wan2.2 lora 训练

1、模型下载

- 建议使用huggingface-cli 或 wget 进行模型下载
- wan2.2 主模型：https://huggingface.co/Comfy-Org/Wan_2.2_ComfyUI_Repackaged/tree/main/split_files/diffusion_models
- T5编码器：https://huggingface.co/Wan-AI/Wan2.1-I2V-14B-720P/blob/main/models_t5_umt5-xxl-enc-bf16.pth
- vae: https://huggingface.co/Comfy-Org/Wan_2.2_ComfyUI_Repackaged/blob/main/split_files/vae/wan_2.1_vae.safetensors

2、数据集前处理

- 图片编码

```
python src/musubi_tuner/wan_cache_latents.py --dataset_config
dataset/cendy_wan2.2.toml \
--vae /workspace/musubi-tuner/models/wan2.2/vae/wan_2.1_vae.safetensors
```

- 提示词编码

```
  python src/musubi_tuner/wan_cache_text_encoder_outputs.py --
dataset_config dataset/cendy_wan2.2.toml \
--t5 models/wan2.2/text_encoders/models_t5_umt5-xxl-enc-bf16.pth  --
batch_size 16
```

3、模型训练

- 单独训练低燥模型

```
accelerate launch --num_cpu_threads_per_process 1 --mixed_precision
fp16 src/musubi_tuner/wan_train_network.py \
  --task t2v-A14B \
```

```
  --dit
models/wan2.2/diffusion_models/wan2.2_t2v_low_noise_14B_fp16.safetensors
 \
  --dataset_config dataset/cendy_wan2.2.toml --sdpa --mixed_precision
fp16 --fp8_base \
  --optimizer_type adamw8bit --learning_rate 2e-4 --
gradient_checkpointing \
  --max_data_loader_n_workers 2 --persistent_data_loader_workers \
  --network_module networks.lora_wan --network_dim 32 \
  --timestep_sampling shift --discrete_flow_shift 8.0 \
  --max_train_epochs 300 --save_every_n_epochs 10 --seed 42 \
  --output_dir output --output_name cendy_wan2.2_v1 --blocks_to_swap 35
\
  --min_timestep 0 --max_timestep 875 \
```

- 单独训练高燥模型

复制代码

```
accelerate launch --num_cpu_threads_per_process 1 --mixed_precision
fp16 src/musubi_tuner/wan_train_network.py \
  --task t2v-A14B \
  --dit
models/wan2.2/diffusion_models/wan2.2_t2v_high_noise_14B_fp16.safetensor
s \
  --dataset_config dataset/cendy_wan2.2.toml --sdpa --mixed_precision
fp16 --fp8_base \
  --optimizer_type adamw8bit --learning_rate 2e-4 --
gradient_checkpointing \
  --max_data_loader_n_workers 2 --persistent_data_loader_workers \
  --network_module networks.lora_wan --network_dim 32 \
  --timestep_sampling shift --discrete_flow_shift 8.0 \
  --max_train_epochs 300 --save_every_n_epochs 10 --seed 42 \
  --output_dir output1 --output_name cendy_wan2.2_v1 --blocks_to_swap
35 \
  --min_timestep 875 --max_timestep 1000 \
  --preserve_distribution_shape
```

- 同时训练高低燥模型

复制代码

```
accelerate launch --num_cpu_threads_per_process 1 --mixed_precision
fp16 src/musubi_tuner/wan_train_network.py \
  --task t2v-A14B \
  --dit
models/wan2.2/diffusion_models/wan2.2_t2v_low_noise_14B_fp16.safetensors
 \
  --dit_high_noise
models/wan2.2/diffusion_models/wan2.2_t2v_high_noise_14B_fp16.safetensor
s \
  --dataset_config dataset/cendy_wan2.2.toml --sdpa --mixed_precision
fp16 --fp8_base \
  --optimizer_type adamw8bit --learning_rate 2e-4 --
gradient_checkpointing \
  --max_data_loader_n_workers 1 --persistent_data_loader_workers \
  --network_module networks.lora_wan --network_dim 32 \
  --timestep_sampling shift --discrete_flow_shift 8.0 \
  --max_train_epochs 300 --save_every_n_epochs 25 --seed 42 \
  --output_dir output3 --output_name cendy_wan2.2_v1 --blocks_to_swap
35 \
```

4、模型转化

复制代码

```
python src/musubi_tuner/convert_lora.py --input
output/cendy_wan2.2_v1.safetensors --output
output/output/cendy_wan2.2_low_v1
```