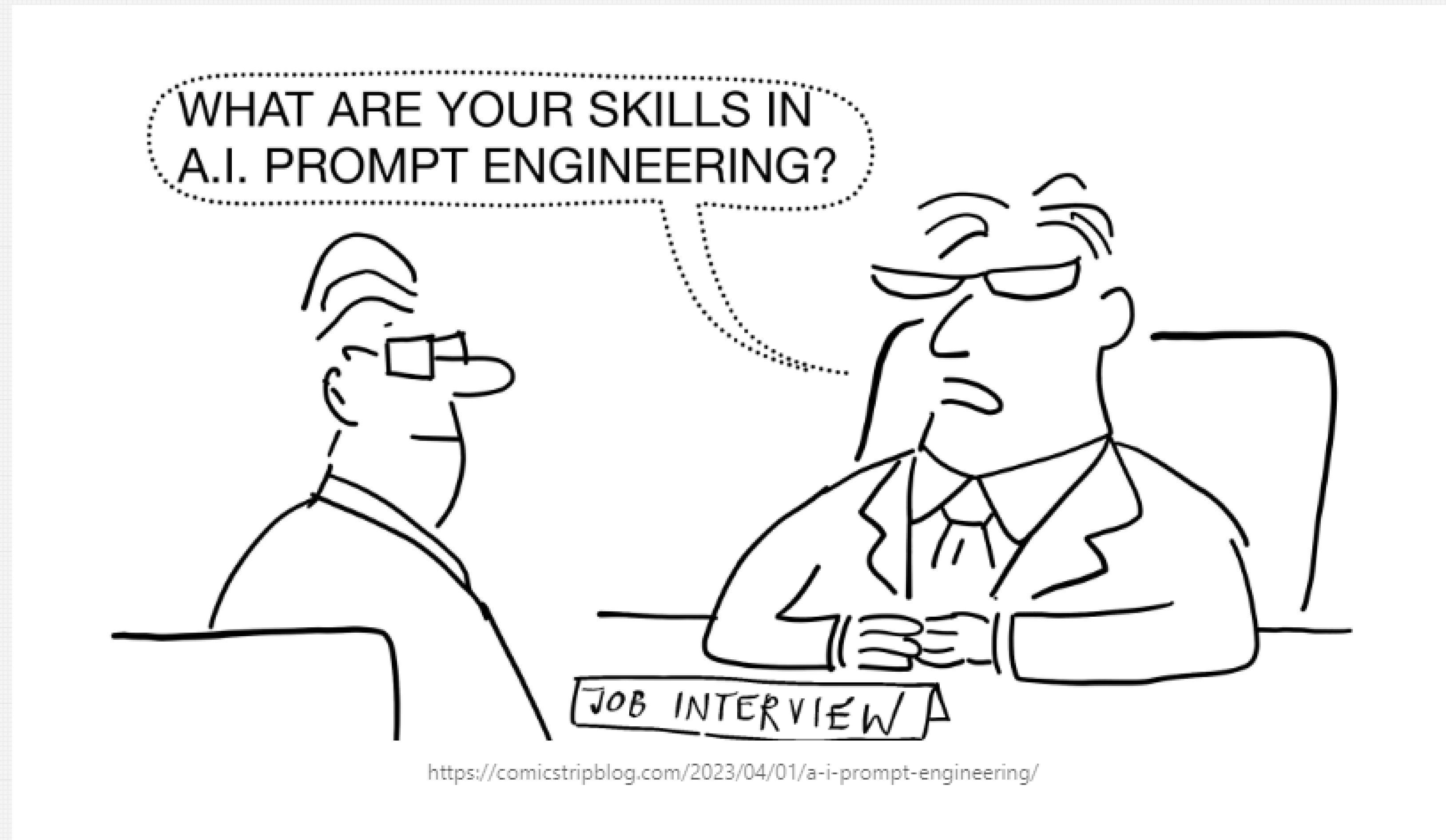
100xEngineers

Lecture 03

Prompt Engineering

What is Prompt Engineering?

Is Prompt Engineering a career?







**AI IS A
BETTER PROMPT
ENGINEER THAN YOU**





Basics of **Prompting** Image Models

- Subject
- Style
- Medium/Composition
- Lighting & Colour
- Camera
- Additional Detailing

1. Subject



- Can be a person, animal, bird, object, etc
- Can be a person holding a bird as well.
- Be as clear as you can be.

Prompt: a black and white portrait of Indian grandparents standing side by side

2. Style



- Artistic styles : Pop-art, Synthwave, Steampunk, Poster Art
- Artists : Van Gogh, Wes Anderson
- Genres : Fantasy, Photorealistic

Prompt: Zombies taking over an urban cityscape in the style of pop art-inspired illustrations, 32k uhd, gadgetpunk, dark, synthwave, frightening

3. Medium/ Composition



- Oil Painting, Watercolour, Graffiti, Chalk, Pencil Drawing, Clay Art

Prompt: an oil painting of Deepika Padikone holding a fruit, in the style of Van Gogh,

4. Lighting & Colour



- Lighting - Studio lighting, neon lighting, warm lighting, cool lighting, cinematic, ambient lighting
- Colour - Iridescent gold, duotone, black n white, monochrome, vintage

Prompt: a woman in a protective gear and an elaborate flower, in the style of cyberpunk futurism, portraits with soft lighting, 32k uhd, kitsch aesthetic, shot on 70mm, neo-pop sensibility, honeycore

5. Camera



- Device - Black magic, Red, Fujifilm, Polaroid.
- Lens - 35mm, Wide-angle, Fish-eye
- Shot - Close-up, portrait shot, panoramic, POV, top-view, side-view

Prompt: will smith doing pooja for ganesh chaturthi,
Kodak Ultra F9 35mm Film Camera

6. Additional Detail



- Styles - Isometric assets, Low-poly
- Resolution - Hyper Realistic, 4K, UHD, HDR, highly detailed
- Emotions - Cosy, nostalgic, morose, romantic

Prompt: editorial style, 35mm still, tom cruise in manyavar ethnic clothes in a garden, misty, bloomcore classicism, dreamwave romance, 4k, 8k, unreal engine 5, octane render

Example



The Prompt

An astronaut on the moon holding an Indian flag, in the centre of the frame, in the style of cyberpunk futurism, portraits with soft lighting, 32k uhd, kitsch aesthetic, shot on 70mm, neo-pop sensibility, honeycore --ar 47:64 --v 6.0

Subject - An astronaut on the moon holding an Indian flag

Style - cyberpunk futurism

Composition - in the centre of the frame

Lighting -soft lighting

Camera/Lens - Shot on 70mm

Additional Details - neo-pop sensibility, honeycore

7. Negative Prompts



- Basics - Distorted, disfigured, ugly, blurred, overexposed, underexposed, tiling, bad anatomy,
- Use opposites of positive prompts like cartoon for photo-realistic pics

Prompt: a woman wearing a superman outfit, digital painting, pop art style, art by greg rutkowski

Negative prompt - ugly, deformed, noisy, blurry, distorted, out of focus, bad anatomy, extra limbs, poorly drawn face, poorly drawn hands, missing fingers

How to Prompt?

- Prompting is iterative
- Start with only subject, style and medium
- Generate 4 or 5 variants
- Assess and add more prompt parameters
- Add negative prompting

Advanced Prompting

- 1. Prompt Weights**
- 2. Blending**
- 3. CFG Scale**

How to use Prompt Weights

() to increase weight and **[]** to decrease weight

Usage :

(keyword:values between 1-2) OR increase number of paratheses

(keyword: 1.1) = (keyword)

(keyword: 1.21) = ((keyword))

(keyword: 1.33) = (((keyword))))

How to use Prompt Weights

Similarly

[keyword:values between 0 -1] OR
increase number of square brackets

[keyword: 0.9] = [keyword]
[keyword: 0.81] = [[keyword]]
[keyword: 0.73] = [[[keyword]]]

Blending

[keyword 1: keyword 2 : factor between 0-1]

Factor control which step of generation it starts bringing in keyword 2
Alternatively you can blend more like this...

(keyword 1:weight 1), (keyword 2:weight 2), (keyword 3:weight 3)

BREAK

**Use BREAK to avoid mix ups if there are multiple items in their own unique
colours**

Checkpoints

Use Checkpoints for narrowing on artistic styles and customizations rather than plain prompting.

Some Resources

- <https://mockey.ai/blog/stable-diffusion-prompts-guide/>
- <https://promptgen.vercel.app/>
- <https://promphero.com/>
- <https://cdn.openart.ai/assets/Stable%20Diffusion%20Prompt%20Book%20From%20OpenArt%2010-28.pdf>
- <https://github.com/AUTOMATIC1111/stable-diffusion-webui/wiki/Features#prompt-editing>