Lect #06
Diffusion Model (generize)

Stable Diffusion (particular model)
↳ (Text - to - Image)

Prompt → شامل کرنا
negative prompt → شامل نہ کرنا
↳ exclude

Diffusion Model ⟶ Technical development
⟍ image generation skill

comes under computer vision domain

- نقاط كا مطلب (intensity) بس تقی intensity كا فرق
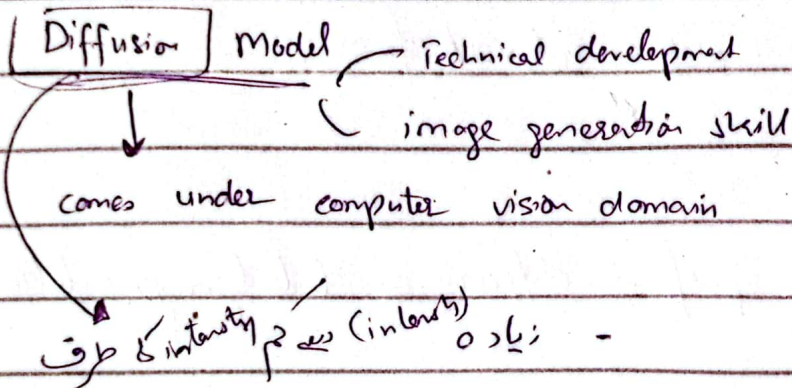
// generate image
iterating prompts

⟹ generaty image from random noise

Picture --- noise --- noise --- ⟹ only (noise)
remaing noise --- remaing noise ی
Picture

- Noising the image forward picture
  ↳ (noise refers to unwanted information that
     disrupts clarity & accuracy)
- de-Noising the image backward process

each pixel R,G,B
→ adding valus infact cotti in chase 3
channels

image → pixels →

(1024 x 1024) Pixel

پھر 3 یہ Pixel p

diffusion کو اگر اس (Picture) کریں تو
اتنا computational resource

⇒ [latency]

latent representation ⇒ picture into vector form

(hidden) چھپا دیں

Latent diffusion ⇒ perform diffusion on latent representation

⇒ [Prompt to Image]
⤷ prompt latent representation

when we add/remove noise
⤷ unit time
⤷ cosine representation

⇒ Stable Diffusion
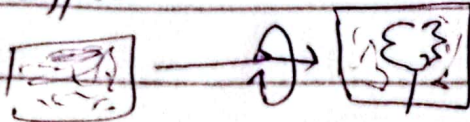
جب کہ noise کی تہہ کی نیچے پکڑ لیں گے پھر وہ روم
کہ latent representation کی تہہ چھپا گیا نکالیں گے
اس پر ہم 2 لگا کر نیچے کریں گے اس
پر پھر کہ Guided noise removal

Prompt Example

- 👤 highly skilled about Needs manger
  90%.   " Selling Skill "

- 👤 30% skill but a great manger

ای ہے سیر شٹا تو سوا تو اس کا ہے کچھ انداز

> 1) Domain Communicabio
> Domain Related vocabulary