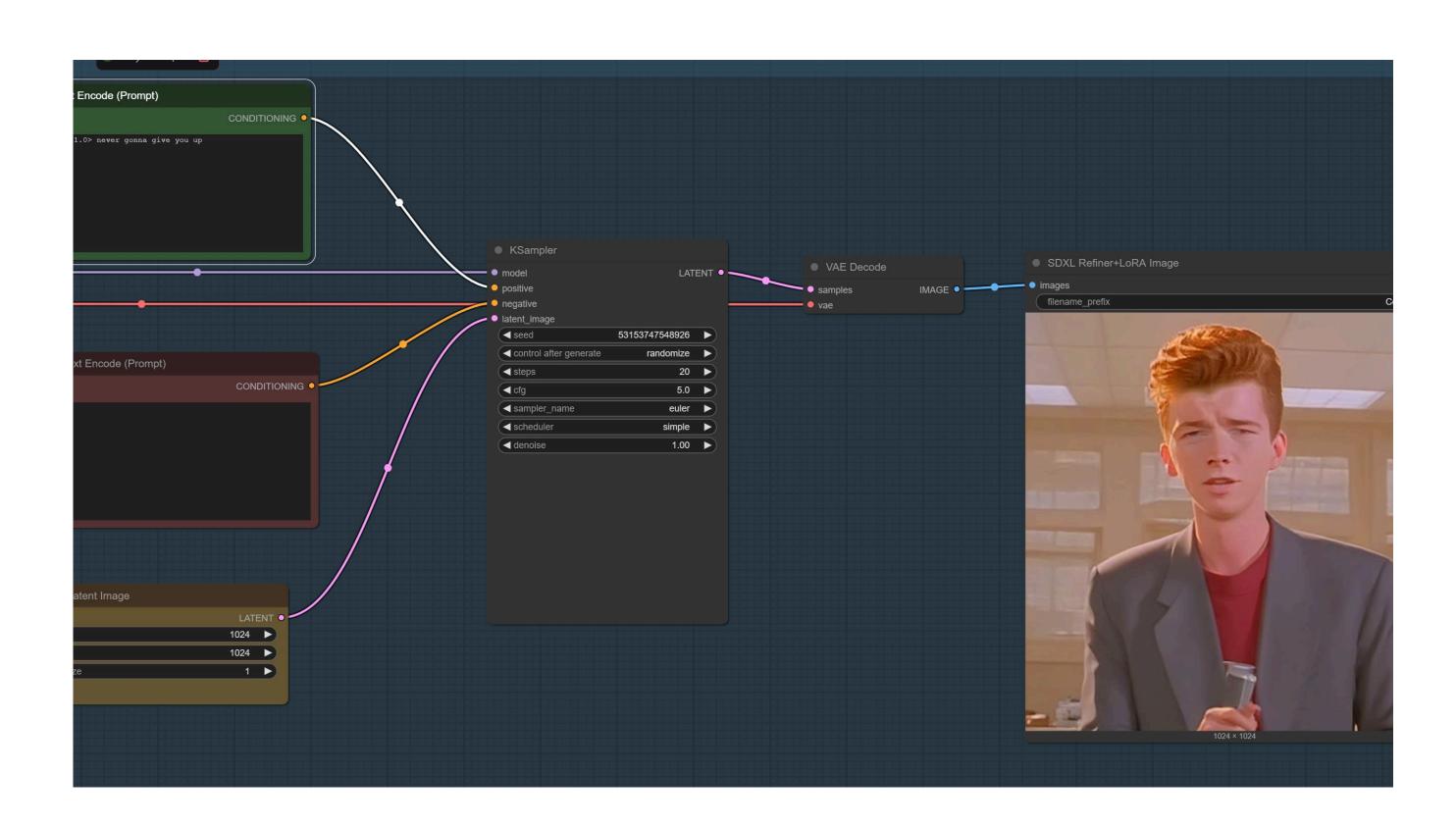
LoRAstley

IAT 460 project by Ethan Lum



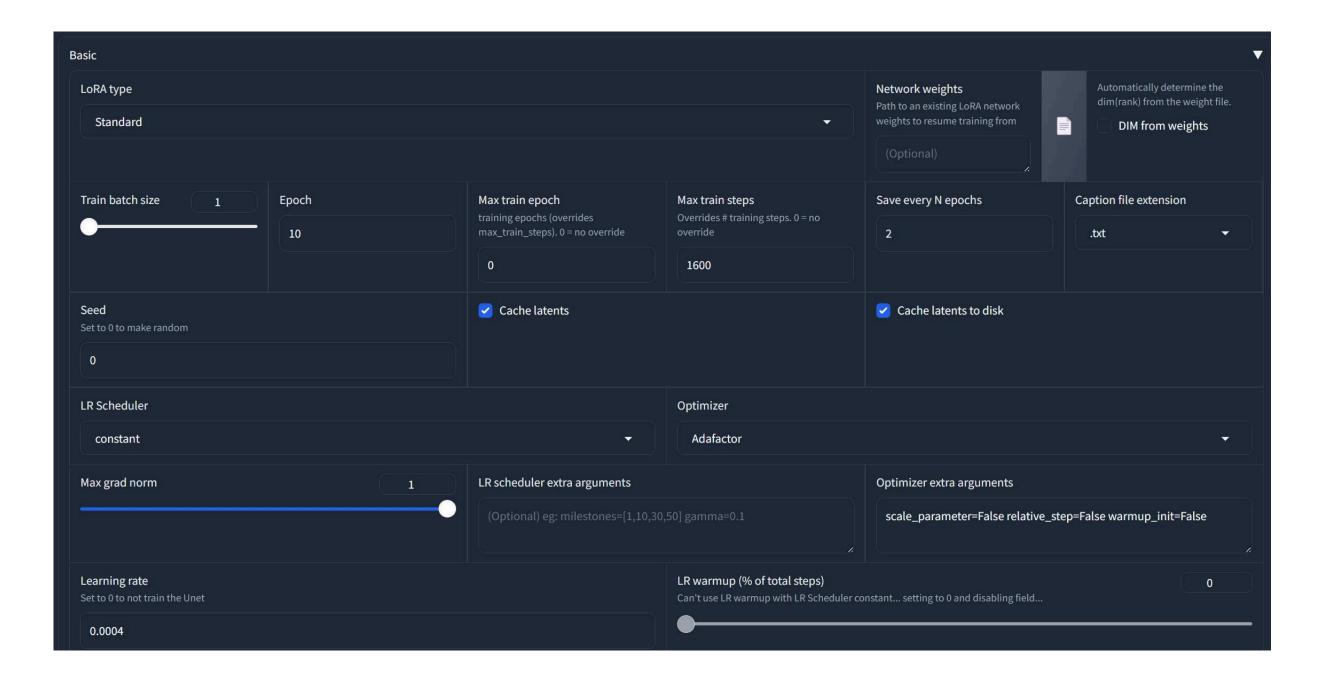
Concept

LoRAstley is a Lora for SDXL 1.0 that helps generate 1024×1024 images of Rick Astley specifically from the Never Gonna Give You Up video that can be run in ComfyUI.



Training

LoRAstley was trained using the Kohya SS GUI on an RTX 4070 Super and it took roughly 8hrs to train with a batch size of 1, 10 epochs and learning rate of 0.0004.



```
neuron dropout: p=None, rank dropout: p=None, module dropout: p=None
                                                                                                    lora.py:929
                          create LoRA for Text Encoder 1:
                                                                                                    lora.py:1020
                          create LoRA for Text Encoder 2:
                                                                                                   lora.py:1020
                          create LoRA for Text Encoder: 264 modules.
                                                                                                   lora.py:1028
                          create LoRA for U-Net: 722 modules.
                                                                                                   lora.py:1036
                          enable LoRA for text encoder: 264 modules
                                                                                                   lora.py:1077
                          enable LoRA for U-Net: 722 modules
                                                                                                   lora.py:1082
prepare optimizer, data loader etc.
                          use Adafactor optimizer | {'scale_parameter': False, 'relative_step': train_util.py:4485
                          False, 'warmup_init': False}
                  WARNING because max_grad_norm is set, clip_grad_norm is enabled. consider set to train_util.py:4513
                          max_grad_normが 設定されているため clip_grad_normが 有効になります。 0に 設定
                          して 無効にしたほう がいいかもしれません
                  WARNING constant_with_warmup will be good
                                                                                              train_util.py:4517
                          スケジューラはconstant_with_warmupが良いかもしれません
running training / 学習開始
 num train images * repeats / 学習画像の数×繰り返し回数: 200
  num reg images / 正則化画像の数: 0
 num batches per epoch / lepochのバッチ数: 200
 num epochs / epoch数: 8
  batch size per device / バッチサイズ: 1
 gradient accumulation steps / 勾配を合計するステップ数 = 1
 total optimization steps / 学習ステップ数: 1600
                                                                                      | 0/1600 [00:00<?, ?it/s]
steps: 0%
epoch 1/8
                          epoch is incremented. current_epoch: 0, epoch: 1
                                                                                               train_util.py:703
                                                              8/1600 [03:05<10:14:27, 23.16s/it, avr_loss=0.152]
steps: 0%
```



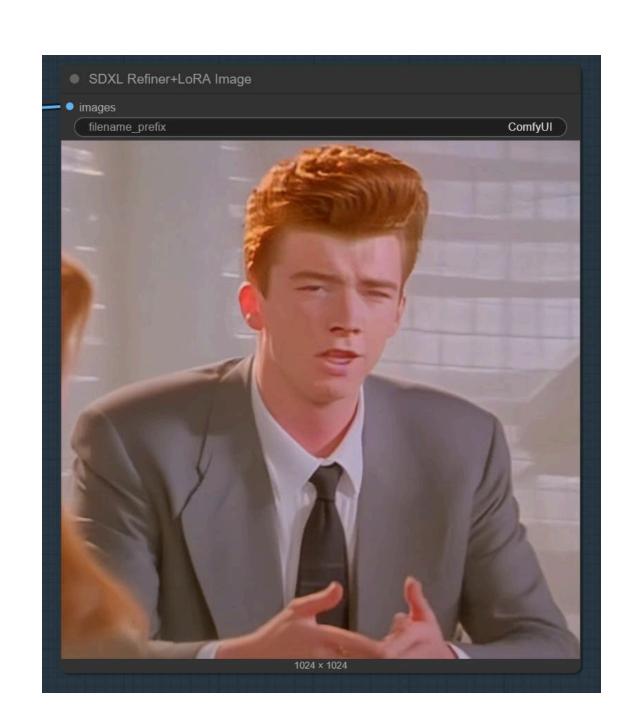
Creative Decisions

The goal was to make a LoRA which would allow users to create images specifically from the Rick Roll, since SDXL base model could not do so accurately.

Comparison



SDXL base model



LoRAstley (Mine)

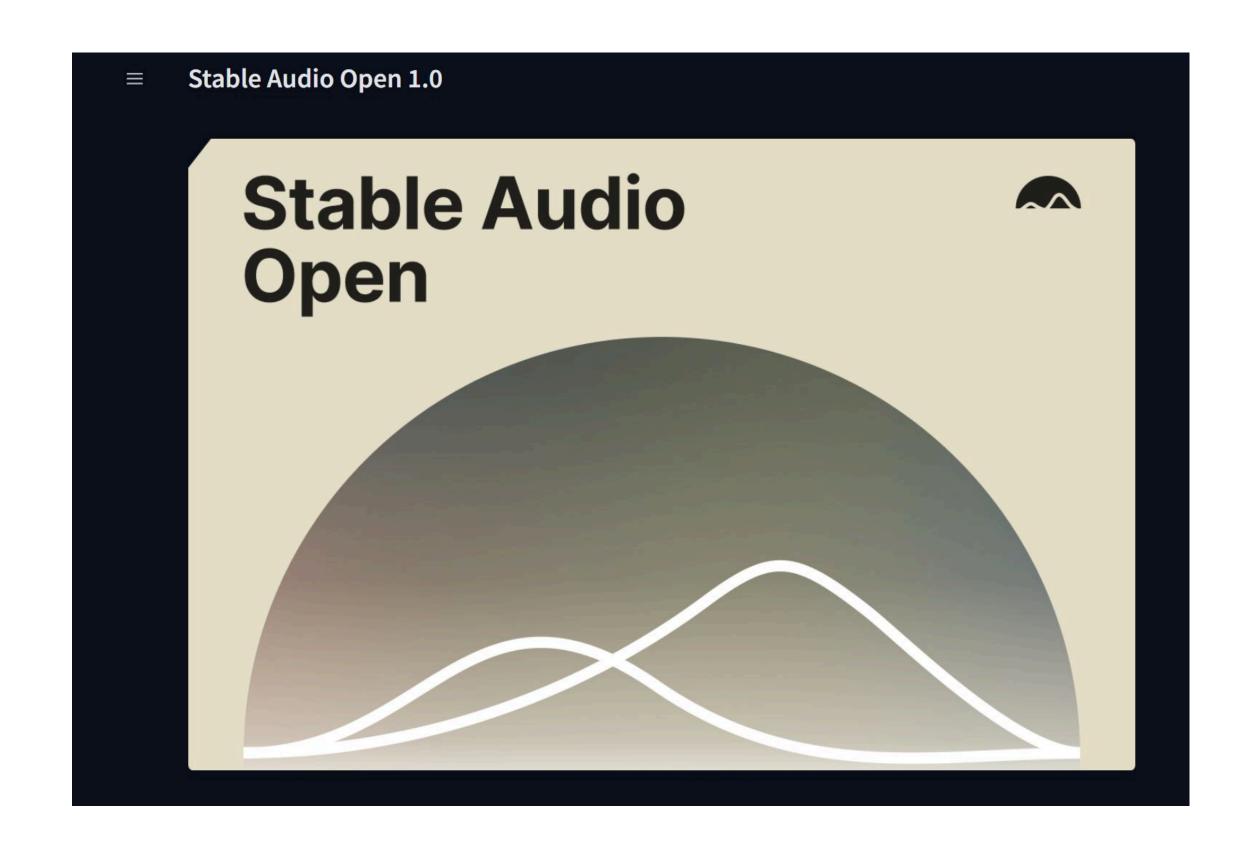
Prompt "<lora:rickv4:1.0> never gonna give you up"



Original rick roll video

Challenges

My original project idea 'Bass Crafter' had to be completely scrapped a week before the "deadline" and I had no good windows PC / GPU





Demo video

https://youtu.be/w0T6svByJYI

