

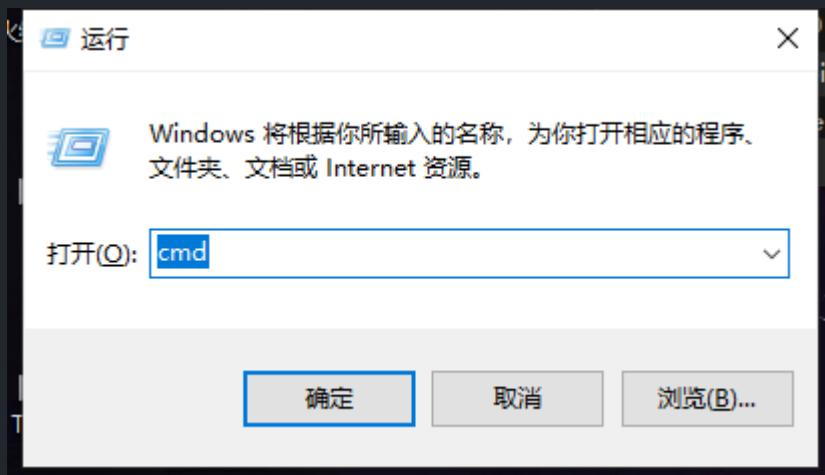
windows_AMD显卡ai

由于光追性能和CUDA的差距，相近光栅性能的A卡和N卡在游戏性能差不多的情况下，价格有一两千的差距。对于游戏玩家而言，性价比更高的A卡是更好的选择。但是，如果想用A卡来玩一些生产力相关AI方面的东西，那该怎么办呢？

这篇文章也许会对你有所帮助。

需要：miniconda（虚拟环境） python AMD 显卡 7000系及以上

1. 找一个大点的地方，创建一个文件夹（最好路径上没有中文）
2. win+r cmd 或者在微软商店下载 powershell（win11好像自带，win+q 搜一下看看？）



3. cmd 进入 你创建的文件夹

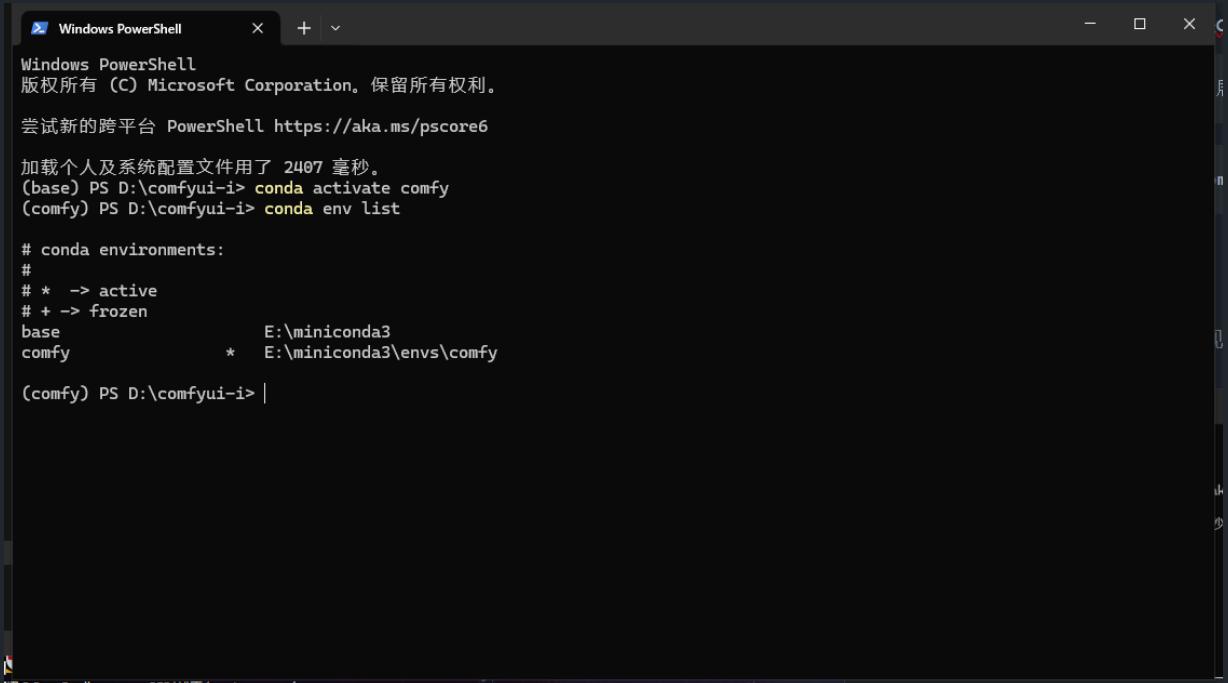
```
1 conda create --name comfy python=3.12
```

创建一个名字是 comfyui-amd 的虚拟环境（名字随意）（注意后面的Python版本，选择你需要的）

可能会有报错，有可能是conda没有在环境变量里，添加后就行。（powershell 可能会有个人系统配置的要求，报错的代码问ai最方便）

```
1 conda env list # 展示你创建的虚拟环境（复制的时候把注释去掉）
```

```
1 conda activate comfy #进入虚拟环境
```

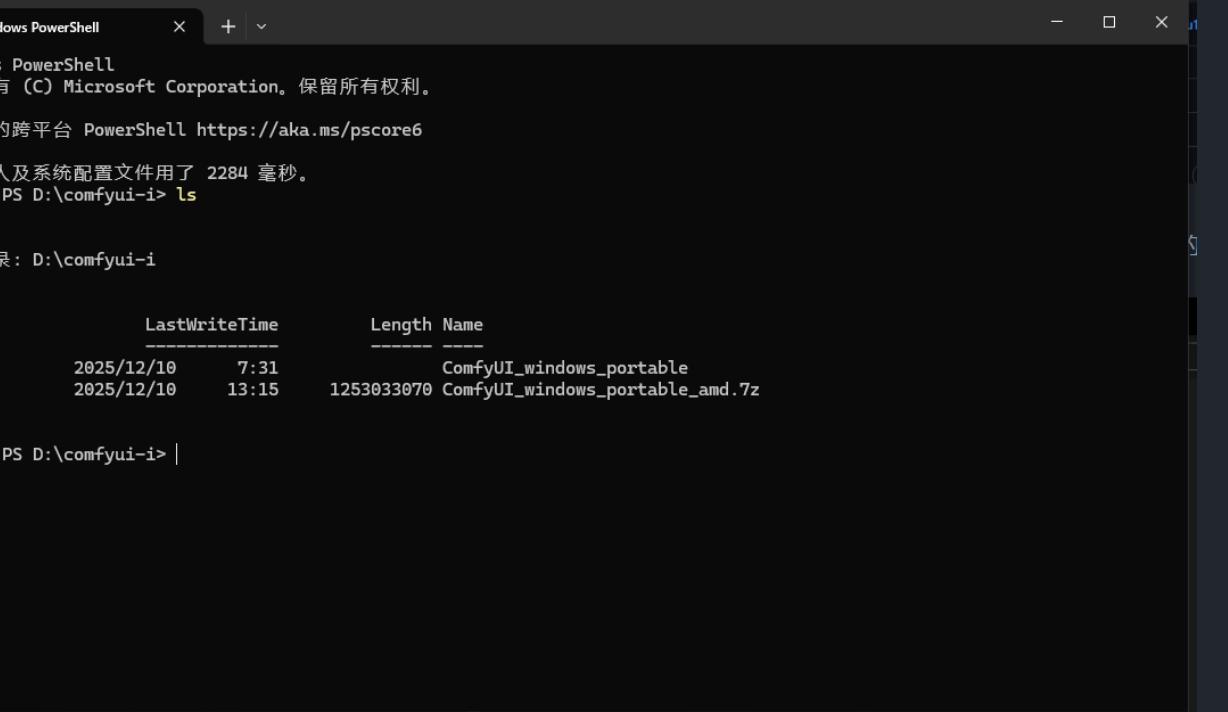


```
Windows PowerShell
版权所有 (C) Microsoft Corporation。保留所有权利。
尝试新的跨平台 PowerShell https://aka.ms/pscore6
加载个人及系统配置文件用了 2407 毫秒。
(base) PS D:\comfyui-i> conda activate comfy
(comfy) PS D:\comfyui-i> conda env list

# conda environments:
#
# *  -> active
# + --> frozen
base           E:\miniconda3
comfy          * E:\miniconda3\envs\comfy

(comfy) PS D:\comfyui-i> |
```

使用powershell也行，更现代集成更多unix终端指令，类似这个：



```
Windows PowerShell
版权所有 (C) Microsoft Corporation。保留所有权利。
尝试新的跨平台 PowerShell https://aka.ms/pscore6
加载个人及系统配置文件用了 2284 毫秒。
(base) PS D:\comfyui-i> ls

目录：D:\comfyui-i

Mode                LastWriteTime         Length Name
----                -----        -----
d-----       2025/12/10     7:31              ComfyUI_windows_portable
-a----       2025/12/10    13:15  1253033070 ComfyUI_windows_portable_amd.7z

(base) PS D:\comfyui-i> |
```

4. 浏览器输入<https://github.com/comfyanonymous/ComfyUI> (comfyui的github库)，右边releases里选择amd的包。

jheising, guill, and 12 other contributors

▼ Assets 7

📦 ComfyUI_windows_portable_amd.7z	sha256:583f364c7b9c2e92c...	1.17 GB	9 hours ago
📦 ComfyUI_windows_portable_nvidia.7z	sha256:fac64ec81e91e8468...	1.63 GB	9 hours ago
📦 ComfyUI_windows_portable_nvidia_cu126.7z	sha256:0390aca3d4a79c758...	1.61 GB	8 hours ago
📦 ComfyUI_windows_portable_nvidia_cu128.7z	sha256:7990eaf1d5be3b0f3...	1.85 GB	8 hours ago
ZIP Source code (zip)			9 hours ago
TGZ Source code (tar.gz)			9 hours ago
JSON Release attestation (json)			9 hours ago

12 people reacted

5. 下载下来的包解压在你创建的文件夹里。

名称	修改日期	类型	大小
ComfyUI_windows_portable	2025/12/10 7:31	文件夹	
ComfyUI_windows_portable_amd.7z	2025/12/10 13:15	7Z 文件	1,223,666...

6. 下载下来的文件里有个README_VERY_IMPORTANT.txt的文件，是作者的教程。

README_VERY_IMPORTANT.txt - 记事本

文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)

As of the time of writing this you need this driver for best results:
<https://www.amd.com/en/resources/support-articles/release-notes/RN-AMDGPU-WINDOWS-PYTORCH-7-1-1.html>

HOW TO RUN:

If you have a AMD gpu:

run_amd_gpu.bat

If you have memory issues you can try disabling the smart memory management by running comfui with:

run_amd_gpu_disable_smart_memory.bat

IF YOU GET A RED ERROR IN THE UI MAKE SURE YOU HAVE A MODEL/CHECKPOINT IN: ComfyUI\models\checkpoints

You can download the stable diffusion XL one from: https://huggingface.co/stabilityai/stable-diffusion-xl-base-1.0/blob/main/sd_xl_base_1.0_0.9vae.safetensors

RECOMMENDED WAY TO UPDATE:
To update the ComfyUI code: update\update_comfui.bat

TO SHARE MODELS BETWEEN COMFYUI AND ANOTHER UI:
In the ComfyUI directory you will find a file: extra_model_paths.yaml.example

第 20 行, 第 54 列 100% Windows (CRLF) UTF-8

7. 需要安装amd的驱动<https://www.amd.com/en/resources/support-articles/release-notes/RN-AMDGPU-WINDOWS-PYTORCH-7-1-1.html>

在这个页面点击这个连接

<https://rocm.docs.amd.com/projects/radeon-ryzen/en/latest/docs/install/installrad/windows/install-pytorch.html>

AMD Lab Notes Infinity Hub Support

Prerequisites

Radeon Prerequisites
Ryzen Prerequisites

Radeon How to guide

Radeon on Linux
Radeon on Windows
Install PyTorch for Radeon GPUs

Install HIP SDK for Radeon GPUs

Radeon on WSL

Ryzen How to guide

Ryzen on Linux
Ryzen on Windows

Use cases

Radeon Use cases
Ryzen Use cases

Compatibility matrices

Radeon Compatibility matrix
Ryzen Compatibility matrix

Limitations

> > How to guide - Use ROCm on Radeon and Ryzen > PyTorch via...

PyTorch via PIP installation

AMD recommends the PIP install method to create a PyTorch environment when working with ROCm™ for machine learning development.

Note
To install the following wheels, Python 3.12 must be installed.

Prerequisites

- For the 7.1.1 PyTorch on Windows release, the [25.20.01.17 graphics driver](#) must be installed.

Install PyTorch via PIP

- Enter the commands to set up ROCm environment.

CMD Prompt PowerShell

```
pip install --no-cache-dir ^
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk_core-0.1.dev0-py3-none-win_a
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk-devel-0.1.dev0-py3-none-win_a
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk_libraries_custom-0.1.dev0-py3
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm-0.1.dev0.tar.gz
```

是amd 官方的rocm blog

8. 在cmd 或者powershell 你打开的文件夹里使用命令：

```
1 cd .\ComfyUI_windows_portable\  
2 cd .\ComfyUI\ # 进入文件夹
```

9. 按照amd 的官方教程

- For the 7.1.1 PyTorch on Windows release, the [25.20.01.17 graphics driver](#) must be installed.

Install PyTorch via PIP

1. Enter the commands to set up ROCm environment.

CMD Prompt PowerShell

```
pip install --no-cache-dir ^
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk_core-0.1.dev0-py3-none-win_a
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk-devel-0.1.dev0-py3-none-win_a
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm_sdk_libraries_custom-0.1.dev0-py3
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/rocm-0.1.dev0.tar.gz
```

2. Enter the commands to install torch, torchvision and torchaudio for ROCm AMD GPU support.

Note

This may take several minutes. See [Compatibility matrices](#) for support information.

CMD Prompt PowerShell

```
pip install --no-cache-dir ^
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/torch-2.9.0+rocm sdk20251116-cp312-cp3
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/torchaudio-2.9.0+rocm sdk20251116-cp31
https://repo.radeon.com/rocm/windows/rocm-rel-7.1.1/torchvision-0.24.0+rocm sdk20251116-cp3
```

输入相应的命令，并验证安装的pytorch

Verify PyTorch installation

Confirm if PyTorch is correctly installed.

1. Verify if Pytorch is installed and detecting the GPU compute device.

```
python -c "import torch" 2>nul && echo Success || echo Failure
```

Expected result:

```
Success
```

2. Enter command to test if the GPU is available.

```
python -c "import torch; print(torch.cuda.is_available())"
```

Expected result:

11. 有一个细节需要注意!

3. Enter command to display installed GPU device name.

```
python -c "import torch; print(f'device name [0]:', torch.cuda.get_device_name(0))"
```

Example result: device name [0]: Radeon RX 7900 XTX

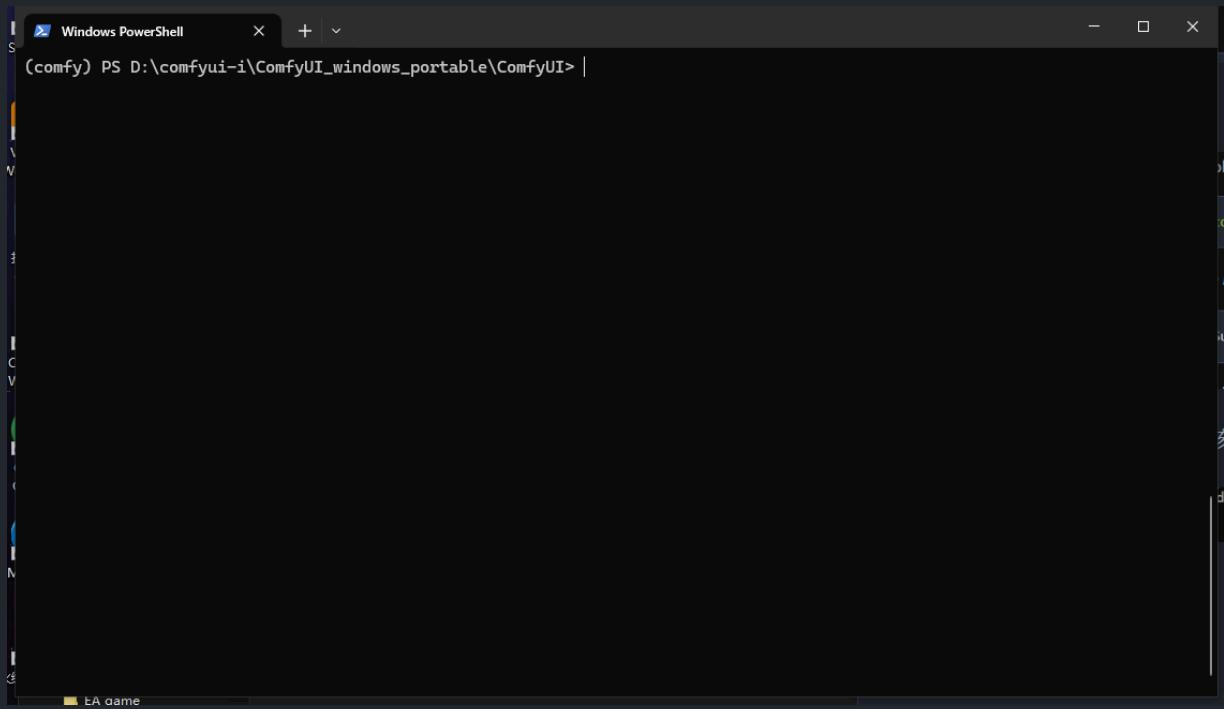
```
device name [0]: <Supported AMD GPU>
```

这里显示的显卡可能是你的核显，修改数字后才是你的独立显卡，例如：

```
(comfy) PS D:\comfyui-i\ComfyUI_windows_portable\ComfyUI> python -c "import torch; print(f'device name [1]:', torch.cuda.get_device_name(1))"  
device name [1]: AMD Radeon RX 9070
```

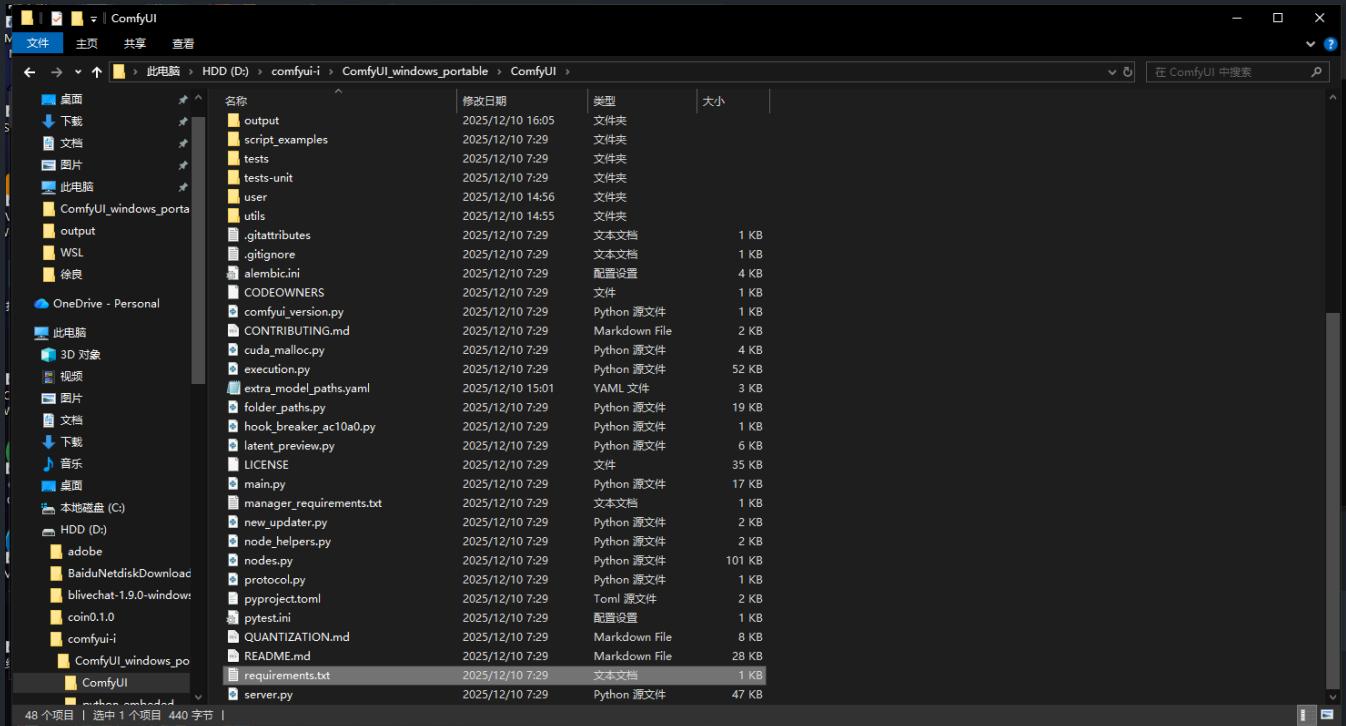
我的是device[1]

12. 下载并验证成功后，在



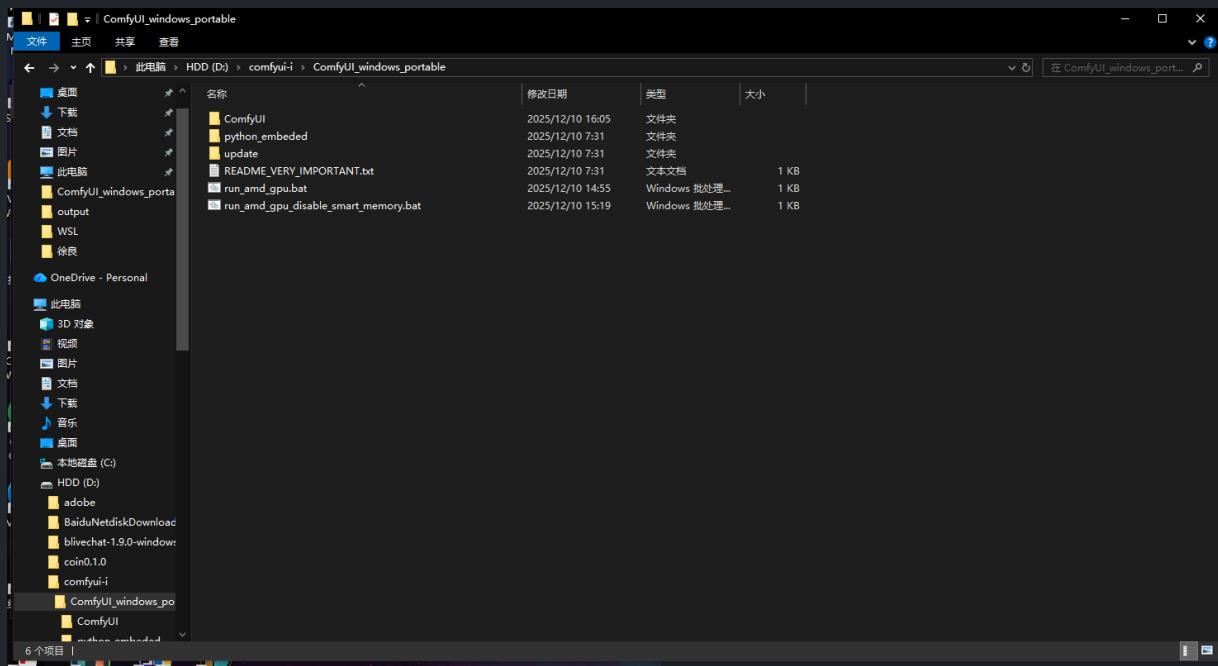
这个路径，输入

```
1 pip install -r requirements.txt
```



就是下载文件夹里的这个文件里所需的依赖。

13. 全部完成之后，



在这个文件夹里有一个run_amd_gpu.bat文件，也可以使用run_amd_gpu_disable_smart_memory.bat这个。

后面这个在作者的提示里：If you have memory issues you can try disabling the smart memory management by running comfyui with:

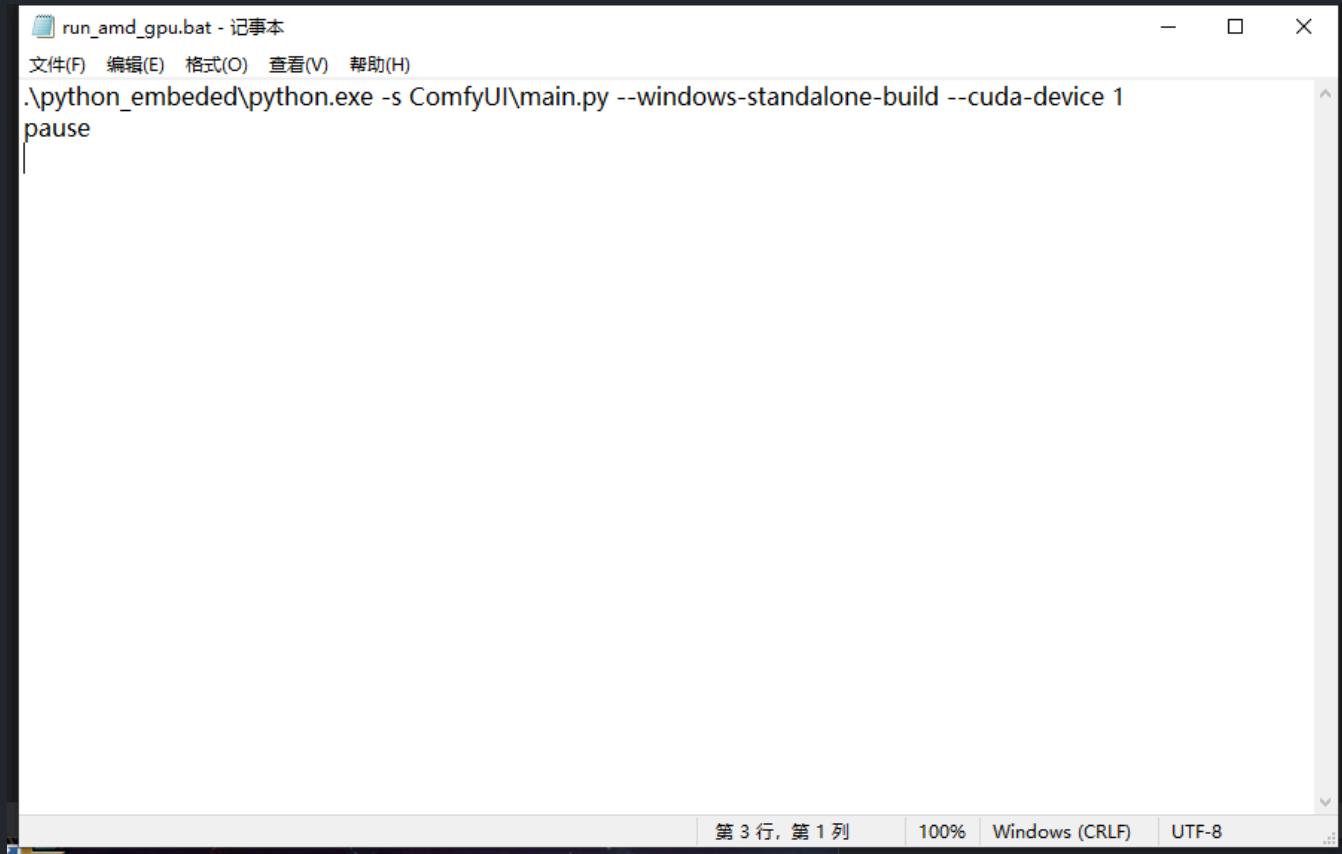
`run_amd_gpu_disable_smart_memory.bat`

翻译之后就是：如果您遇到内存问题，您可以尝试通过运行 comfyui 来禁用智能内存管理：

`run_amd_gpu_disable_smart_memory.bat`

按你的需要选择（或者其中一个错误之后换一个）

右键编辑，添加

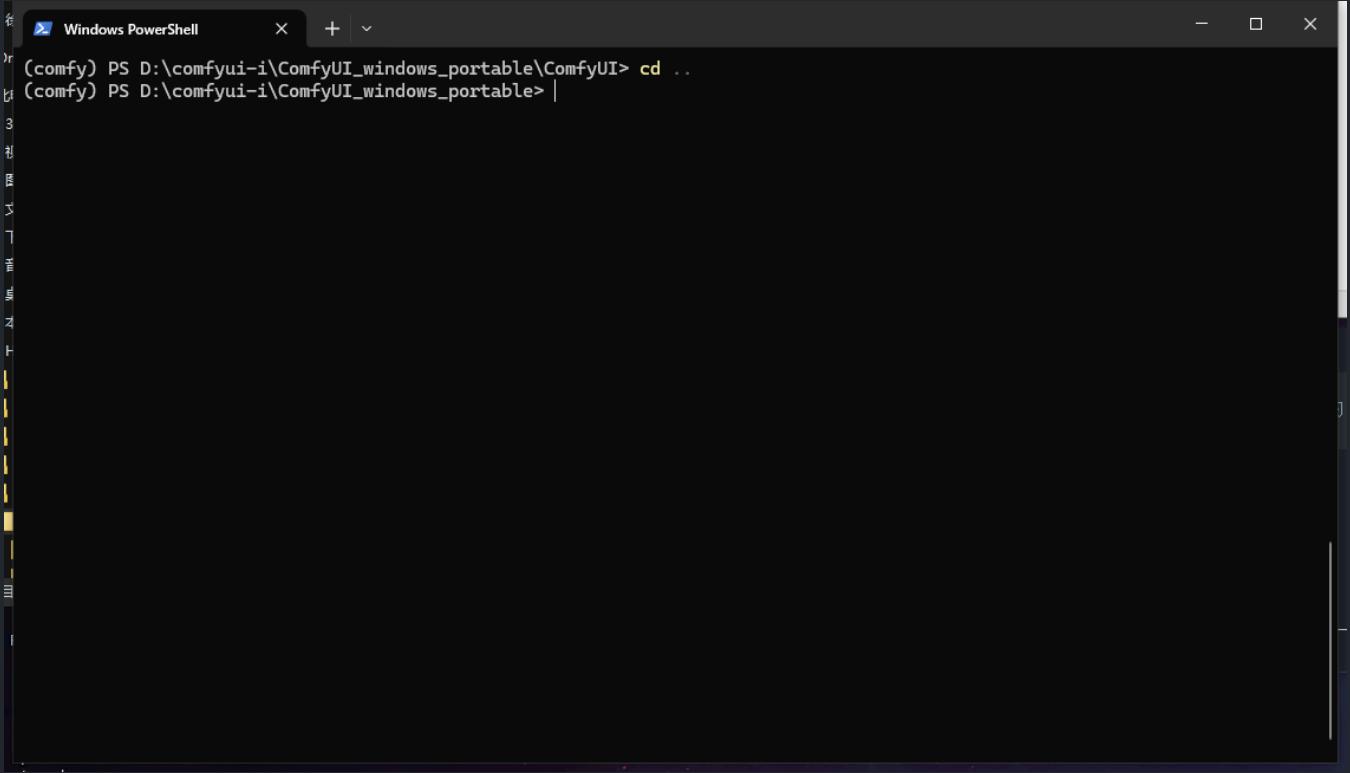


```
run_amd_gpu.bat - 记事本
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
.\python_embedded\python.exe -s ComfyUI\main.py --windows-standalone-build --cuda-device 1
pause

第 3 行, 第 1 列 100% Windows (CRLF) UTF-8
```

1 --cuda-device 1 #因为我的独显的编号是1, 你选你自己的, 用哪个启动就改哪个

14.



A screenshot of a Windows PowerShell window titled "Windows PowerShell". The window shows the command `cd ..` being run in the directory `D:\comfyui-i\ComfyUI_windows_portable\ComfyUI`. The command has been completed, and the prompt now shows the parent directory `D:\comfyui-i\ComfyUI_windows_portable>`.

```
(comfy) PS D:\comfyui-i\ComfyUI_windows_portable\ComfyUI> cd ..
(comfy) PS D:\comfyui-i\ComfyUI_windows_portable>
```

```
1 cd ..
```

退回到上一级目录

```
1 .\run_amd_gpu_disable_smart_memory.bat
```

```
Windows PowerShell + 
(comy) PS D:\comfyui-i\ComfyUI_windows_portable> .\run_amd_gpu_disable_smart_memory.bat
```

```
d----- 2025/12/10 7:29 tests-unit
(comy) PS D:\comfyui-i\ComfyUI_windows_portable> .\run_amd_gpu_disable_smart_memory.bat

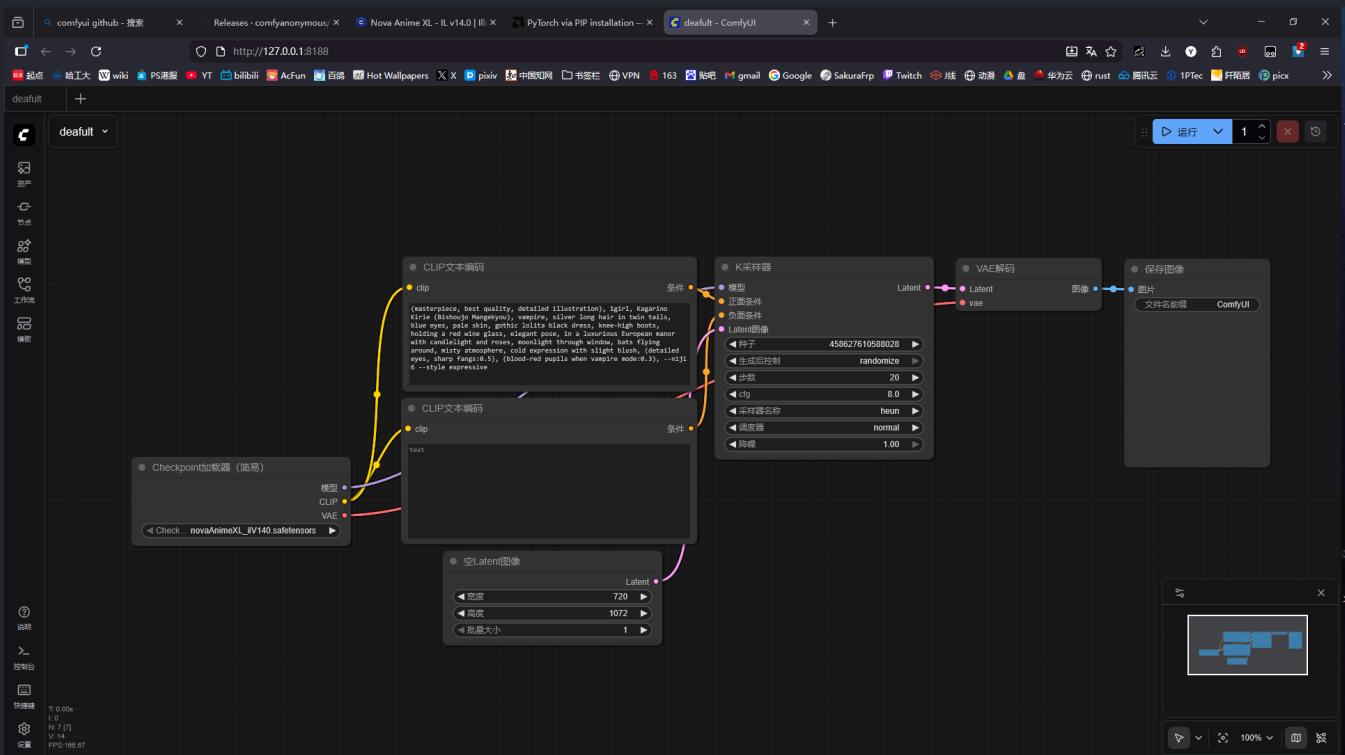
D:\comfyui-i\ComfyUI_windows_portable>.\python_embeded\python.exe -s ComfyUI\main.py --windows-standalone-build --disable-smart-memory --cuda-device 1
Adding extra search path checkpoints D:\BaiduNetdiskDownload\models
Set cuda device to: 1
Failed to get device count
Checkpoint files will always be loaded safely.
Total VRAM 16304 MB, total RAM 64618 MB
pytorch version: 2.9.0+rocm sdk 20251116
Set: torch.backends.cudnn.enabled = False for better AMD performance.
AMD arch: gfx1201
ROCM version: (7, 1)
Set vram state to: NORMAL_VRAM
Disabling smart memory management
Device: cuda:0 AMD Radeon RX 9070 : native
Enabled pinned memory 29078.0
Using sub quadratic optimization for attention, if you have memory or speed issues try using: --use-split-cross-attention
Python version: 3.12.10 (tags/v3.12.10:0cc8128, Apr 8 2025, 12:21:36) [MSC v.1943 64 bit (AMD64)]
ComfyUI version: 0.4.0
ComfyUI frontend version: 1.33.13
[Prompt Server] web root: D:\comfyui-i\ComfyUI_windows_portable\python_embeded\Lib\site-packages\comfyui_frontend_package\static
Total VRAM 16304 MB, total RAM 64618 MB
pytorch version: 2.9.0+rocm sdk 20251116
Set: torch.backends.cudnn.enabled = False for better AMD performance.
AMD arch: gfx1201
ROCM version: (7, 1)
Set vram state to: NORMAL_VRAM
Disabling smart memory management
Device: cuda:0 AMD Radeon RX 9070 : native
Enabled pinned memory 29078.0

Import times for custom nodes:
0.0 seconds: D:\comfyui-i\ComfyUI_windows_portable\ComfyUI\custom_nodes\websocket_image_save.py

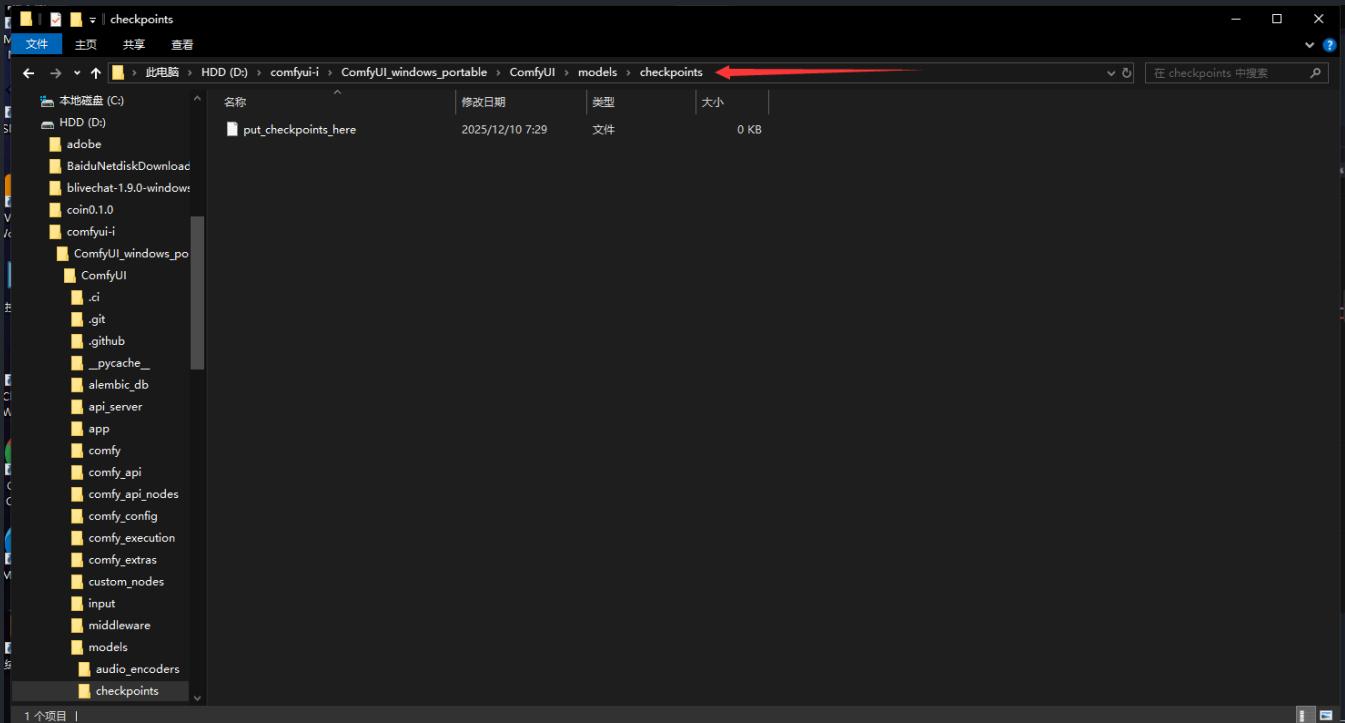
Context impl SQLiteImpl.
Will assume non-transactional DDL.
No target revision found.
Starting server

To see the GUI go to: http://127.0.0.1:8188
```

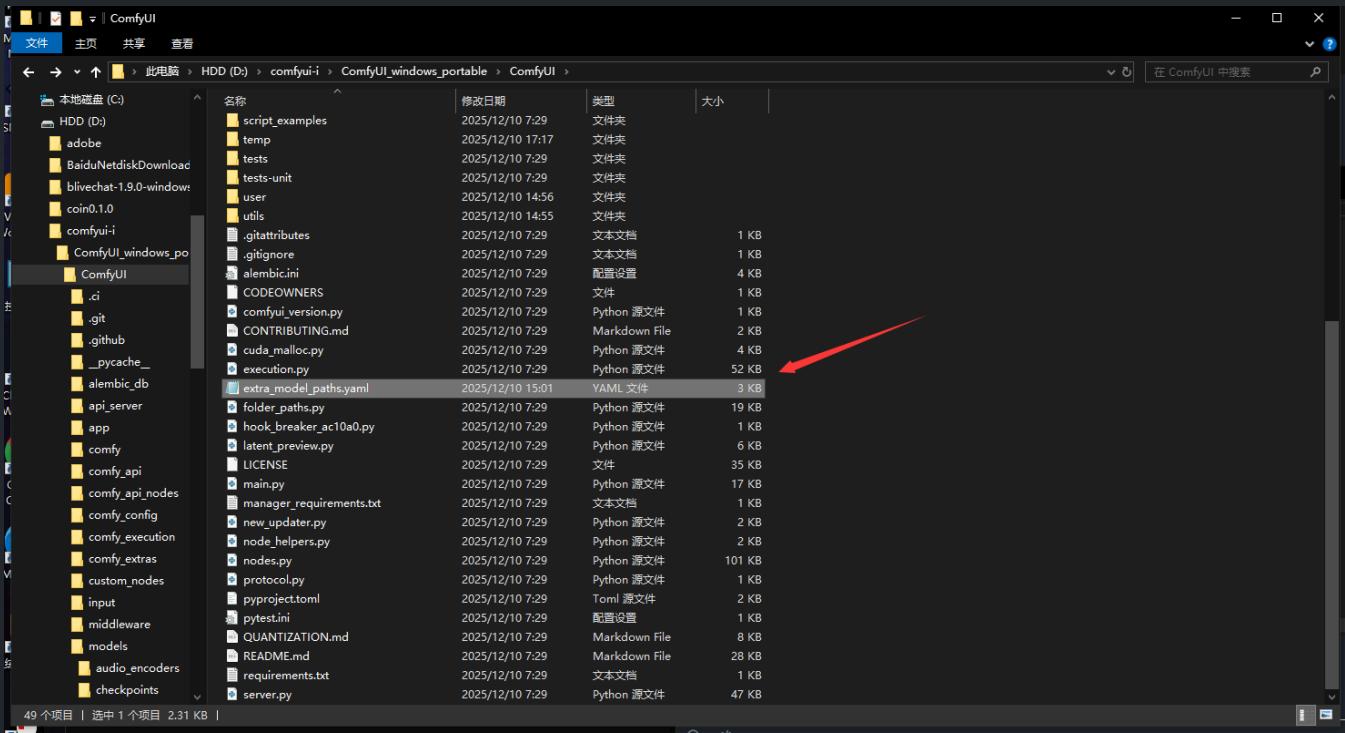
会自动跳出来个web页面（有问题的把上面的命令行复制给ai纠错）



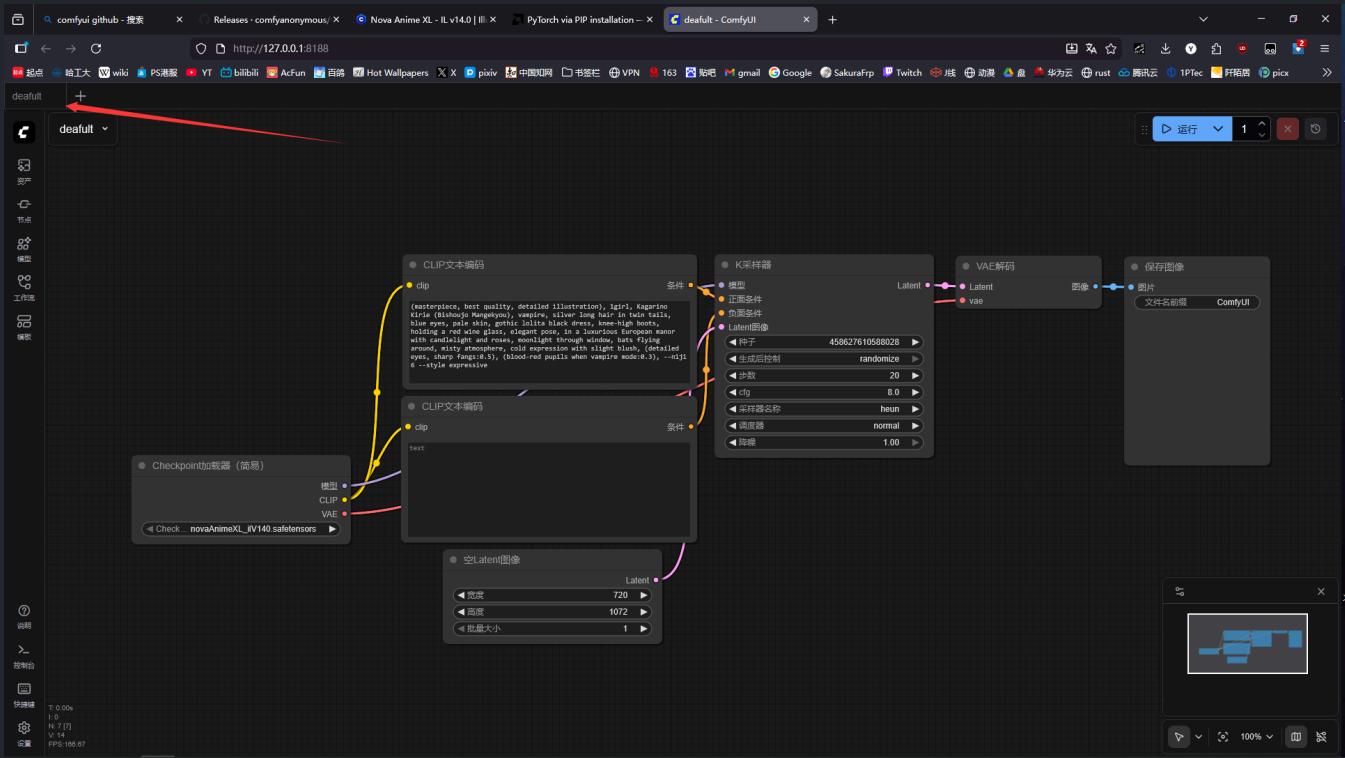
15. 关掉页面



在这个路径下把你的模型放进去（或者使用作者提供的修改文件的方法，映射你的模型路径）



16.

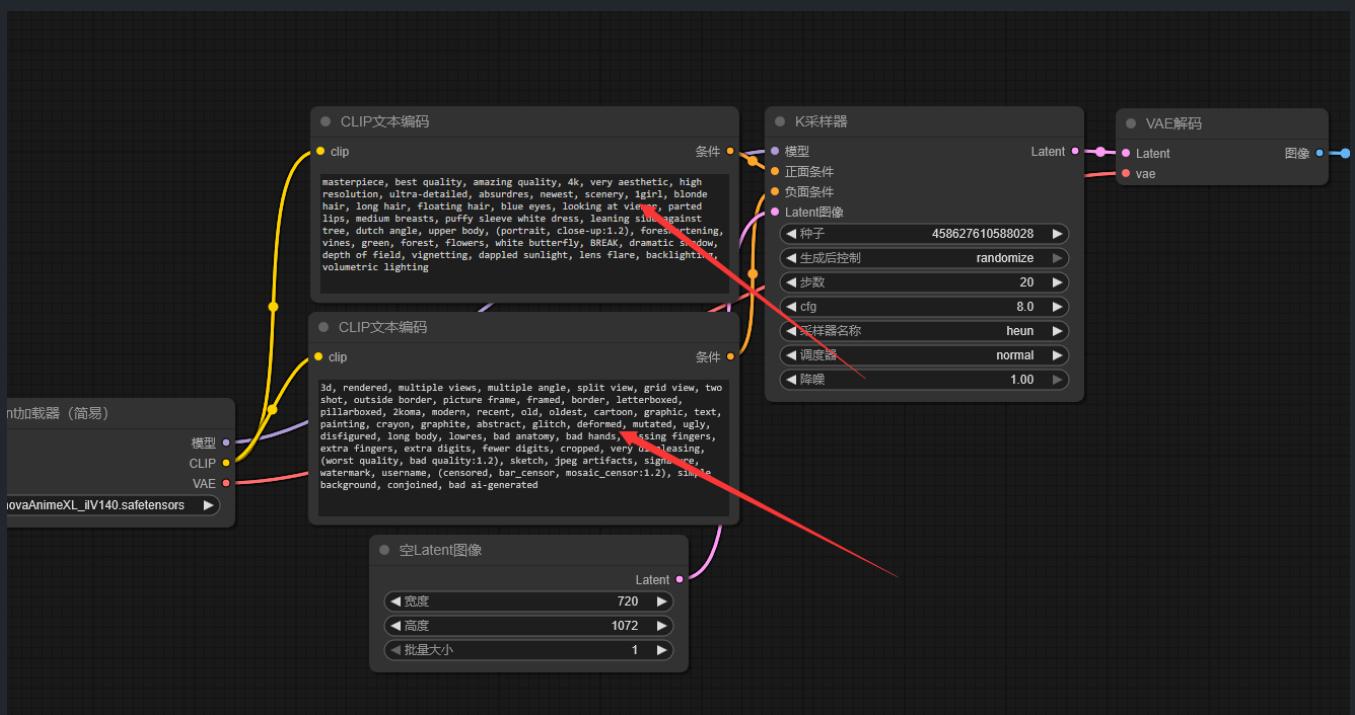


关掉所有的工作流，会出来一个默认的。

在这里选择模型，



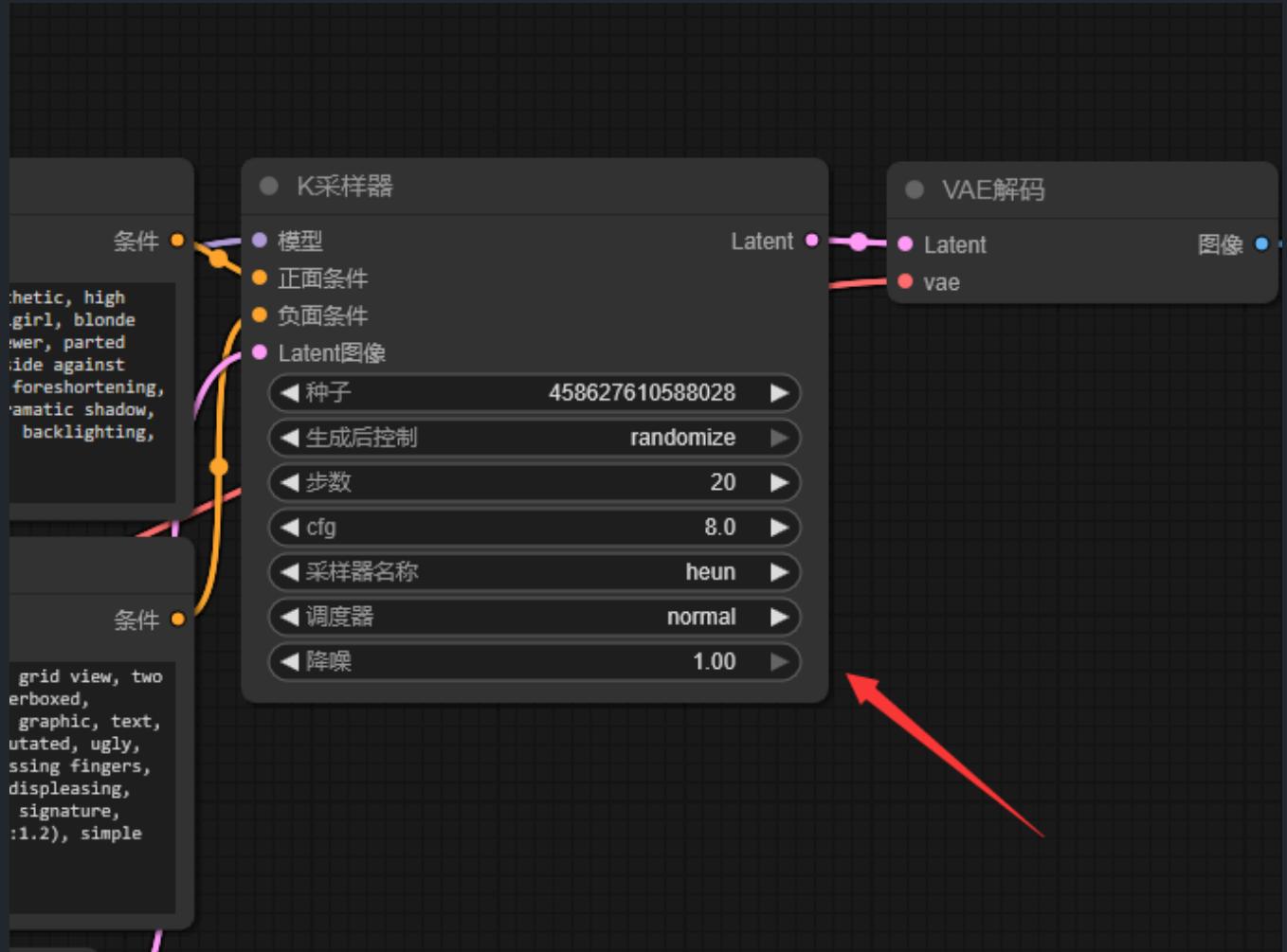
在这两个地方修改提示词



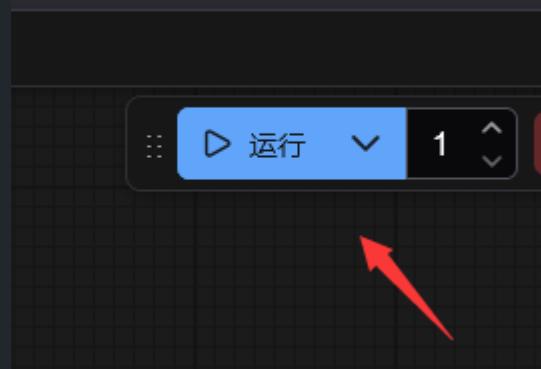
这里修改图片的像素



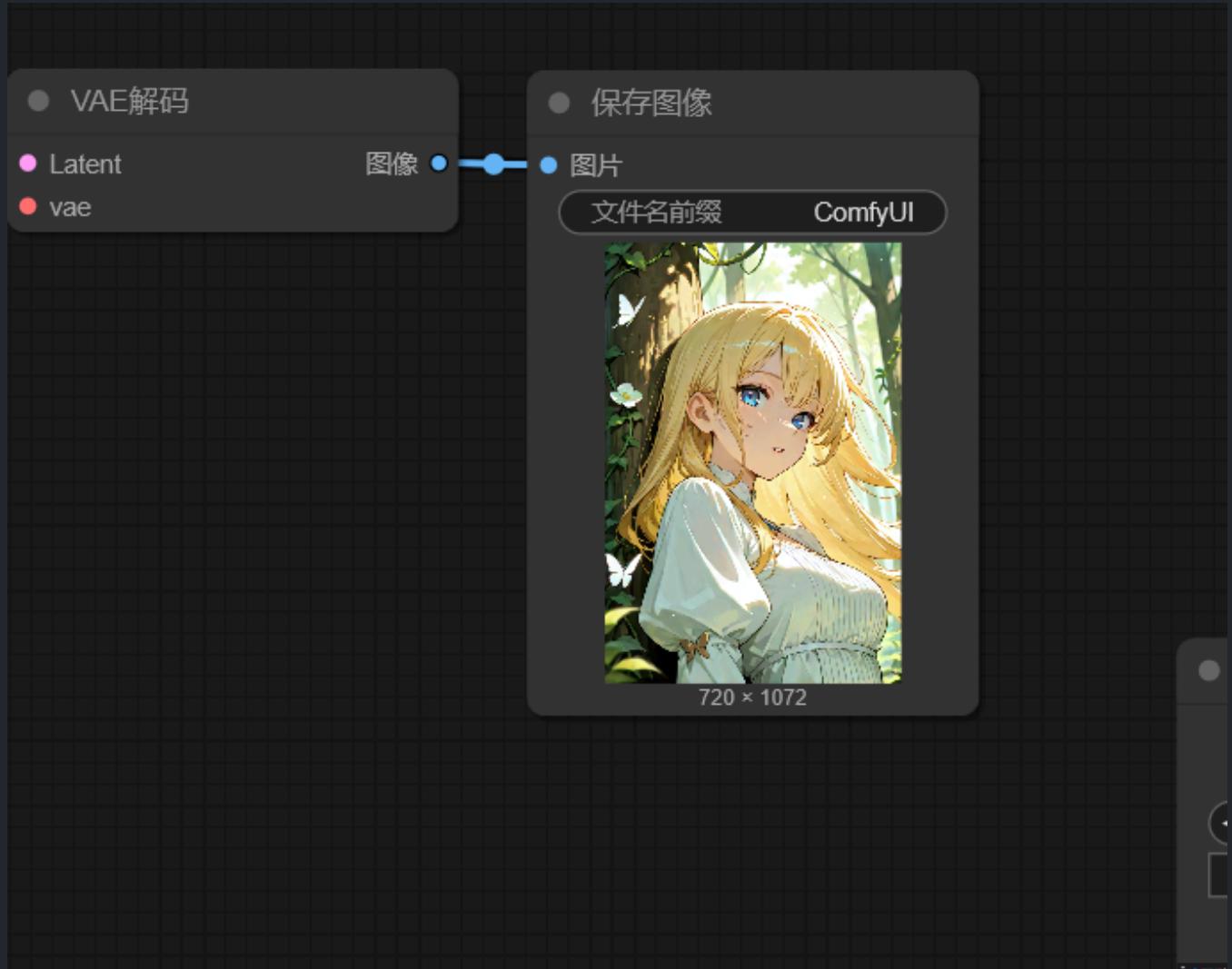
这里修改生成步数等



rust 腾讯云 1PTec 阿陌居 pi



出图



powershell 显示

```

Windows PowerShell

[Prompt Server] web root: D:\comfyui-i\ComfyUI_windows_portable\python_embeded\Lib\site-packages\comfyui_frontend_package\static
Total VRAM 16304 MB, total RAM 64618 MB
pytorch version: 2.9.0+rocm sdk20251116
Set: torch.backends.cudnn.enabled = False for better AMD performance.
AMD arch: gfx1201
ROCM version: (7, 1)
Set vram state to: NORMAL_VRAM
Disabling smart memory management
Device: cuda:0 AMD Radeon RX 9070 : native
Enabled pinned memory 29078.0

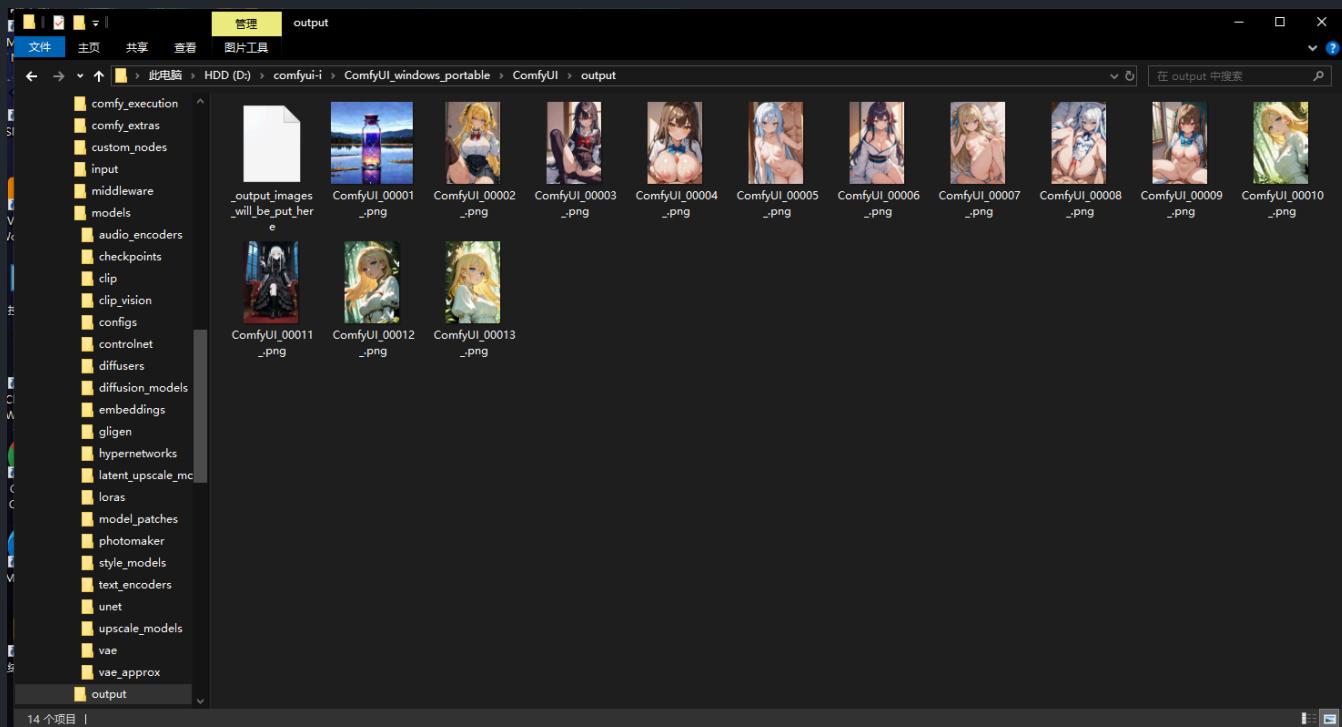
Import times for custom nodes:
 0.0 seconds: D:\comfyui-i\ComfyUI\custom_nodes\websocket_image_save.py

Context impl SQLiteImpl.
Will assume non-transactional DDL.
No target revision found.
Starting server

To see the GUI go to: http://127.0.0.1:8188
got prompt
model weight dtype torch.float16, manual cast: None
model_type EPS
Using split attention in VAE
Using split attention in VAE
VAE load device: cuda:0, offload device: cpu, dtype: torch.bfloat16
CLIP/text encoder model load device: cuda:0, offload device: cpu, current: cpu, dtype: torch.float16
Requested to load SDXLClipModel
loaded completely; 14633.80 MB usable, 1560.80 MB loaded, full load: True
Requested to load SDXL
loaded completely; 13877.42 MB usable, 4897.05 MB loaded, full load: True
100% [██████████] 20/20 [00:10<00:00, 1.87it/s]
Requested to load AutoencoderKL
loaded completely; 6345.27 MB usable, 159.56 MB loaded, full load: True
Prompt executed in 17.32 seconds

```

出来的文件在这个路径



17. 我是用的模型: <https://civitai.com/models/376130/nova-anime-xl> (科学上网)

18. **ctrl + C** 退出

```
Windows PowerShell      X + ^

Total VRAM 16304 MB, total RAM 64618 MB
pytorch version: 2.9.0+rocm sdk 20251116
Set: torch.backends.cudnn.enabled = False for better AMD performance.
AMD arch: gfx1201
ROCM version: (7, 1)
Set vram state to: NORMAL_VRAM
Disabling smart memory management
Device: cuda:0 AMD Radeon RX 9070 : native
Enabled pinned memory 29078.0

Import times for custom nodes:
  0.0 seconds: D:\comfyui-i\ComfyUI_windows_portable\ComfyUI\custom_nodes\websocket_image_save.py

Context impl SQLiteImpl.
Will assume non-transactional DDL.
No target revision found.
Starting server

To see the GUI go to: http://127.0.0.1:8188
got prompt
model weight dtype torch.float16, manual cast: None
model_type EPS
Using split attention in VAE
Using split attention in VAE
VAE load device: cuda:0, offload device: cpu, dtype: torch.bfloat16
CLIP/text encoder model load device: cuda:0, offload device: cpu, current: cpu, dtype: torch.float16
Requested to load SDXLClipModel
loaded completely; 14633.80 MB usable, 1560.80 MB loaded, full load: True
Requested to load SDXL
loaded completely; 13877.42 MB usable, 4897.05 MB loaded, full load: True
100% | 20/20 [00:10~00:00, 1.87it/s]
Requested to load AutoencoderKL
loaded completely; 6345.27 MB usable, 159.56 MB loaded, full load: True
Prompt executed in 17.32 seconds

Stopped server
终止批处理操作吗(Y/N)? |
```

再输入Y +回车