Diffusers
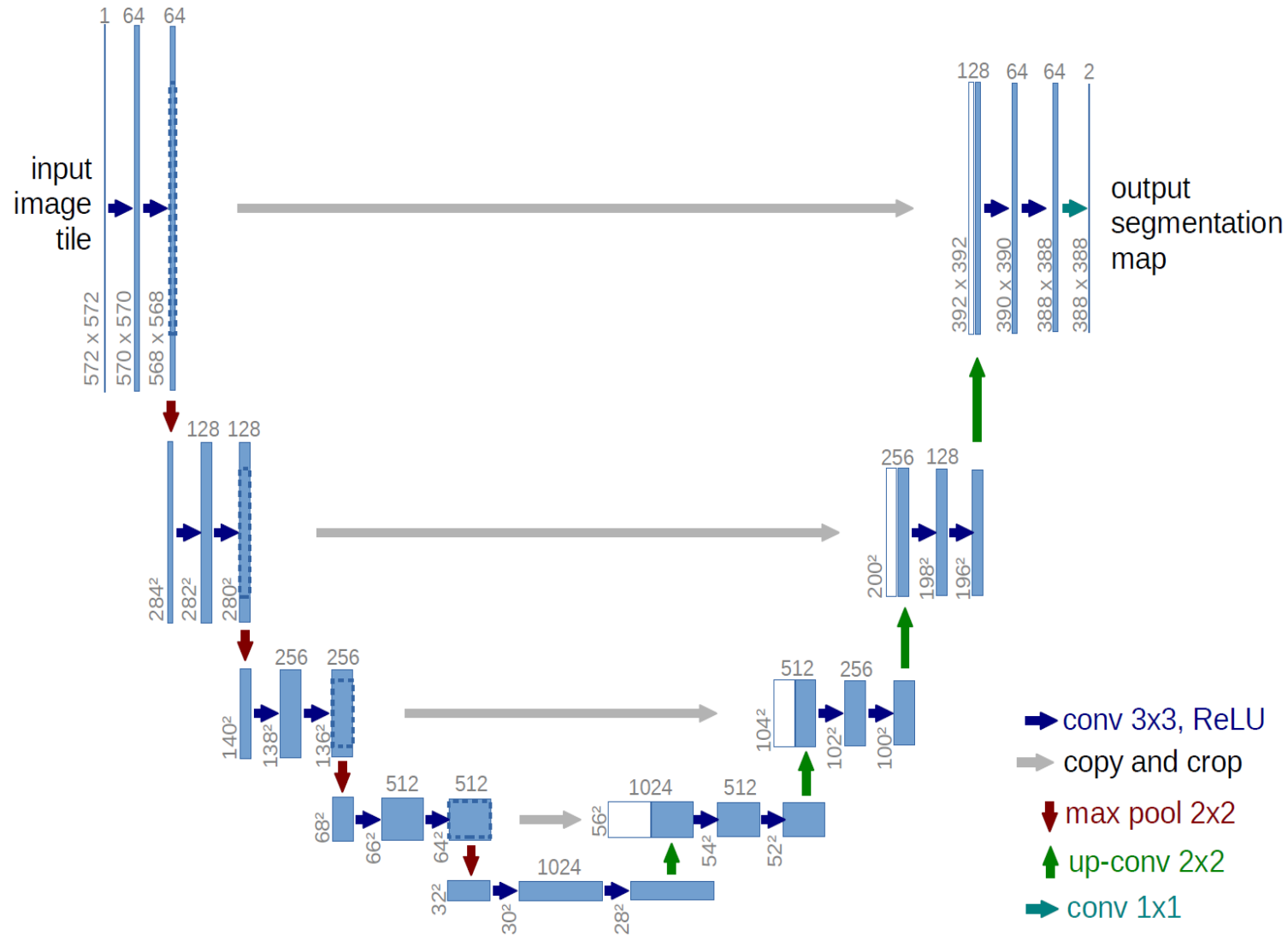
Diffusion Models

❑Diffusion models are generative models that learn to generate data by reversing a gradual noising process. It has gained popularity for its ability to generate high-quality images and other types of data.

❑Diffusion Model consists of a **forward process** (or **diffusion process**), in which a datum (generally an image) is progressively noised, and a **reverse process** (or **reverse diffusion process**), in which noise is transformed back into a sample from the target distribution.

Architecture of U-Net

conv 3x3, ReLU

copy and crop

max pool 2x2

up-conv 2x2

conv 1x1

Applications

- **Image Generation**: Creating high-quality images from noise.

- **Text-to-Image Generation**: Generating images based on textual descriptions.

- **Audio Synthesis**: Producing audio signals from noise, potentially used in speech synthesis and music generation.

Stable diffusion text to image anime style

prompt = " forest, flowers, fruits, landscape, 8k, masterpiece, ultradetailed"

Pretrained Model - redstonehero / cetusmix_v4

Stable diffusion text to image realistic style

prompt = " forest, flowers, fruits, animal, landscape,
8k, masterpiece, ultradetailed"

Pretrained Model - majicMIX_realistic_v6

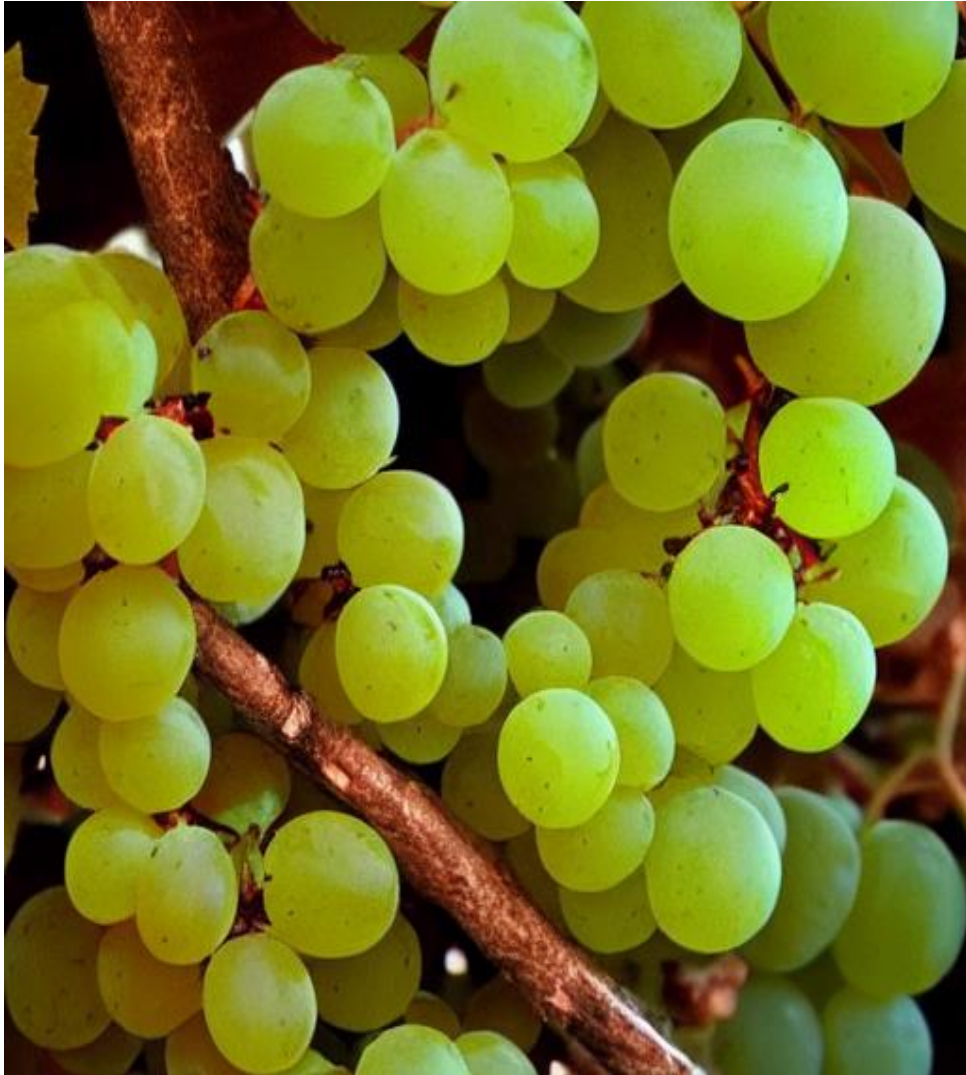# Stable diffusion text to image realistic style

prompt = "green grapes, 8k, masterpiece, ultradetailed"

Pretrained Model - majicMIX_realistic_v6
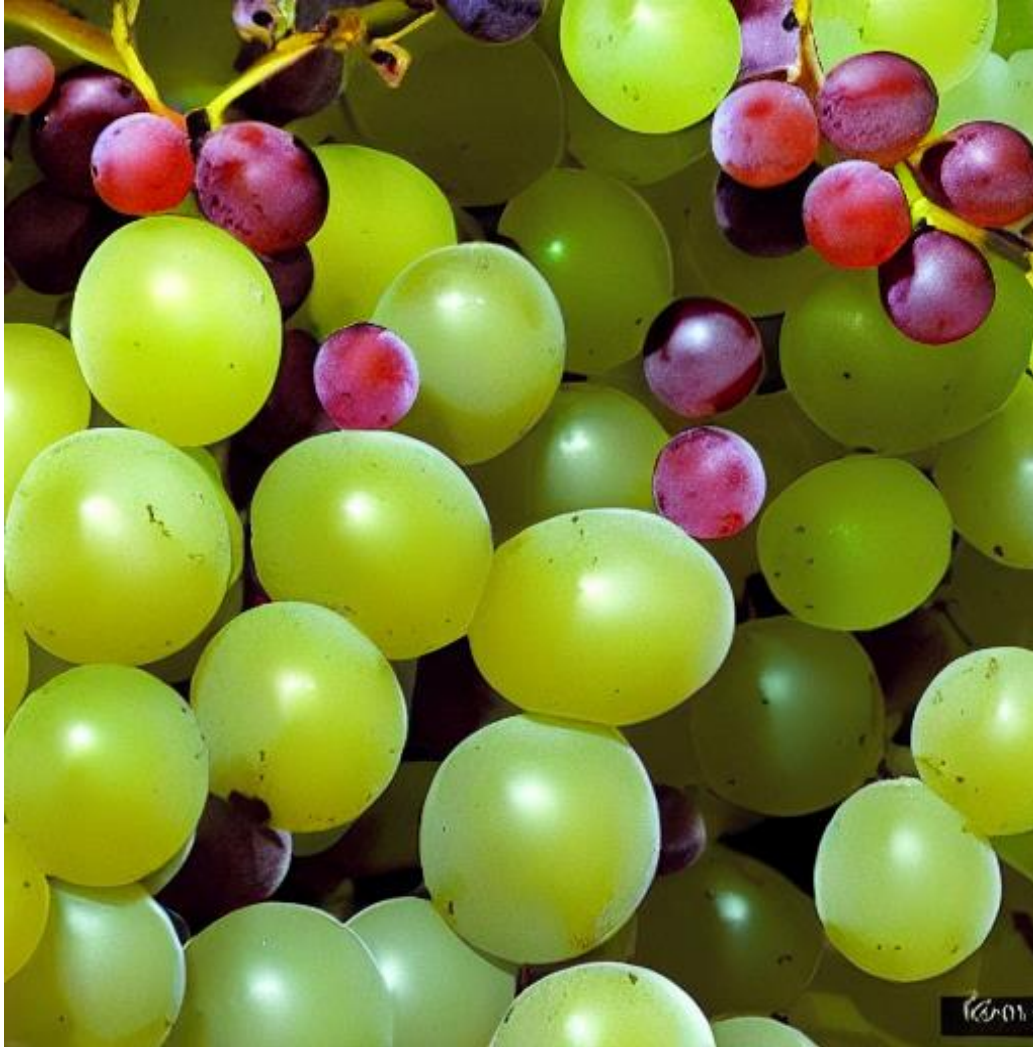
Stable diffusion text to image realistic style

prompt = " Green Shine Muscat Grapes"

Pretrained Model - majicMIX_realistic_v6

Stable diffusion text to image realistic style

prompt = " Green Shine Muscat Grapes,
8k, masterpiece, ultradetailed"

Pretrained Model - majicMIX_realistic_v6

Stable diffusion text to image realistic style

prompt = " Green Shine Muscat Grapes, 8k,
masterpiece, ultradetailed"

Pretrained Model - majicMIX_realistic_v6