Pixel Recursive Super Resolution

양승우

Pixel Recursive 복원

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In [1]:
```
import tensorflow as tf
import sys
sys.path.insert(0, './')
from solver import *
from PIL import Image
```

Flag 설정

In [2]:
```
flags = tf.app.flags
```

In [3]:
```
# solver

flags.DEFINE_string("train_dir", "models", "trained model save path")
flags.DEFINE_string("samples_dir", "samples", "sampled images save path")
flags.DEFINE_string("imgs_list_path", "data/train.txt", "images list file path")

flags.DEFINE_boolean("use_gpu", True, "whether to use gpu for training")
flags.DEFINE_integer("device_id", 0, "gpu device id")

flags.DEFINE_integer("num_epoch", 30, "train epoch num")
flags.DEFINE_integer("batch_size", 32, "batch_size")

flags.DEFINE_float("learning_rate", 4e-4, "learning rate")
```

In [4]:
```
conf = flags.FLAGS
```

훈련 및 실행

- 100000 Iteration

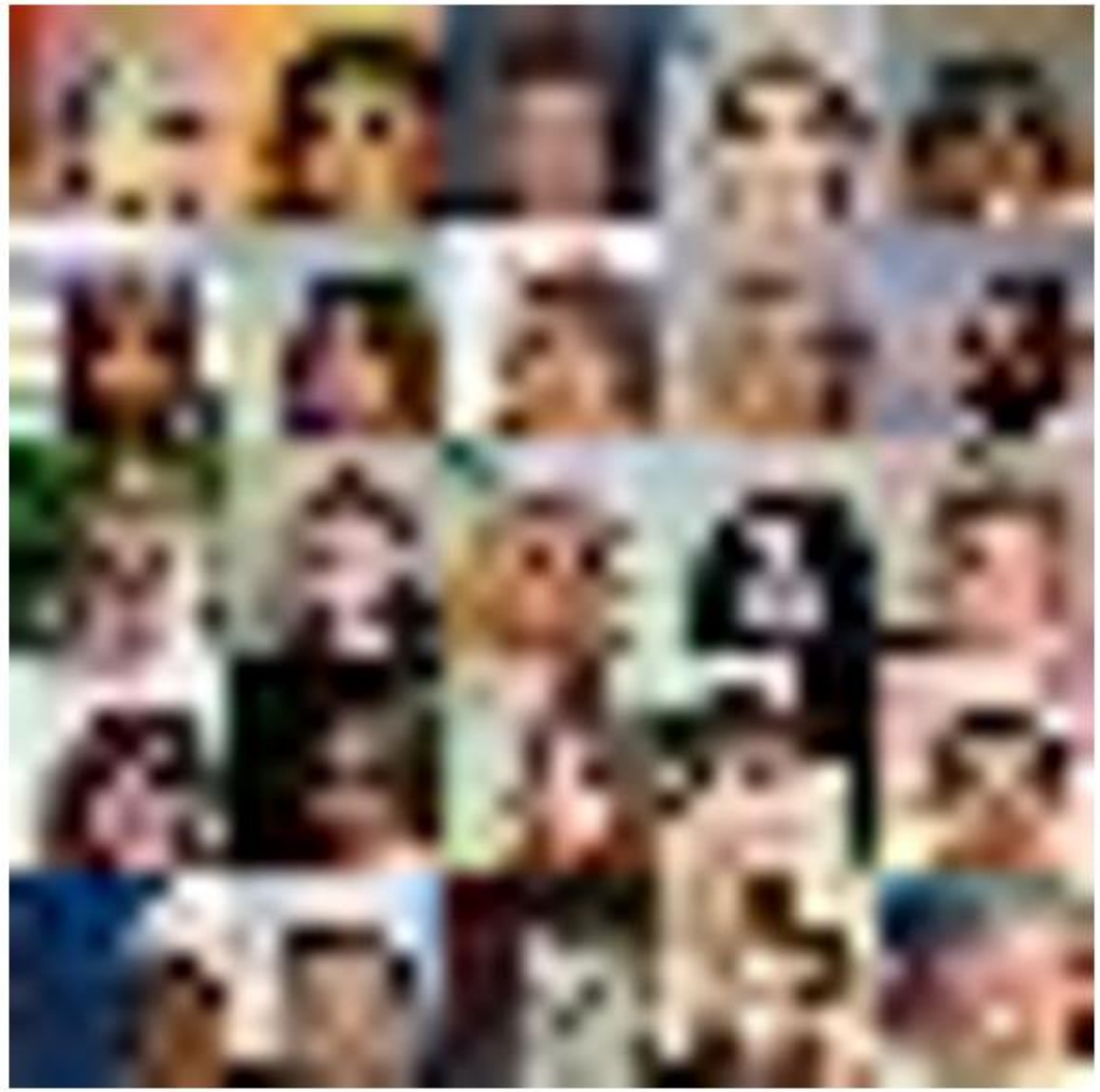
In [*]:
```
def main(_):
  solver = Solver()
  solver.train()

if __name__ == '__main__':
  tf.app.run()
```

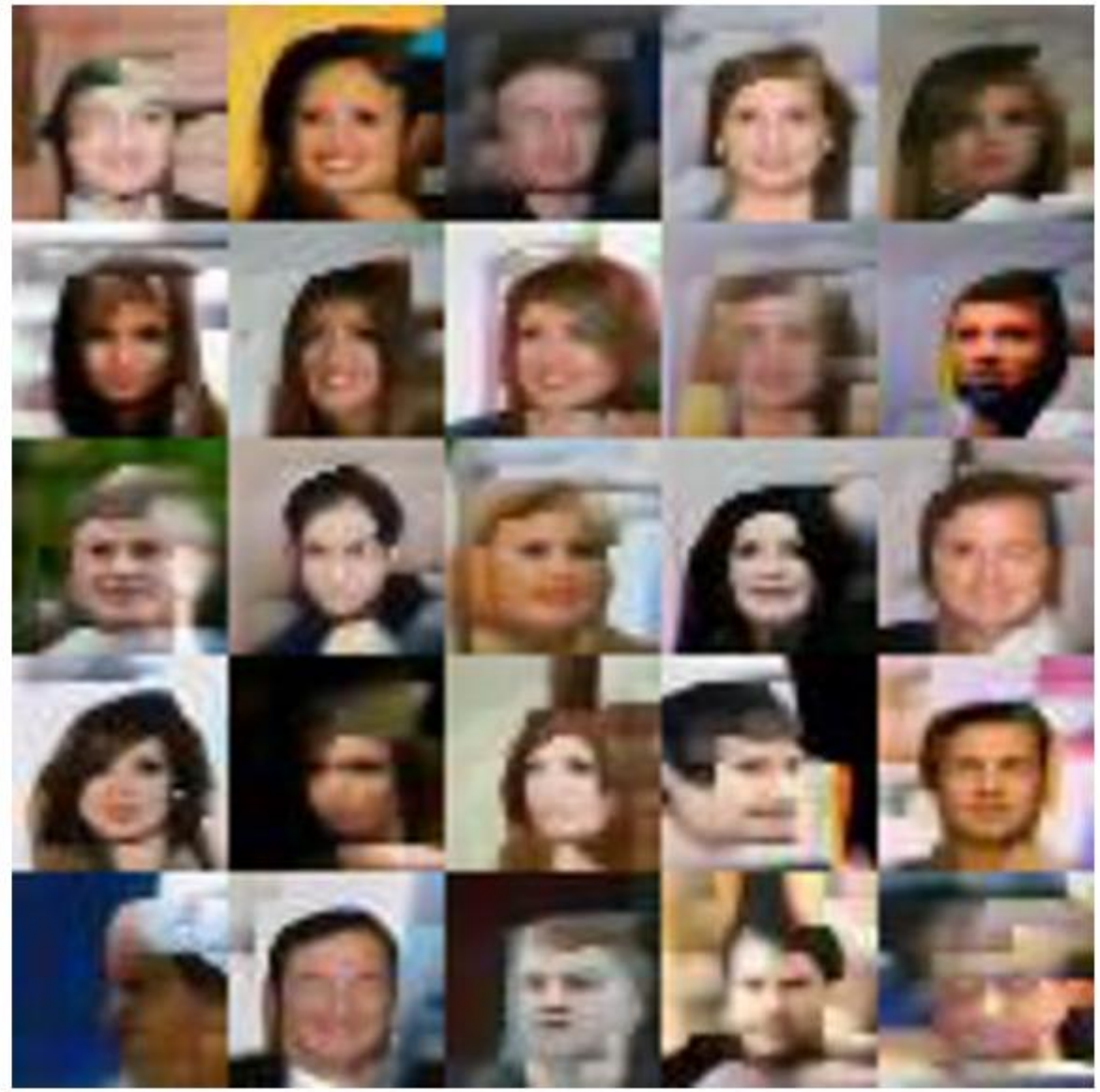
```
step 99982, loss = 7.12 (133.6 examples/sec; 0.240 sec/batch)
step 99983, loss = 7.40 (132.7 examples/sec; 0.241 sec/batch)
step 99984, loss = 7.26 (133.1 examples/sec; 0.240 sec/batch)
step 99985, loss = 7.22 (131.8 examples/sec; 0.243 sec/batch)
step 99986, loss = 7.12 (132.6 examples/sec; 0.241 sec/batch)
step 99987, loss = 7.45 (131.9 examples/sec; 0.243 sec/batch)
step 99988, loss = 7.28 (132.4 examples/sec; 0.242 sec/batch)
step 99989, loss = 7.22 (132.4 examples/sec; 0.242 sec/batch)
step 99990, loss = 7.54 (131.5 examples/sec; 0.243 sec/batch)
step 99991, loss = 7.42 (131.6 examples/sec; 0.243 sec/batch)
step 99992, loss = 7.55 (132.7 examples/sec; 0.241 sec/batch)
step 99993, loss = 7.42 (131.2 examples/sec; 0.244 sec/batch)
step 99994, loss = 7.45 (132.1 examples/sec; 0.242 sec/batch)
step 99995, loss = 7.45 (132.1 examples/sec; 0.242 sec/batch)
step 99996, loss = 7.34 (132.7 examples/sec; 0.241 sec/batch)
step 99997, loss = 7.27 (132.3 examples/sec; 0.242 sec/batch)
step 99998, loss = 7.41 (132.1 examples/sec; 0.242 sec/batch)
step 99999, loss = 7.25 (132.7 examples/sec; 0.241 sec/batch)
iters 100000:
```

50000 Iteration

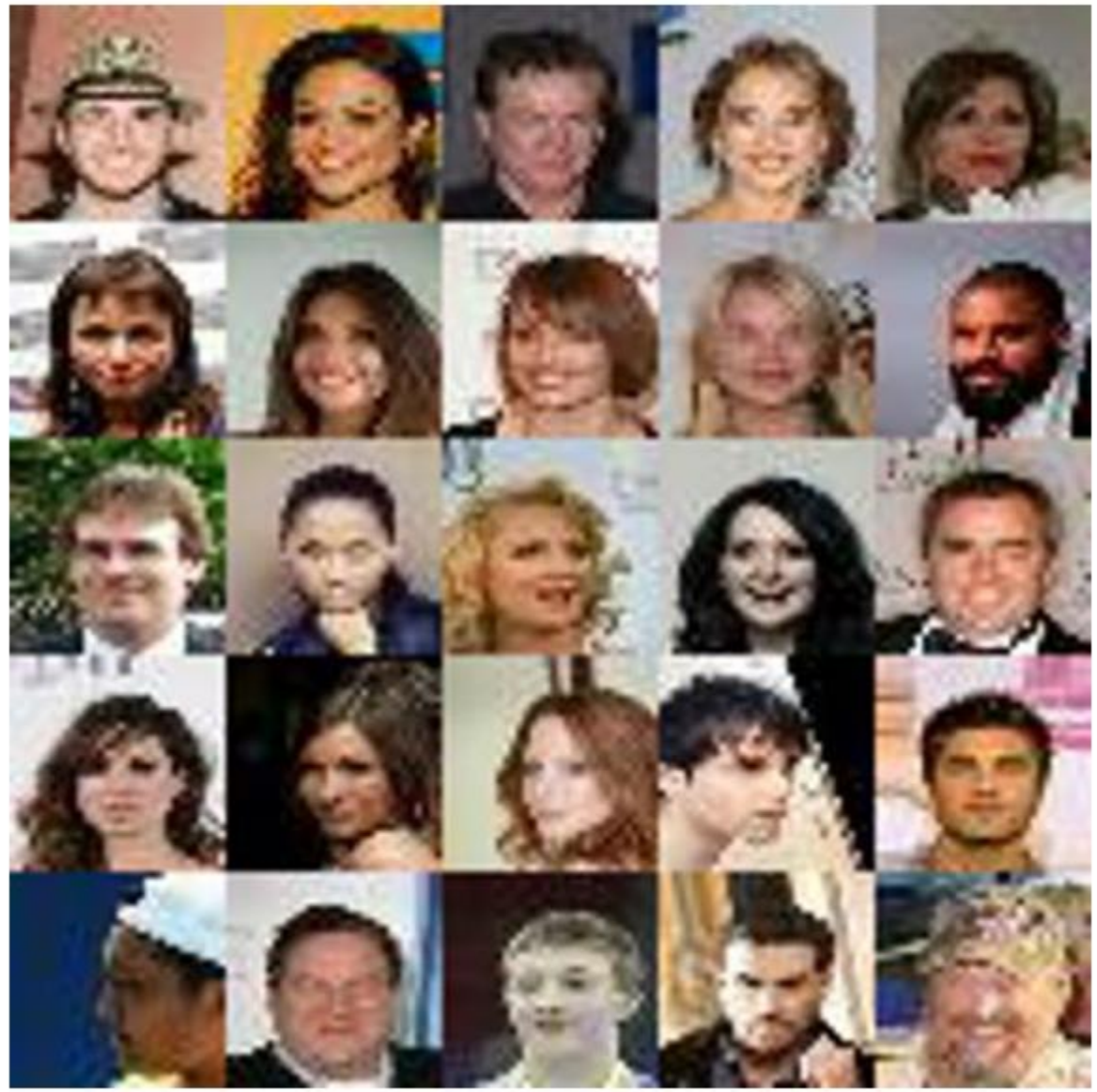
저해상도 이미지



생성된 이미지

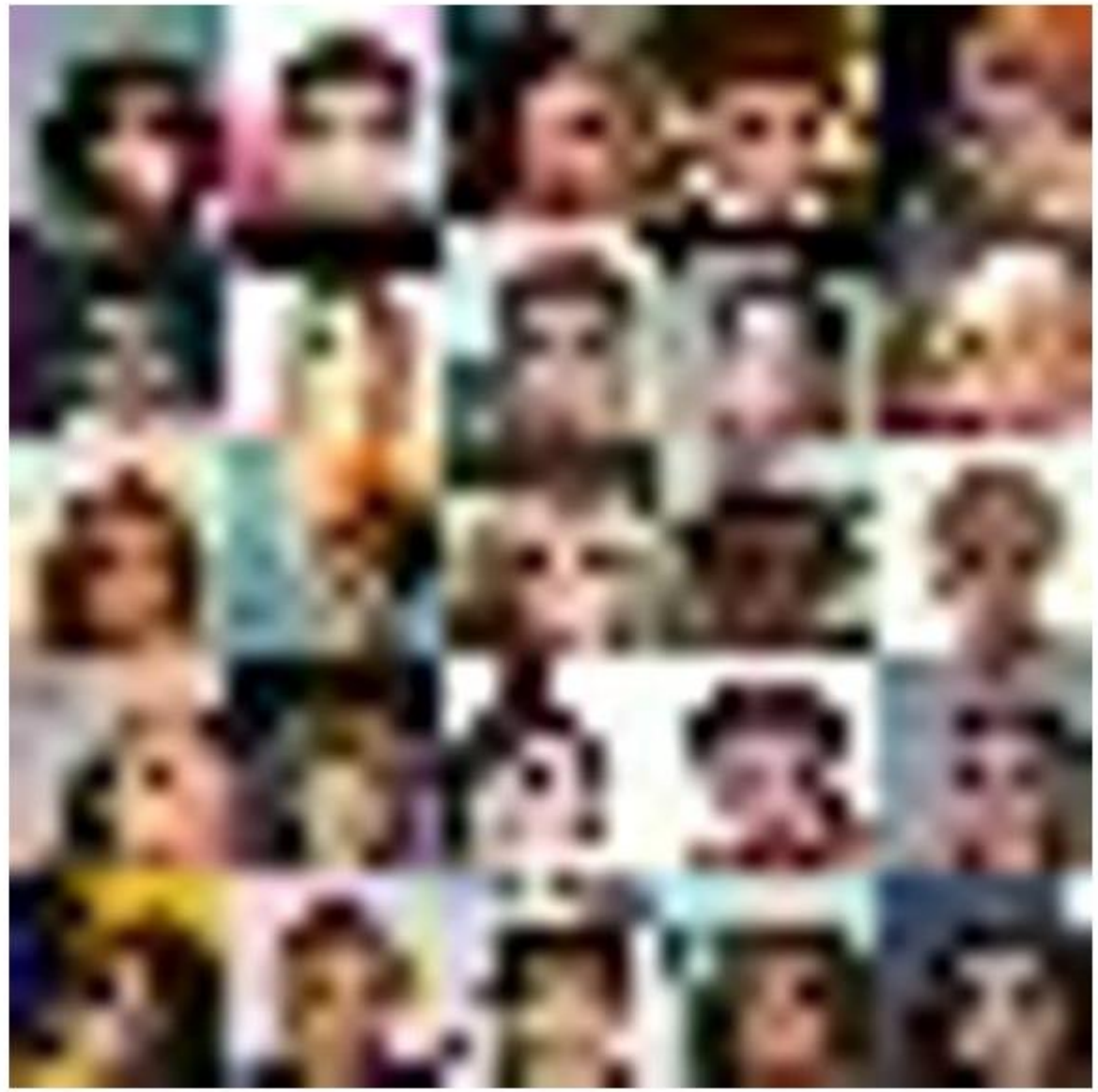


원래의 고해상도 이미지 (참고)

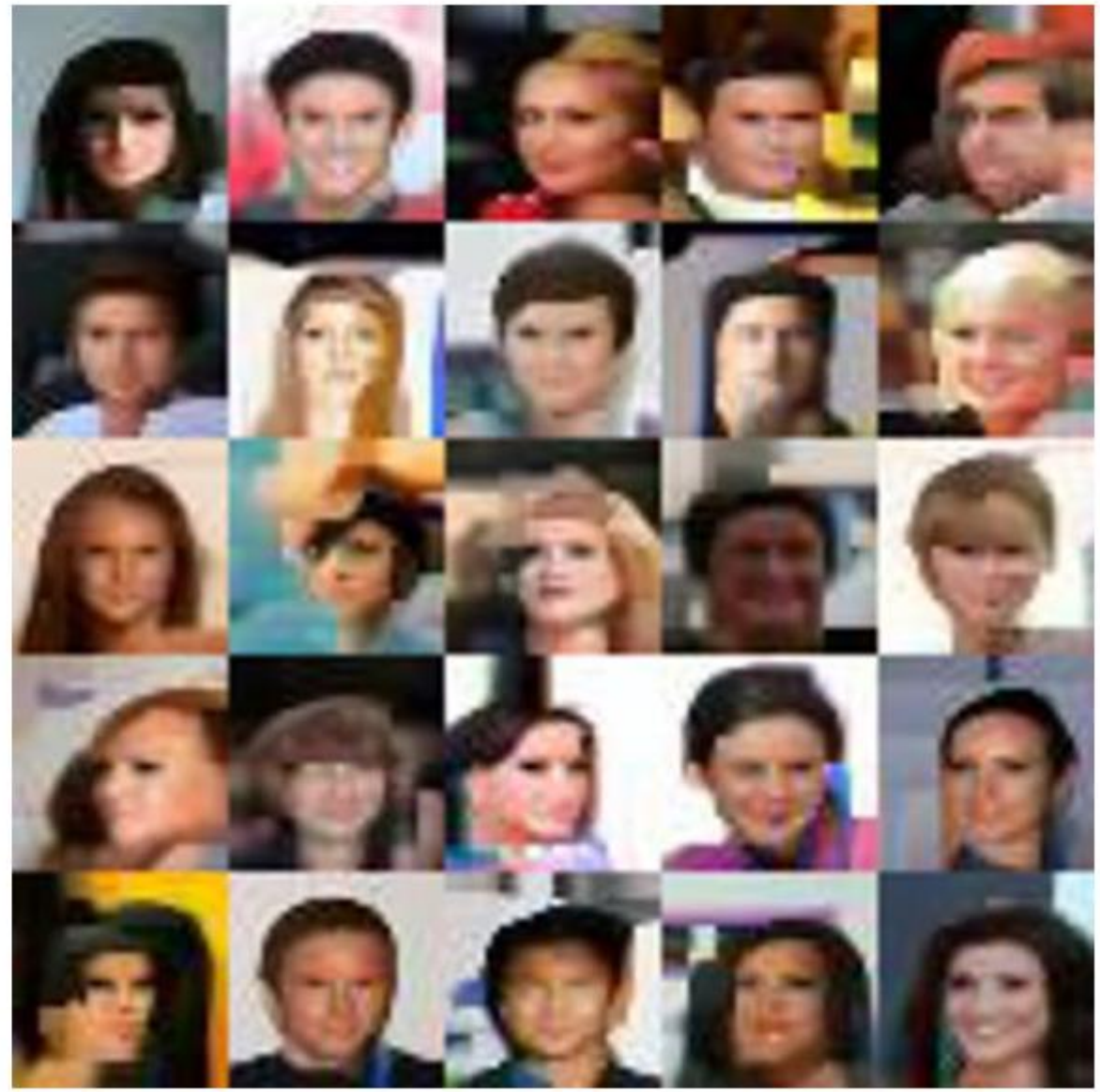


100000 Iteration

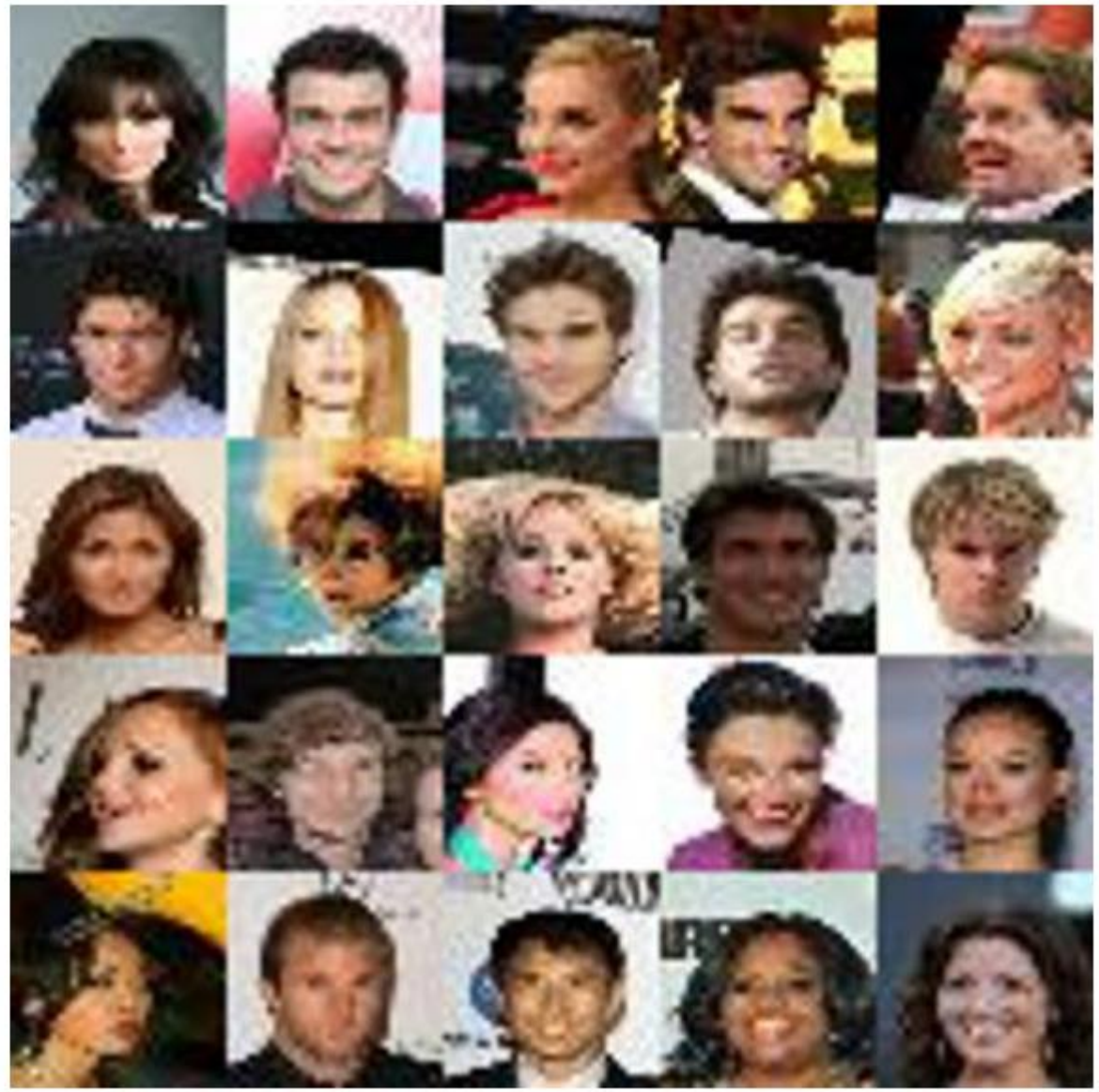
저해상도 이미지



생성된 이미지



원래의 고해상도 이미지 (참고)



수고하셨습니다.