

# LIIF

数据集

```
# Load/div2k/  
#   |— DIV2K_train_HR/  
#   |— DIV2K_valid_HR/  
#   |— DIV2K_valid_LR_bicubic/  
#   |   |— X2/  
#   |   |— X4/
```

基本用法：将图片放大到指定分辨率

## 功能体验

```
python demo.py \  
  --input input.png \  
  --model pretrained_models/edsr-baseline-liif.pth \  
  --resolution 512,512 \  
  --output output.png \  
  --gpu 0
```

更多例子：

2倍放大 (如果原图是256x256)

```
python demo.py --input input.png --model pretrained_models/edsr-baseline-liif.pth --resolution  
512,512 --output 2x.png --gpu 0
```

4倍放大

```
python demo.py --input input.png --model pretrained_models/edsr-baseline-liif.pth --resolution  
1024,1024 --output 4x.png --gpu 0
```

非整数倍放大 (LIIF的独特优势! )

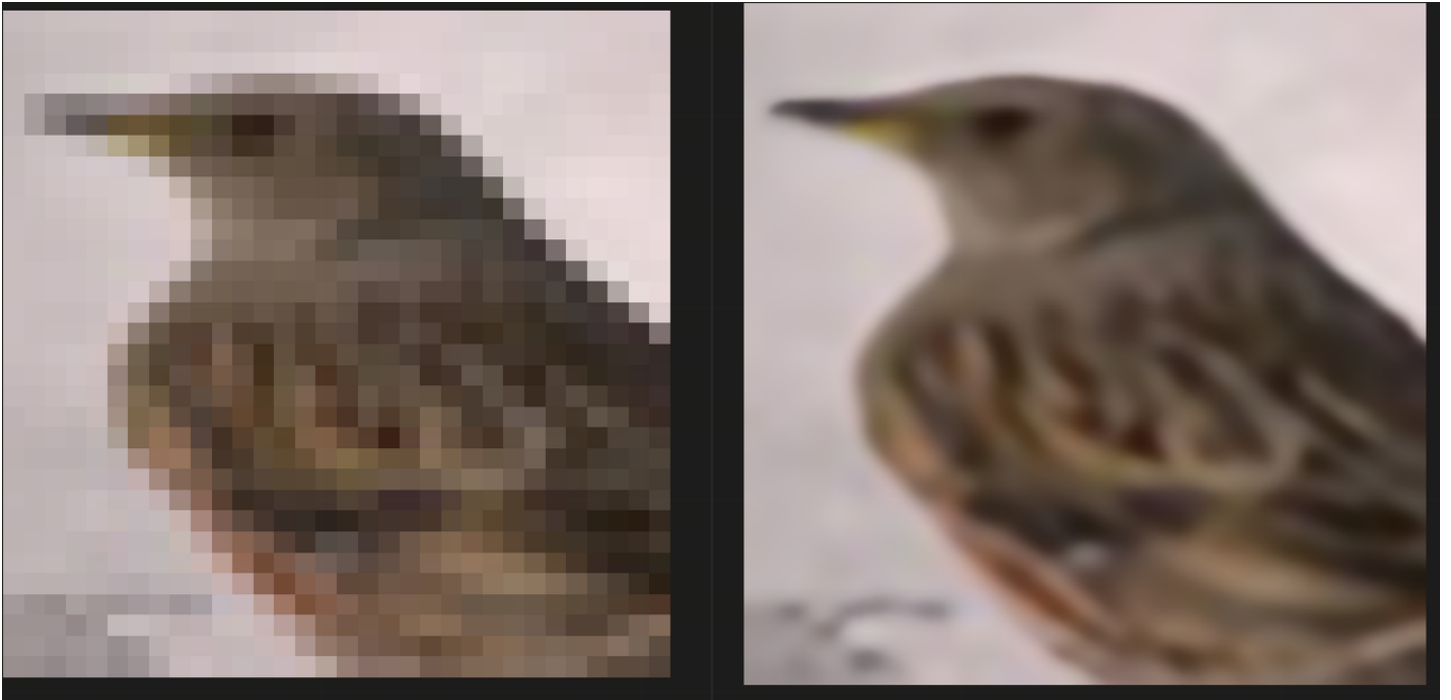
```
python demo.py --input input.png --model pretrained_models/edsr-baseline-liif.pth --resolution 640,480 --output custom.png --gpu 0
```

My test

```
python demo.py --input cat0_256x256.jpg --model pretrained_models/rdn-liif.pth --resolution 512,512 --output 2x.png --gpu 0
```

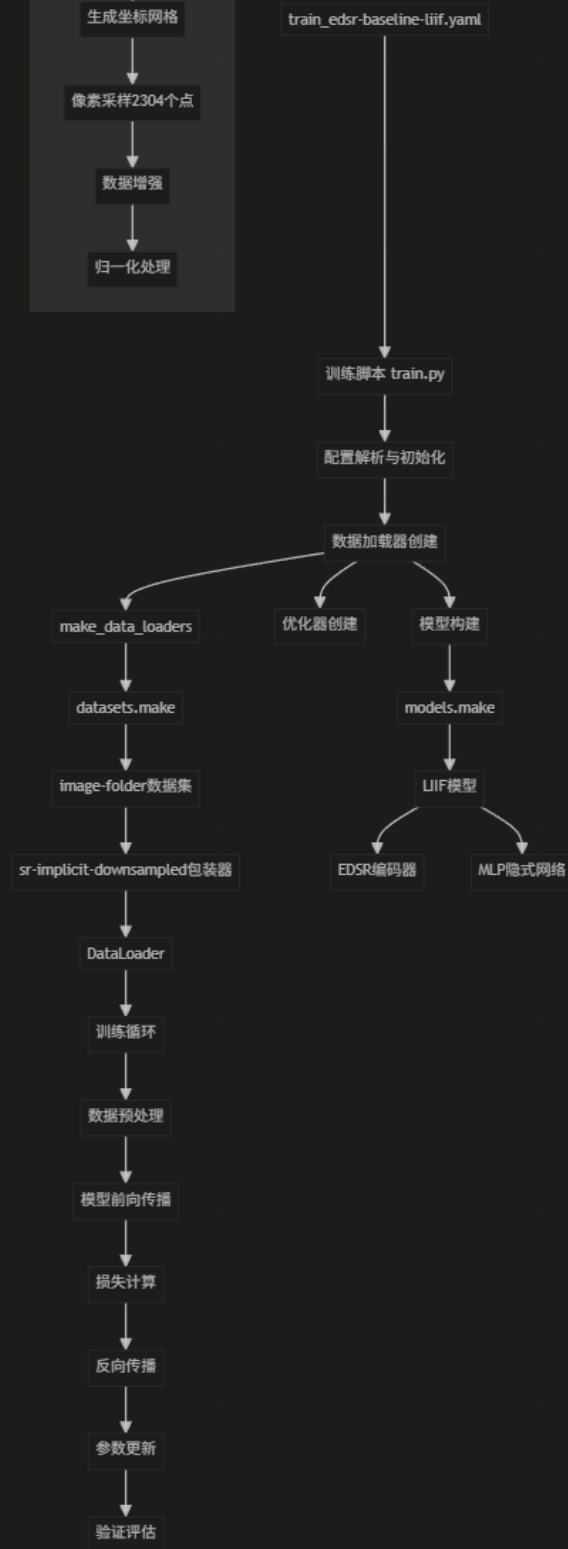
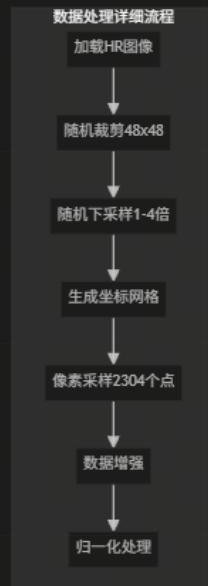
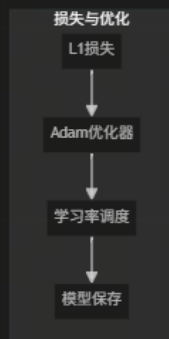
```
python demo.py --input yang.jpg --model pretrained_models/rdn-liif.pth --resolution 2048,2048 --output yangyang.png --gpu 0
```

```
python demo.py --input new.png --model pretrained_models/rdn-liif.pth --resolution 320,320 --output new10.png --gpu 0
```



```
python demo.py --input new.png --model save_model/edsr_liif_baseline/epoch-100.pth --resolution 320,320 --output new10.png --gpu 0
```

项目理解



# pytorch实验

## train\_edsr-baseline-pytorch

python train\_liif.py --config configs/train-div2k/train\_edsr-baseline-liif.yaml --name liif\_edsr\_baseline\_v1 --gpu 0

```
liif > save > liif_edsr_baseline_v1 > log.txt
1 train dataset: size=16000
2 inp: shape=(3, 48, 48)
3 coord: shape=(2304, 2)
4 cell: shape=(2304, 2)
5 gt: shape=(2304, 3)
6 val dataset: size=1600
7 inp: shape=(3, 48, 48)
8 coord: shape=(2304, 2)
9 cell: shape=(2304, 2)
10 gt: shape=(2304, 3)
11 model: #params=1.6M
12 epoch 1/200, train: loss=0.0811, val: psnr=26.9796, 1.1m 1.1m/3.7h
13 epoch 2/200, train: loss=0.0486, val: psnr=28.0073, 1.1m 2.2m/3.7h
14 epoch 3/200, train: loss=0.0451, val: psnr=27.8387, 1.1m 3.3m/3.7h
15 epoch 4/200, train: loss=0.0432, val: psnr=28.6593, 1.1m 4.5m/3.7h
16

Problems Output Debug Console Terminal Ports
python - liif
1.py:504: UserWarning: torch.meshgrid: in an upcoming release, it will be required
to pass the indexing argument. (Triggered internally at ../aten/src/ATen/native/T
ensorShape.cpp:3526.)
return _VF.meshgrid(tensors, **kwargs) # type: ignore[attr-defined]
inp: shape=(3, 48, 48)
coord: shape=(2304, 2)
cell: shape=(2304, 2)
gt: shape=(2304, 3)
val dataset: size=1600
inp: shape=(3, 48, 48)
coord: shape=(2304, 2)
cell: shape=(2304, 2)
gt: shape=(2304, 3)
model: #params=1.6M
epoch 1/200, train: loss=0.0811, val: psnr=26.9796, 1.1m 1.1m/3.7h
epoch 2/200, train: loss=0.0486, val: psnr=28.0073, 1.1m 2.2m/3.7h
epoch 3/200, train: loss=0.0451, val: psnr=27.8387, 1.1m 3.3m/3.7h
epoch 4/200, train: loss=0.0432, val: psnr=28.6593, 1.1m 4.5m/3.7h
val: 51% | 51/100 [00:02<00:01, 42.24it/s]
```

## 测试

python demo.py --input new.png --model ./save/liif\_edsr\_baseline\_v1/epoch-best.pth --resolution 320,320 --output new10.png --gpu 0



```
python test.py --config ./configs/test/test-div2k-2.yaml --model  
./save/liif_edsr_baseline_v1/epoch-best.pth --gpu 0
```

result: 34.3430

```
python test.py --config ./configs/test/test-div2k-6.yaml --model  
./save/liif_edsr_baseline_v1/epoch-best.pth --gpu 0
```

result: 26.5597

train\_rdn-liif-pytorch

消融实验train\_edsr-baseline-固定放大倍数\*2/\*3/\*4-pytorch

消融实验train\_edsr-baseline-cell\_decode: false测试cell decode重要性

消融实验train\_edsr-baseline-hidden\_list: [256, 256]测试MLP深度影响

消融实验train\_edsr-baseline-local\_ensemble: false测试局部集成重要性

消融实验train\_edsr-baseline-feat\_unfold: false：测试特征展开重要性

记录结果

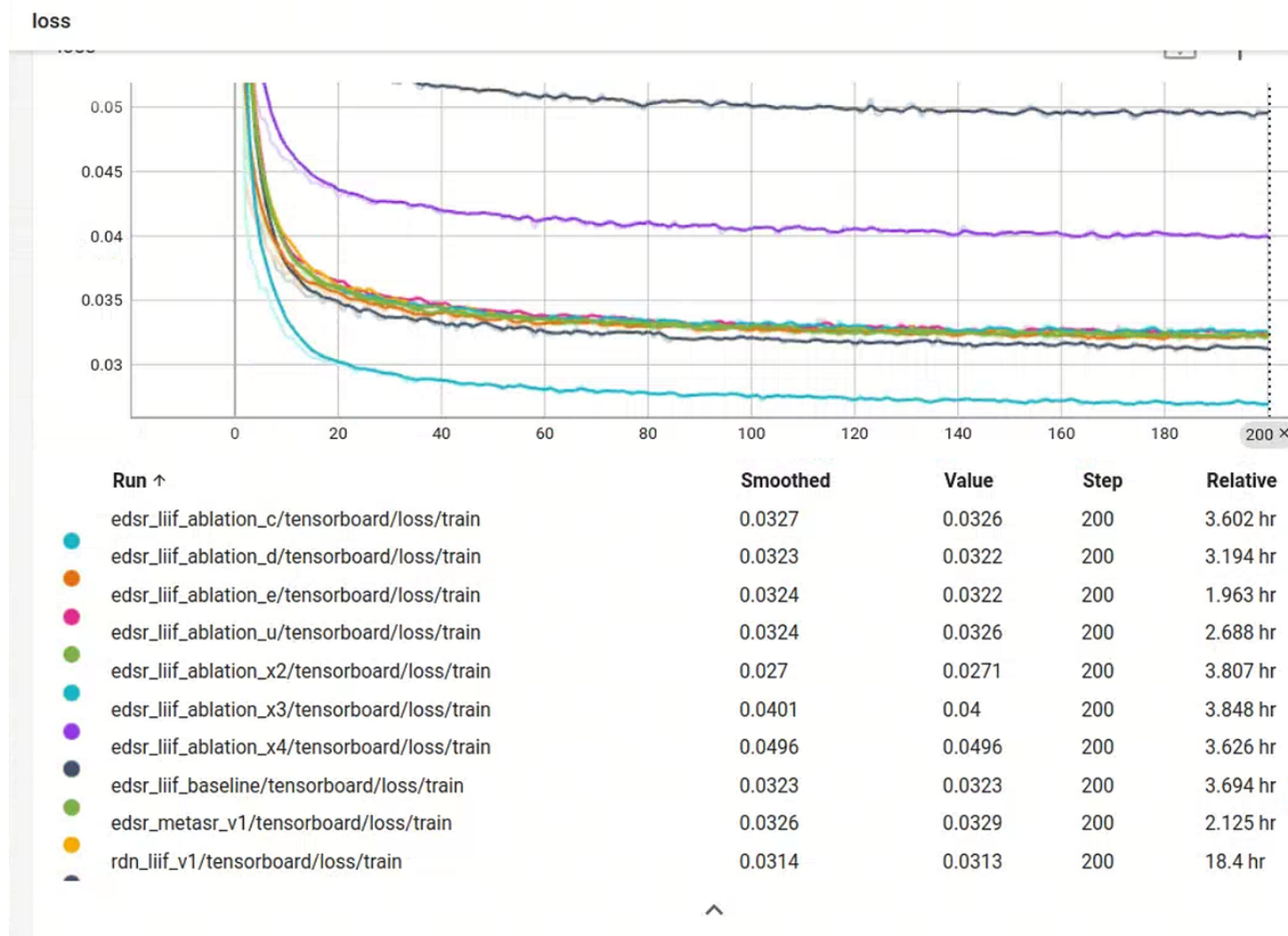
代码块

```
1  # 批量测试结果 pytorch - 2025-08-09 04:35:35
2  =====
3
4
5  ## 模型: edsr_liif_ablation_e
6  模型路径: ./save_model/edsr_liif_ablation_e/epoch-best.pth
7  test-div2k-12.yaml: 23.4963
8  test-div2k-18.yaml: 21.9953
9  test-div2k-2.yaml: 34.1336
10 test-div2k-24.yaml: 21.0386
11 test-div2k-3.yaml: 30.5627
12 test-div2k-30.yaml: 20.3633
13 test-div2k-4.yaml: 28.6617
14 test-div2k-6.yaml: 26.4681
15 -----
16
17 ## 模型: edsr_liif_baseline
18 模型路径: ./save_model/edsr_liif_baseline/epoch-best.pth
19 test-div2k-12.yaml: 23.5905
20 test-div2k-18.yaml: 22.0491
21 test-div2k-2.yaml: 34.3599
22 test-div2k-24.yaml: 21.0941
23 test-div2k-3.yaml: 30.7096
24 test-div2k-30.yaml: 20.4137
25 test-div2k-4.yaml: 28.7951
26 test-div2k-6.yaml: 26.5856
27 -----
28
29 ## 模型: edsr_liif_ablation_c
30 模型路径: ./save_model/edsr_liif_ablation_c/epoch-best.pth
```

```
31 test-div2k-12.yaml: 23.5686
32 test-div2k-18.yaml: 22.0716
33 test-div2k-2.yaml: 34.2156
34 test-div2k-24.yaml: 21.1073
35 test-div2k-3.yaml: 30.6501
36 test-div2k-30.yaml: 20.4218
37 test-div2k-4.yaml: 28.7276
38 test-div2k-6.yaml: 26.5329
39 -----
40
41 ## 模型: rdn_liif_v1
42 模型路径: ./save_model/rdn_liif_v1/epoch-best.pth
43 test-div2k-12.yaml: 23.6874
44 test-div2k-18.yaml: 22.1463
45 test-div2k-2.yaml: 34.4883
46 test-div2k-24.yaml: 21.1565
47 test-div2k-3.yaml: 30.8683
48 test-div2k-30.yaml: 20.4653
49 test-div2k-4.yaml: 28.9486
50 test-div2k-6.yaml: 26.7103
51 -----
52
53 ## 模型: edsr_liif_ablation_d
54 模型路径: ./save_model/edsr_liif_ablation_d/epoch-best.pth
55 test-div2k-12.yaml: 23.5082
56 test-div2k-18.yaml: 22.0001
57 test-div2k-2.yaml: 34.3292
58 test-div2k-24.yaml: 21.0367
59 test-div2k-3.yaml: 30.6596
60 test-div2k-30.yaml: 20.3627
61 test-div2k-4.yaml: 28.7328
62 test-div2k-6.yaml: 26.5056
63 -----
64
65 ## 模型: edsr_liif_ablation_u
66 模型路径: ./save_model/edsr_liif_ablation_u/epoch-best.pth
67 test-div2k-12.yaml: 23.5461
68 test-div2k-18.yaml: 22.0371
69 test-div2k-2.yaml: 34.3393
70 test-div2k-24.yaml: 21.0695
71 test-div2k-3.yaml: 30.6861
72 test-div2k-30.yaml: 20.3887
73 test-div2k-4.yaml: 28.7715
74 test-div2k-6.yaml: 26.5462
75 -----
76
77 ## 模型: edsr_liif_ablation_x3
```

```
78 模型路径: ./save_model/edsr_liif_ablation_x3/epoch-best.pth
79 test-div2k-12.yaml: 23.5514
80 test-div2k-18.yaml: 22.0473
81 test-div2k-2.yaml: 33.7988
82 test-div2k-24.yaml: 21.0834
83 test-div2k-3.yaml: 30.5798
84 test-div2k-30.yaml: 20.4090
85 test-div2k-4.yaml: 28.6869
86 test-div2k-6.yaml: 26.5050
87 -----
88
89 ## 模型: edsr_liif_ablation_x2
90 模型路径: ./save_model/edsr_liif_ablation_x2/epoch-best.pth
91 test-div2k-12.yaml: 23.4563
92 test-div2k-18.yaml: 21.9792
93 test-div2k-2.yaml: 34.3062
94 test-div2k-24.yaml: 21.0293
95 test-div2k-3.yaml: 30.4536
96 test-div2k-30.yaml: 20.3568
97 test-div2k-4.yaml: 28.6041
98 test-div2k-6.yaml: 26.3955
99 -----
100
101 ## 模型: edsr_liif_ablation_x4
102 模型路径: ./save_model/edsr_liif_ablation_x4/epoch-best.pth
103 test-div2k-12.yaml: 23.5930
104 test-div2k-18.yaml: 22.0831
105 test-div2k-2.yaml: 33.8345
106 test-div2k-24.yaml: 21.1049
107 test-div2k-3.yaml: 30.5910
108 test-div2k-30.yaml: 20.4185
109 test-div2k-4.yaml: 28.7739
110 test-div2k-6.yaml: 26.5737
111 -----
112
113 ## 模型: edsr metasr_v1
114 模型路径: ./save_model/edsr_metasr_v1/epoch-best.pth
115 test-div2k-12.yaml: 23.3730
116 test-div2k-18.yaml: 21.8920
117 test-div2k-2.yaml: 34.2341
118 test-div2k-24.yaml: 20.9396
119 test-div2k-3.yaml: 30.5801
120 test-div2k-30.yaml: 20.2721
121 test-div2k-4.yaml: 28.6179
122 test-div2k-6.yaml: 26.3640
123 -----
```





测试

```
python test.py --config test-div2k-2.yaml --model ./save_model/edsr_liif_baseline/epoch-best.pth --gpu 0
```

## 迁移过程

utils.py

代码块

```
1 import os
2 import time
3 import shutil
4 import math
5 import numpy as np
6 import jittor as jt
```

```

7  from jittor.optim import SGD, Adam
8  from tensorboardX import SummaryWriter
9
10 class Averager():
11
12     def __init__(self):
13         self.n = 0.0
14         self.v = 0.0
15
16     def add(self, v, n=1.0):
17         self.v = (self.v * self.n + v * n) / (self.n + n)
18         self.n += n
19
20     def item(self):
21         return self.v
22
23 class Timer():
24
25     def __init__(self):
26         self.v = time.time()
27
28     def s(self):
29         self.v = time.time()
30
31     def t(self):
32         return time.time() - self.v
33
34 def time_text(t):
35     if t >= 3600:
36         return '{:.1f}h'.format(t / 3600)
37     elif t >= 60:
38         return '{:.1f}m'.format(t / 60)
39     else:
40         return '{:.1f}s'.format(t)
41
42 _log_path = None
43
44 def set_log_path(path):
45     global _log_path
46     _log_path = path
47
48 def log(obj, filename='log.txt'):
49     print(obj)
50     if _log_path is not None:
51         with open(os.path.join(_log_path, filename), 'a') as f:
52             print(obj, file=f)
53

```

```

54 def ensure_path(path, remove=True):
55     basename = os.path.basename(path.rstrip('/'))
56     if os.path.exists(path):
57         if remove and (basename.startswith('_')
58             or input('{} exists, remove? (y/[n]): '.format(path)) == 'y'):
59             shutil.rmtree(path)
60             os.makedirs(path)
61     else:
62         os.makedirs(path)
63
64 def set_save_path(save_path, remove=True):
65     ensure_path(save_path, remove=remove)
66     set_log_path(save_path)
67     writer = SummaryWriter(os.path.join(save_path, 'tensorboard'))
68     return log, writer
69
70 def compute_num_params(model, text=False):
71     tot = int(sum([np.prod(p.shape) for p in model.parameters()]))
72     if text:
73         if tot >= 1e6:
74             return '{:.1f}M'.format(tot / 1e6)
75         else:
76             return '{:.1f}K'.format(tot / 1e3)
77     else:
78         return tot
79
80 def make_optimizer(param_list, optimizer_spec):
81     Optimizer = {
82         'sgd': SGD,
83         'adam': Adam
84     }[optimizer_spec['name']]
85
86     ##optimizer:
87     ## name: adam          # 优化器类型
88     ## args:
89     ## lr: 1.e-4           # 学习率
90
91     optimizer = Optimizer(param_list, **optimizer_spec['args'])
92     #其实就是调用
93     # classjittor.optim.Adam(params, lr, eps=1e-08, betas=(0.9, 0.999),
94     # weight_decay=0)
95     return optimizer
96
97 def make_coord(shape, ranges=None, flatten=True):
98     """ Make coordinates at grid centers.
99     """
100     coord_seqs = []

```

```

100     for i, n in enumerate(shape):
101         if ranges is None:
102             v0, v1 = -1, 1
103         else:
104             v0, v1 = ranges[i]
105         r = (v1 - v0) / (2 * n)
106         # Jittor中用jt.arange替代torch.arange
107         seq = v0 + r + (2 * r) * jt.arange(n).float()
108         coord_seqs.append(seq)
109     # Jittor中用jt.meshgrid替代torch.meshgrid
110     ret = jt.stack(jt.meshgrid(*coord_seqs), dim=-1)
111     if flatten:
112         # Jittor中用reshape替代view (功能相同)
113         ret = ret.reshape(-1, ret.shape[-1])
114     return ret
115
116 #像素网格坐标->RGB值的映射
117 def to_pixel_samples(img):
118     """ Convert the image to coord-RGB pairs.
119     img: Tensor, (3, H, W)
120     """
121     coord = make_coord(img.shape[-2:])
122     rgb = img.view(3, -1).permute(1, 0)
123     return coord, rgb
124
125 def calc_psnr(sr, hr, dataset=None, scale=1, rgb_range=1):
126     diff = (sr - hr) / rgb_range
127     if dataset is not None:
128         if dataset == 'benchmark':
129             shave = scale
130             if diff.size(1) > 1:
131                 gray_coeffs = [65.738, 129.057, 25.064]
132                 convert = diff.new_tensor(gray_coeffs).view(1, 3, 1, 1) / 256
133                 diff = diff.mul(convert).sum(dim=1)
134             elif dataset == 'div2k':
135                 shave = scale + 6
136             else:
137                 raise NotImplementedError
138     valid = diff[..., shave:-shave, shave:-shave]
139     else:
140         valid = diff
141     # 计算均方误差,因为传入的是torch.Tensor->jt.Var
142     mse = valid.pow(2).mean() # Jittor张量的方法
143     return -10 * jt.log10(mse) # Jittor的对数函数
144

```

# Datasets

数据裁剪部分迁移成功

代码块

```
1  ##dataset和warpper的时候用到torch需要重构为jittor
2  def make_data_loader(spec, tag=''):
3      if spec is None:
4          return None
5      # train_dataset:
6      #   dataset:
7      #       name: image-folder
8      #       args:
9      #           root_path: ./load/div2k/DIV2K_train_HR
10     #           repeat: 20
11     #           cache: in_memory
12     # wrapper:
13     #   name: sr-implicit-downsampled
14     #   args:
15     #       inp_size: 48
16     #       scale_max: 4
17     #       augment: true
18     #       sample_q: 2304
19     # batch_size: 16
20     dataset = datasets.make(spec['dataset'])
21     dataset = datasets.make(spec['wrapper'], args={'dataset': dataset})
22
23     log('{} dataset: size={}'.format(tag, len(dataset)))
24     for k, v in dataset[0].items():
25         log('  {}: shape={}'.format(k, tuple(v.shape)))
26
27     #DataLoader(dataset, batch_size=spec['batch_size'])
28     #这里torch和jittor不一致,
29     # Jittor无需dataloader封装, dataset即可
30     dataset.set_attrs(
31         batch_size=spec['batch_size'], # 设置批大小
32         shuffle=(tag == 'train'),      # 设置是否打乱
33         num_workers=8                  # 设置工作进程数
34     )
35     # 直接基于设置好属性的数据集创建
36     return dataset
```

代码块

```
1  train dataset: size=16000
2      inp: shape=(3, 48, 48)
3      coord: shape=(2304, 2)
4      cell: shape=(2304, 2)
5      gt: shape=(2304, 3)
6  <class 'dict'>
7  <class 'jittor.jittor_core.Var'>
8  val dataset: size=1600
9      inp: shape=(3, 48, 48)
10     coord: shape=(2304, 2)
11     cell: shape=(2304, 2)
12     gt: shape=(2304, 3)
13 <class 'dict'>
14 <class 'jittor.jittor_core.Var'>
```

## jittor实验

### jittor配置

Jittor

```
export LD_LIBRARY_PATH=/home/sumeru-js-04/miniconda3/envs/liv/lib:$LD_LIBRARY_PATH &&
export nvcc_path=/home/sumeru-js-04/miniconda3/envs/liv/bin/nvcc
```

```
export nvcc_path=/home/nomodeset/.cache/jittor/jtcuda/cuda12.2_cudnn8_linux/bin/nvcc
```

这个命令会从清华镜像下载并安装包含 GLIBCXX\_3.4.30 的 libstdc++.so.6

```
conda install -c conda-forge libstdcxx-ng
```

检验

```
strings /home/sumeru-js-04/miniconda3/envs/liv/lib/libstdc++.so.6 | grep GLIBCXX_3.4.30
```

代码块

```
1  python -m jittor.test.test_example
```

```
2 .....
3 step 846, loss = 0.0017997237155213952 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
4 step 847, loss = 0.0016322014853358269 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
5 step 848, loss = 0.0017350636189803481 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
6 step 849, loss = 0.001465433626435697 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
7 step 850, loss = 0.0012759666424244642 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
8 step 851, loss = 0.0014240741729736328 {'hold_vars': 13, 'lived_vars': 61,
  'lived_ops': 55}
9 .....
10 Ran 1 test in 4.596s
11 OK
```

#### 代码块

```
1 (liv) sumeru-js-04@user:~/Projects/Qwen/LIIF/liif$ python -c "import jittor as
  jt; jt.flags.use_cuda=1; print('Jittor CUDA可用:', jt.has_cuda); "
2 [i 0805 11:02:43.505479 36 compiler.py:956] Jittor(1.3.10.0) src: /home/sumeru-
  js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor
3 [i 0805 11:02:43.506707 36 compiler.py:957] g++ at /usr/bin/g++(11.4.0)
4 [i 0805 11:02:43.506732 36 compiler.py:958] cache_path: /home/sumeru-js-
  04/.cache/jittor/jt1.3.10/g++11.4.0/py3.9.23/Linux-5.15.0-
  1x42/IntelCoreTm9xd1/1234/default
5 [i 0805 11:02:43.546444 36 install_cuda.py:96] cuda_driver_version: [12, 4]
6 [i 0805 11:02:43.552343 36 __init__.py:412] Found /home/sumeru-js-
  04/.cache/jittor/jtcuda/cuda12.2_cudnn8_linux/bin/nvcc(12.2.140) at
  /home/sumeru-js-04/.cache/jittor/jtcuda/cuda12.2_cudnn8_linux/bin/nvcc.
7 [i 0805 11:02:43.600174 36 __init__.py:412] Found gdb(22.04.2) at /usr/bin/gdb.
8 [i 0805 11:02:43.601505 36 __init__.py:412] Found addr2line(2.38) at
  /usr/bin/addr2line.
9 [i 0805 11:02:43.674627 36 compiler.py:1013] cuda key:cu12.2.140
10 [i 0805 11:02:43.889815 36 __init__.py:227] Total mem: 125.58GB, using 16
  procs for compiling.
11 [i 0805 11:02:43.926840 36 jit_compiler.cc:28] Load cc_path: /usr/bin/g++
12 [i 0805 11:02:43.926854 36 jit_compiler.cc:31] Load nvcc_path: /home/sumeru-js-
  04/.cache/jittor/jtcuda/cuda12.2_cudnn8_linux/bin/nvcc
13 [i 0805 11:02:43.985700 36 init.cc:63] Found cuda archs: [86,]
14 [i 0805 11:02:44.504572 36 __init__.py:412] Found mpicc(4.1.2) at
  /usr/bin/mpicc.
15 [i 0805 11:02:44.682670 36 cuda_flags.cc:55] CUDA enabled.
```

## 代码块

```

1  (liv) sumeru-js-04@user:~/Projects/Qwen/LIIF/liif$ python -m
   jittor.test.test_cudnn_op
2  .....
3  Ran 5 tests in 44.636s
4
5  OK

```

## jittor框架调试记录

```
python train.py --config train_edsr-baseline-liif.yaml --name liif_edsr_baseline_v1 --gpu 0
```

```
python train.py --config train-div2k/train_edsr-baseline-liif.yaml --name liif_edsr_baseline_v1 --gpu 0
```

```
python trainon1.py --config train-div2k/train_edsr-baseline-liif.yaml --name liif_edsr_baseline_v1 --gpu 0
```

```
python test.py --config test-div2k/test-div2k-2.yaml --model ./save_model_jittor/edsr_liif_baseline_debug_v1/epoch-best.pth --gpu 0
```

## 爆显存分析

## 代码块

```

1  config loaded.
2  ./save_model_jittor/liif_edsr_baseline_debug_new_v1 exists, remove? (y/[n]): y
3  train dataset: size=4000
4  inp: shape=(3, 32, 32)
5  coord: shape=(1024, 2)
6  cell: shape=(1024, 2)
7  gt: shape=(1024, 3)
8  <class 'dict'>
9  <class 'jittor.jittor_core.Var'>
10 val dataset: size=100

```



```

11     inp: shape=(3, 32, 32)
12     coord: shape=(1024, 2)
13     cell: shape=(1024, 2)
14     gt: shape=(1024, 3)
15 <class 'dict'>
16 <class 'jittor.jittor_core.Var'>
17 model: #params=1.6M
18 Optimizer type: <class 'jittor.optim.Adam'>
19 Learning rate: 0.0001
20 train: 0%|                                     | 0/4000 [00:00<?, ?it/s]
21 Compiling Operators(37/37) used: 2.31s eta: 0s
22 root()
23 [222.08 MB; 100.00%; cnt:377 ]
24 |
25 |─/home/sumeru-js-04/Projects/Qwen/LIIF/liif_jittor/cuda.py:273(<module>)
26 | [203.94 MB; 91.83%; cnt:121 ]
27 | /home/sumeru-js-04/Projects/Qwen/LIIF/liif_jittor/cuda.py:273
28 | |
29 | |─/home/sumeru-js-04/Projects/Qwen/LIIF/liif_jittor/cuda.py:204(main)
30 | | [203.94 MB; 91.83%; cnt:121 ]
31 | | /home/sumeru-js-04/Projects/Qwen/LIIF/liif_jittor/cuda.py:204
32 | | |
33 | | |─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/cuda.py:125(train)
34 | | [203.94 MB; 91.83%; cnt:121 ]
35 | | /home/sumeru-js-04/Projects/Qwen/LIIF/liif_jittor/cuda.py:125
36 | | |
37 | | |─/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211(__call__)
38 | | [203.94 MB; 91.83%; cnt:121 ]
39 | | /home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211
40 | | |
41 | | |─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:307(execute)
42 | | | [165.94 MB; 74.72%; cnt:71 ]
43 | | | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:307
44 | | | |
45 | | | |─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:290(query_rgb)
46 | | | | [120.39 MB; 54.21%; cnt:40 ]
47 | | | | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:290
48 | | | | |
49 | | | | |─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-

```

```

packages/jittor/__init__.py:1211(__call__)
50      |          |      |      | [120.25 MB; 54.15%; cnt:37 ]
51      |          |      |      | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
52      |          |      |      |      |
53      |          |      |      |      |└─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:203(execute)
54      |          |      |      |      | [120.25 MB; 54.15%; cnt:37 ]
55      |          |      |      |      | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:203
56      |          |      |      |      |
57      |          |      |      |      |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211(__call__)
58      |          |      |      |      | [84.00 MB; 37.82%; cnt:33 ]
59      |          |      |      |      | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
60      |          |      |      |      |      |
61      |          |      |      |      |      |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323(execute)
62      |          |      |      |      |      | [84.00 MB; 37.82%; cnt:33 ]
63      |          |      |      |      |      | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323
64      |          |      |      |      |      |
65      |          |      |      |      |      |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211(__call__)
66      |          |      |      |      |      | [84.00 MB; 37.82%;
cnt:33 ]
67      |          |      |      |      |      | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
68      |          |      |      |      |      |
69      |          |      |      |      |      |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:2026(execute)
70      |          |      |      |      |      | [80.00 MB; 36.02%;
cnt:32 ]
71      |          |      |      |      |      | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:2026
72      |          |      |      |      |      |      |
73      |          |      |      |      |      |      |└─/home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:183(relu)
74      |          |      |      |      |      |      | [64.00 MB;
28.82%; cnt:16 ]
75      |          |      |      |      |      |      |
Var(12545:1:1:0:i1:o1:s1:n1:g1,float32,,7f9247a00000)[4096,256,...

```

```

76 | | | | | | | /home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:183
77 | | | | | | |
78 | | | | | | | └─/home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:182(relu)
79 | | | | | | | [16.00 MB;
7.20%; cnt:16 ]
80 | | | | | | |
Var(11654:0:1:0:i0:o1:s1:n1:g0,bool,,7f924b500000)[4096,256,...]
81 | | | | | | | /home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:182
82 | | | | | | |
83 | | | | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:645(execute)
84 | | | | | | | [4.00 MB; 1.80%;
cnt:1 ]
85 | | | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:645
86 | | | | | | |
87 | | | | | | | └─/home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:43(matmul_transpose)
88 | | | | | | | [4.00 MB;
1.80%; cnt:1 ]
89 | | | | | | |
Var(12582:1:1:1:i1:o1:s1:n0:g1,float32,,7f938f000000)[4096,256,...]
90 | | | | | | | /home/sumeru-
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:43
91 | | | | | | |
92 | | | | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:686(reshape)
93 | | | | | | | [36.25 MB; 16.32%; cnt:4 ]
94 | | | | | | |
Var(11603:1:1:0:i1:o1:s1:n1:g1,float32,,7f924aa00000)[4096,580,...]
95 | | | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:686
96 | | | | | | |
97 | | | | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:686(reshape)
98 | | | | | | | [144.00 KB; 0.06%; cnt:3 ]
99 | | | | | | |
Var(11737:1:1:1:i1:o1:s1:n1:g1,float32,,7f99571e5000)[4,1024,3,...]
100 | | | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:686
101 | | | | | | |

```

```

102 | | | | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:270(query_rgb)
103 | | | | [36.12 MB; 16.27%; cnt:12 ]
104 | | | | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:270
105 | | | | |
106 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2259(grid_sample)
107 | | | | [36.12 MB; 16.27%; cnt:12 ]
108 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2259
109 | | | | |
110 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2251(grid_sampler)
111 | | | | [36.12 MB; 16.27%; cnt:12 ]
112 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2251
113 | | | | |
114 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2229(grid_sampler_2d)
115 | | | | | [36.00 MB; 16.21%; cnt:4 ]
116 | | | | |
Var(11881:1:1:0:i1:o1:s1:n1:g1,float32,,7f9248000000)[4,576,1,1024,...]
117 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2229
118 | | | | |
119 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2223(grid_sampler_2d)
120 | | | | | [64.00 KB; 0.03%; cnt:4 ]
121 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2223
122 | | | | | |
123 | | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2151(grid_sampler_compute_source_index)
124 | | | | | [64.00 KB; 0.03%; cnt:4 ]
125 | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2151
126 | | | | | |
127 | | | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2126(grid_sampler_unnormalize)

```

```

128 | | | | [64.00 KB; 0.03%; cnt:4
129 | | | |
Var(10955:1:1:0:i1:o1:s1:n1:g1,float32,,7f9956cfc000)[4,1,1024,...
130 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2126
131 | | | |
132 | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2224(grid_sampler_2d)
133 | | | | [64.00 KB; 0.03%; cnt:4 ]
134 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2224
135 | | | | |
136 | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2151(grid_sampler_compute_source_index)
137 | | | | [64.00 KB; 0.03%; cnt:4 ]
138 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2151
139 | | | | |
140 | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/nn.py:2126(grid_sampler_unnormalize)
141 | | | | [64.00 KB; 0.03%; cnt:4
142 | | | |
Var(10987:1:1:0:i1:o1:s1:n1:g1,float32,,7f9956afc000)[4,1,1024,...
143 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2126
144 | | | |
145 | | | | └─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:244(query_rgb)
146 | | | | [9.00 MB; 4.05%; cnt:1 ]
147 | | | | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:244
148 | | | | |
149 | | | | └─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:686(reshape)
150 | | | | [9.00 MB; 4.05%; cnt:1 ]
151 | | | |
Var(10768:1:4:0:i1:o4:s1:n1:g1,float32,,7f938f600000)[4,576,32,32,]
152 | | | | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:686
153 | | | |

```

```

154 | | | | /home/sumeru-js-
    | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:268(query_rgb)
155 | | | | [128.00 KB; 0.06%; cnt:4 ]
156 | | | | /home/sumeru-js-
    | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:268
157 | | | | |
158 | | | | | /home/sumeru-js-
    | | | | | 04/miniconda3/envs/liv/lib/python3.9/site-
    | | | | | packages/jittor/contrib.py:214(setitem)
159 | | | | [128.00 KB; 0.06%; cnt:4 ]
160 | | | |
    | | | | Var(10895:1:1:0:i1:o1:s1:n1:g1,float32,,7f99571d1000)[4,1024,2,...]
161 | | | | /home/sumeru-js-
    | | | | 04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/contrib.py:214
162 | | | |
163 | | | | | /home/sumeru-js-
    | | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:269(query_rgb)
164 | | | | [128.00 KB; 0.06%; cnt:4 ]
165 | | | | /home/sumeru-js-
    | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:269
166 | | | | |
167 | | | | | /home/sumeru-js-
    | | | | | 04/miniconda3/envs/liv/lib/python3.9/site-
    | | | | | packages/jittor/__init__.py:770(clamp_)
168 | | | | [128.00 KB; 0.06%; cnt:4 ]
169 | | | | /home/sumeru-js-
    | | | | 04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:770
170 | | | | |
171 | | | | | /home/sumeru-js-
    | | | | | 04/miniconda3/envs/liv/lib/python3.9/site-
    | | | | | packages/jittor/__init__.py:752(clamp)
172 | | | | [128.00 KB; 0.06%; cnt:4 ]
173 | | | |
    | | | | Var(10911:1:1:0:i1:o1:s1:n1:g1,float32,,7f9952534a00)[4,1024,2,...]
174 | | | | /home/sumeru-js-
    | | | | 04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:752
175 | | | |
176 | | | | | /home/sumeru-js-
    | | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:293(query_rgb)
177 | | | | [96.00 KB; 0.04%; cnt:6 ]
178 | | | | /home/sumeru-js-
    | | | | 04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:293
179 | | | | |
180 | | | | | /home/sumeru-js-
    | | | | | 04/miniconda3/envs/liv/lib/python3.9/site-
    | | | | | packages/jittor/contrib.py:194(getitem)
181 | | | | [96.00 KB; 0.04%; cnt:6 ]

```

```

182 | | |
    Var(11297:1:1:0:i1:o1:s1:n1:g1,float32,,7f9956bfc000)[4,1024,]...
183 | | | /home/sumeru-js-
    04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/contrib.py:194
184 | | |
185 | | | └─/home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:294(query_rgb)
186 | | | [48.00 KB; 0.02%; cnt:3 ]
187 | | |
    Var(11311:1:1:1:i1:o1:s1:n0:g1,float32,,7f9956efc000)[4,1024,]...
188 | | | /home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:294
189 | | |
190 | | | └─/home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:280(query_rgb)
191 | | | [32.00 KB; 0.01%; cnt:1 ]
192 | | | /home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:280
193 | | |
194 | | | └─/home/sumeru-js-
    04/miniconda3/envs/liv/lib/python3.9/site-
    packages/jittor/contrib.py:214(setitem)
195 | | | [32.00 KB; 0.01%; cnt:1 ]
196 | | |
    Var(12445:1:3:2:i1:o3:s1:n0:g1,float32,,7f995252ca00)[4,1024,2,]
197 | | | /home/sumeru-js-
    04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/contrib.py:214
198 | | |
199 | | | └─/home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:306(execute)
200 | | | [38.00 MB; 17.11%; cnt:50 ]
201 | | | /home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:306
202 | | |
203 | | | └─/home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:227(gen_feat)
204 | | | [38.00 MB; 17.11%; cnt:50 ]
205 | | | /home/sumeru-js-
    04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:227
206 | | |
207 | | | └─/home/sumeru-js-
    04/miniconda3/envs/liv/lib/python3.9/site-
    packages/jittor/__init__.py:1211(__call__)
208 | | | [38.00 MB; 17.11%; cnt:50 ]
209 | | | /home/sumeru-js-
    04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
210 | | |

```

```

211 | | /home/sumeru-js-  
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:151(execute)  
212 | | [36.00 MB; 16.21%; cnt:48 ]  
213 | | /home/sumeru-js-  
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:151  
214 | | |  
215 | | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-  
packages/jittor/__init__.py:1211(__call__)  
216 | | [36.00 MB; 16.21%; cnt:48 ]  
217 | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211  
218 | | |  
219 | | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323(execute)  
220 | | [36.00 MB; 16.21%; cnt:48 ]  
221 | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323  
222 | | |  
223 | | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-  
packages/jittor/__init__.py:1211(__call__)  
224 | | [36.00 MB; 16.21%;  
cnt:48 ]  
225 | | /home/sumeru-js-  
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211  
226 | | |  
227 | | | /home/sumeru-js-  
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:77(execute)  
228 | | [20.00 MB; 9.01%;  
cnt:32 ]  
229 | | /home/sumeru-js-  
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:77  
230 | | |  
231 | | | /home/sumeru-  
js-04/miniconda3/envs/liv/lib/python3.9/site-  
packages/jittor/__init__.py:1211(__call__)  
232 | | [20.00 MB;  
9.01%; cnt:32 ]  
233 | | /home/sumeru-  
js-04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211  
234 | | |  
235 | | |  
| /home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-  
packages/jittor/nn.py:2323(execute)  
236 | | [20.00  
MB; 9.01%; cnt:32 ]
```



237			
	/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/nn.py:2323		
238			
239			
	└─/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/__init__.py:1211(__call__)		
240			
	[20.00 MB; 9.01%; cnt:32 ]		
241			
	/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/__init__.py:1211		
242			
243			
	└─/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/__init__.py:2026(execute)		
244			
	[20.00 MB; 9.01%; cnt:32 ]		
245			
	/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/__init__.py:2026		
246			
247			
	└─/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/nn.py:183(relu)		
248			
	[16.00 MB; 7.20%; cnt:16 ]		
249			
	Var(10677:1:1:0:i1:o1:s1:n1:g1,float32,,7f938ea00000)[4,64,32,32,...		
250			
	/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/nn.py:183		
251			
252			
	└─/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/nn.py:182(relu)		
253			
	[4.00 MB; 1.80%; cnt:16 ]		
254			
	Var(10327:0:1:0:i0:o1:s1:n1:g0,bool,,7f9255980000)[4,64,32,32,...		
255			
	/home/sumeru-js-04/miniconda3/envs/liv/lib/python3.9/site-		
	packages/jittor/nn.py:182		

```

256      |                                     |                                     |
257      |                                     |                                     |└─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:78(execute)
258      |                                     |                                     | [16.00 MB; 7.20%;
cnt:16 ]
259      |                                     |
Var(10699:1:2:0:i1:o2:s1:n1:g1,float32,,7f938eb00000)[4,64,32,32,...
260      |                                     |                                     | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:78
261      |                                     |
262      |                                     |└─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:150(execute)
263      |                                     | [1.00 MB; 0.45%; cnt:1 ]
264      |                                     | /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:150
265      |                                     | |
266      |                                     | |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211(__call__)
267      |                                     | [1.00 MB; 0.45%; cnt:1 ]
268      |                                     | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
269      |                                     | |
270      |                                     | |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323(execute)
271      |                                     | [1.00 MB; 0.45%; cnt:1 ]
272      |                                     | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:2323
273      |                                     | |
274      |                                     | |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-
packages/jittor/__init__.py:1211(__call__)
275      |                                     | [1.00 MB; 0.45%; cnt:1 ]
276      |                                     | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/__init__.py:1211
277      |                                     | |
278      |                                     | |└─/home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:1020(execute)
279      |                                     | [1.00 MB; 0.45%;
cnt:1 ]
280      |                                     |
Var(9964:1:3:0:i1:o3:s1:n1:g1,float32,,7f9957500000)[4,64,32,32,]
281      |                                     | /home/sumeru-js-
04/miniconda3/envs/liv/lib/python3.9/site-packages/jittor/nn.py:1020
282      |                                     |

```

```

283 |                               └─/home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:152(execute)
284 |                               [1.00 MB; 0.45%; cnt:1 ]
285 |
Var(10762:2:2:1:i1:o1:s1:n0:g1,float32,,7f938ee00000)[4,64,32,32,]
286 |                               /home/sumeru-js-
04/Projects/Qwen/LIIF/liif_jittor/models_jt.py:152
287 |
288 └─()
289 [18.14 MB; 8.17%; cnt:255 ]
290 Var(8746:1:5:1:i0:o4:s1:n1:g1,float32,imnet.layers.0.weight,7f9953f00000)
[256,580,]...
291 :0
292

```

```
python test.py --config test-div2k/test-div2k-2.yaml --model
./save_model_jittor/liif_edsr_baseline_debug_v1/epoch-best.pth --gpu 0
```

```
python demo.py --input new.png --model ./save_model_jittor_align/edsr_liif_baseline/epoch-
best.pth --resolution 320,320 --output new10.png --gpu 0
```

## jittor训练日志：双卡训练

代码块

[illegible]

```

10 | 0 NVIDIA GeForce RTX 3090 Off | 00000000:01:00.0 On |
    | N/A |
11 | 0% 44C P2 328W / 350W | 2930MiB / 24576MiB | 94%
    | Default |
12 | | |
    | N/A |
13 +-----+
    -----+
14 | 1 NVIDIA GeForce RTX 3090 Off | 00000000:05:00.0 Off |
    | N/A |
15 | 0% 45C P2 331W / 350W | 2180MiB / 24576MiB | 93%
    | Default |
16 | | |
    | N/A |
17 +-----+
    -----+
18
19 +-----+
    -----+
20 | Processes:
    |
21 | GPU GI CI PID Type Process name
    | GPU Memory |
22 | ID ID
    | Usage |
23 |=====
    =====|
24 | 0 N/A N/A 1188859 G /usr/lib/xorg/Xorg
    | 130MiB |
25 | 0 N/A N/A 1208207 G /usr/bin/gnome-shell
    | 92MiB |
26 | 0 N/A N/A 2769618 C python
    | 276MiB |
27 | 0 N/A N/A 2771334 C python
    | 2414MiB |
28 | 1 N/A N/A 1188859 G /usr/lib/xorg/Xorg
    | 4MiB |
29 | 1 N/A N/A 2755264 C python
    | 2164MiB |
30 +-----+
    -----+
31 (base) sumeru-js-04@user:~/Desktop$ free -h
32 total used free shared buff/cache
    available
33 Mem: 125Gi 57Gi 49Gi 12Gi 18Gi
    54Gi

```

```
34 Swap: 8.0Gi 535Mi 7.5Gi
35 (base) sumeru-js-04@user:~/Desktop$ free -h
36
```

内存使用：单任务使用约35G(虚拟内存占用60G)

RES	SHR	S	CPU%	MEM%
35.2G	8614M	R	100.	27.4
35.5G	8950M	R	99.	27.7

