Text-To-Image

OPEN PROGRAM

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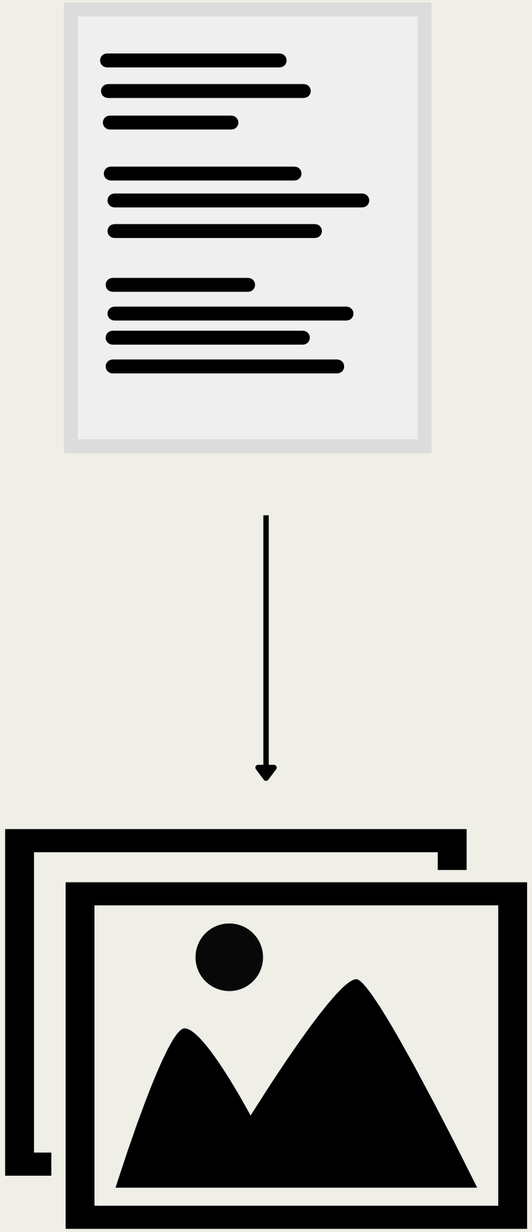
Goal: Learn more about text-to-image

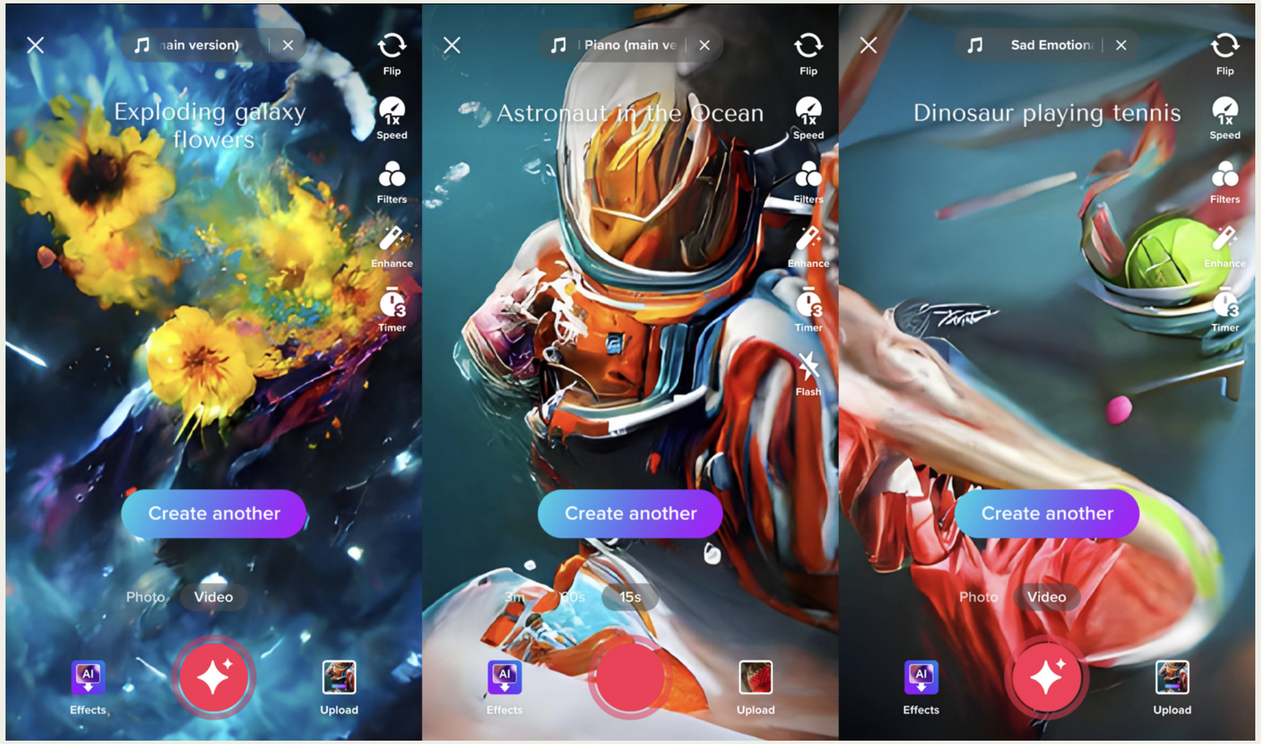


WHAT I DID

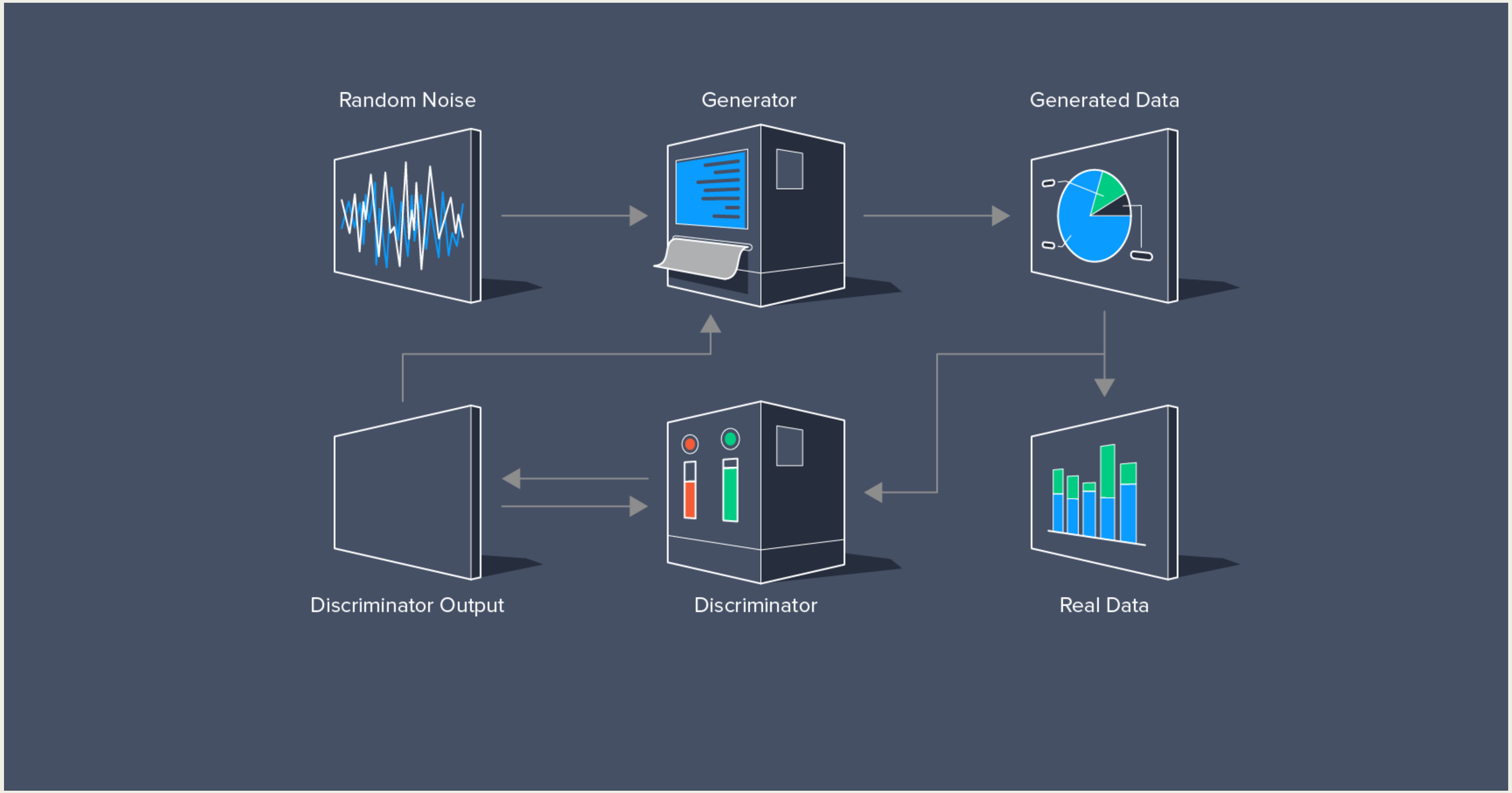
- Research on Text-to-Image
- Generative Adversarial Networks (GANs)
- Diffusion Models
- Prototype

MODELS

- Jasper
- DALL-E 2
- Midjourney
- TikTok

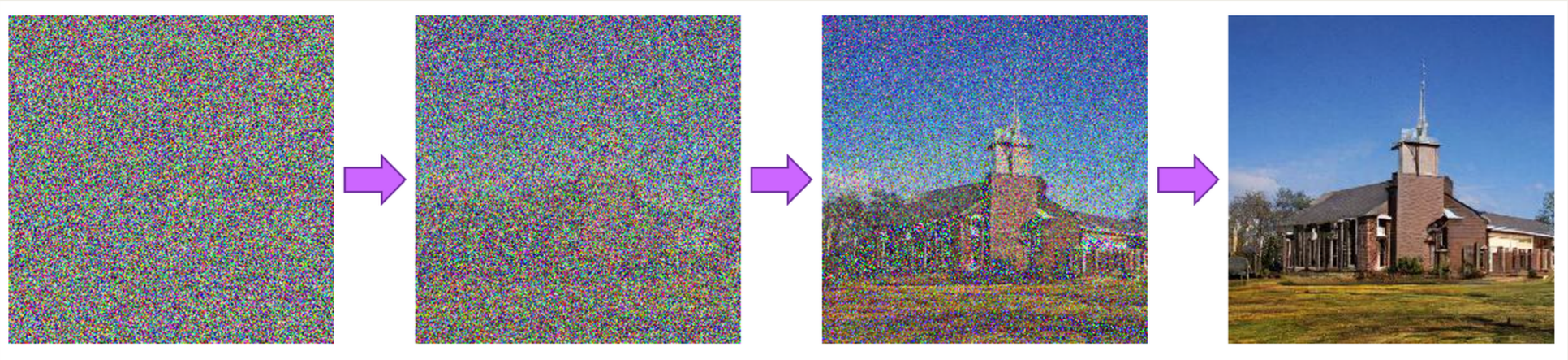


GANS

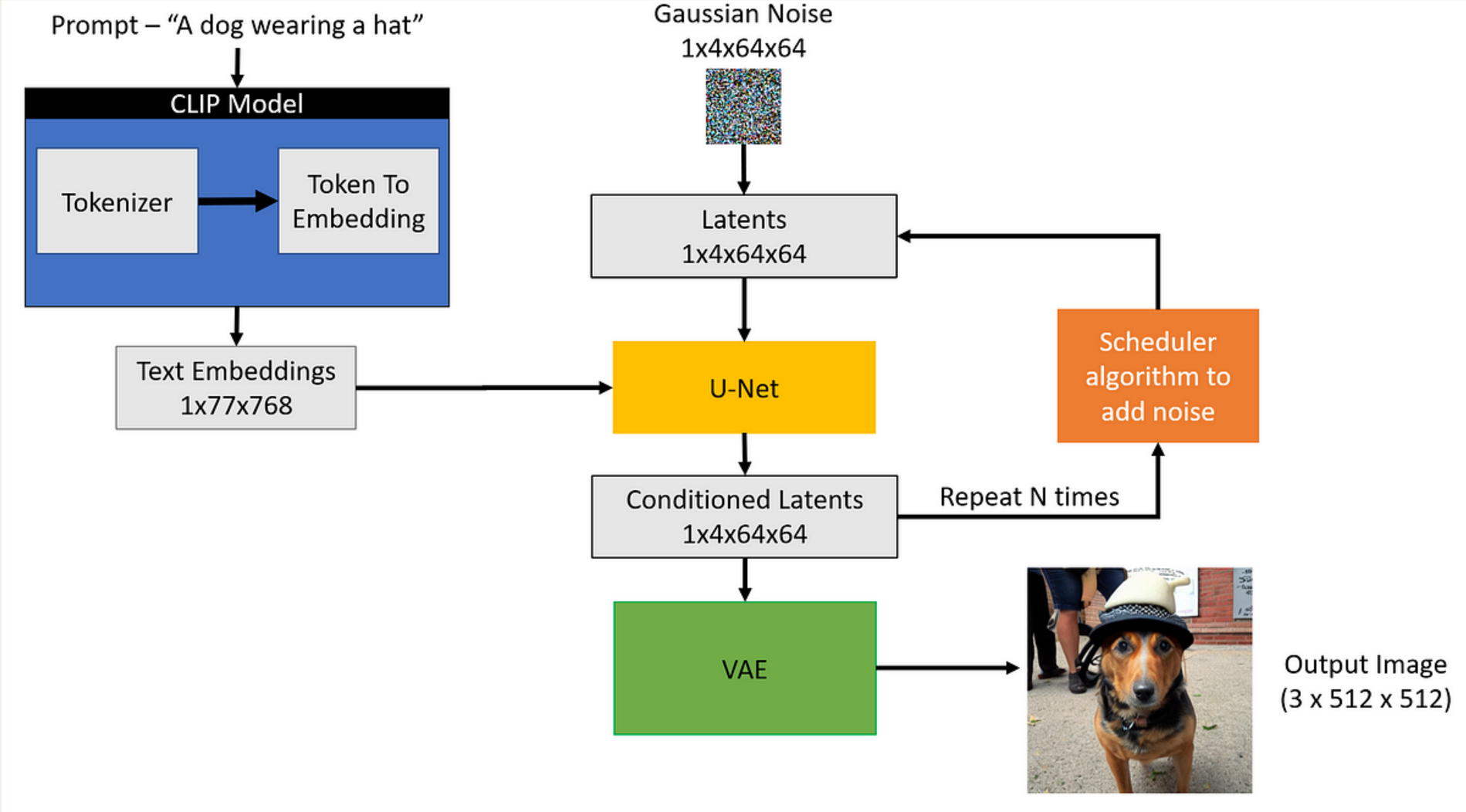

Random Noise
Generator
Generated Data
Discriminator Output
Discriminator
Real Data

DIFFUSERS

A neural network,that is trained to predict a way to slightly denoise the image in each step.



Hugging Face



PROTOTYPE

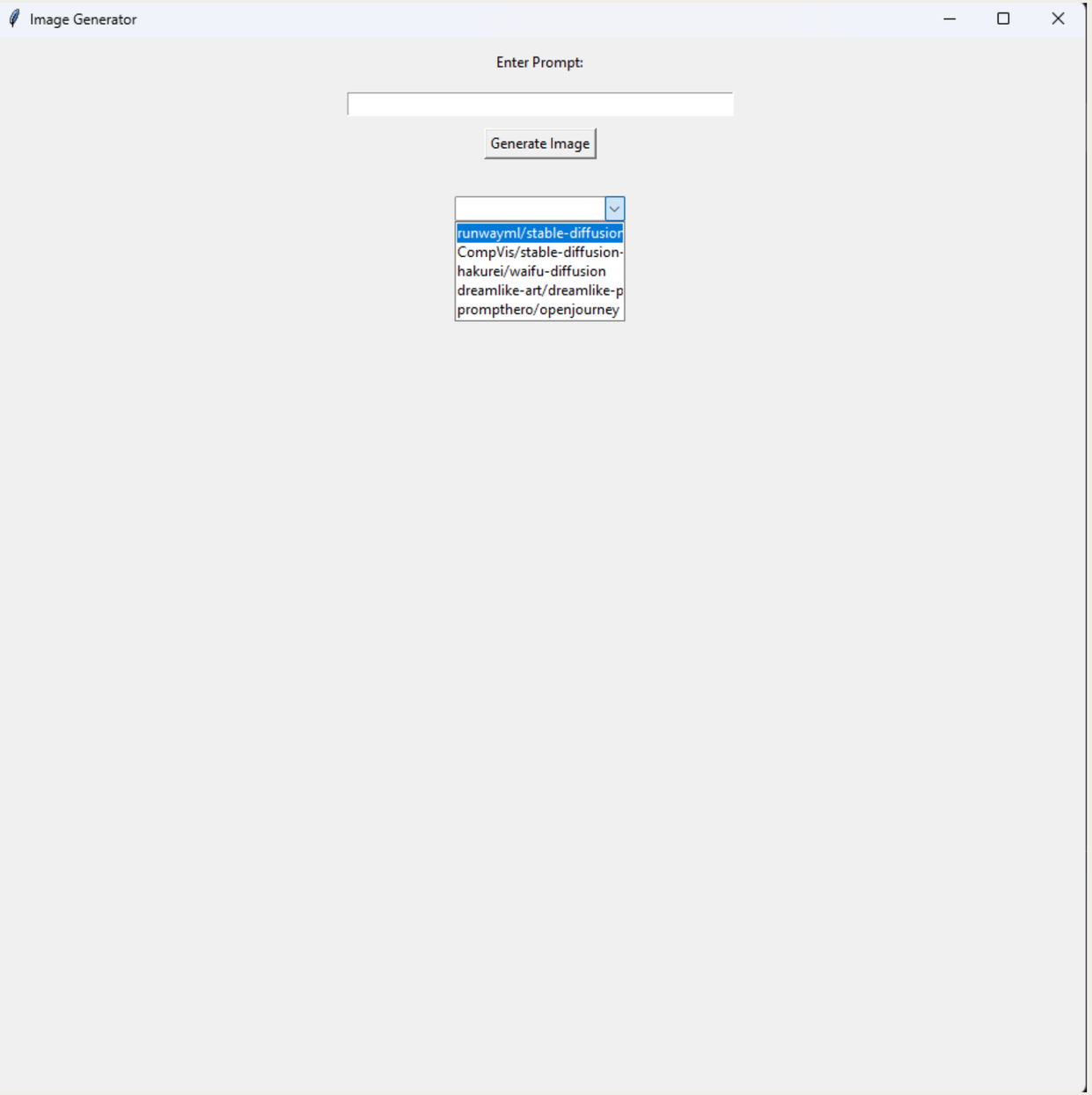


Image Generator
Enter Prompt:
Generate Image
runwayml/stable-diffusion
CompVis/stable-diffusion-
hakurei/waifu-diffusion
dreamlike-art/dreamlike-p
prompthero/openjourney

Model : dreamlike-art

Prompt: photo, a church in the middle of a field of crops, bright cinematic lighting, gopro, fisheye lens

Model : openjourney

Prompt: Picture a mystical forest, where the trees are a radiant shade of purple and they emit a soft, bioluminescent glow. The leaves on the trees are a shimmering silver that reflect the gentle light from the stars above. The forest is inhabited by tiny, ethereal creatures, floating about like sparks from a campfire...

Model:
stable-diffusion-v1-4

Prompt: Visualize a rustic wooden table set against a white brick wall. On the table, there's an open book with a vintage brass magnifying glass on top. Next to the book, there's a steaming cup of coffee in a blue ceramic mug, and a vase with fresh sunflowers.

Model: stable-diffusion-v1-5

Prompt: a photo of an astronaut riding a horse on mars

Model: waifu-diffusion

Prompt: girl, aqua eyes, baseball cap, blonde hair, earrings, green background, hat, hoop earrings, jewelry, looking at viewer, short hair, simple background, yellow shirt, high-definition

IMPROVEMENTS

- Utilise GPU
- Visualise multiple images for the user to choose
- Improve models

Thank you!