

# fine\_tuning

预训练模型+微调的效果会比直接重新训练好些。

源数据集和目标数据集不同。

```
root@autodl-container-27bd46a6c6-f03a9356:~/autodl-tmp# python fine_tuning.py
Downloading hotdog dataset...
Extracting hotdog dataset...
/root/miniconda3/lib/python3.12/site-packages/torchvision/models/_utils.py:208:
UserWarning: The parameter 'pretrained' is deprecated since 0.13 and may be
removed in the future, please use 'weights' instead.
  warnings.warn(
/root/miniconda3/lib/python3.12/site-packages/torchvision/models/_utils.py:223:
UserWarning: Arguments other than a weight enum or `None` for 'weights' are
deprecated since 0.13 and may be removed in the future. The current behavior is
equivalent to passing `weights=ResNet18_Weights.IMAGENET1K_V1'. You can also use
'weights=ResNet18_Weights.DEFAULT` to get the most up-to-date weights.
  warnings.warn(msg)
Downloading: "https://download.pytorch.org/models/resnet18-f37072fd.pth" to
/root/.cache/torch/hub/checkpoints/resnet18-f37072fd.pth
100%|
██████████████████████████████████████████████████████████████████████████████
██████| 44.7M/44.7M [00:03<00:00, 12.1MB/s]
epoch 1, loss 0.7702, train acc 0.587, test acc 0.584
epoch 2, loss 0.7244, train acc 0.598, test acc 0.588
epoch 3, loss 0.7037, train acc 0.614, test acc 0.608
epoch 4, loss 0.6546, train acc 0.639, test acc 0.624
epoch 5, loss 0.6392, train acc 0.655, test acc 0.637
/root/miniconda3/lib/python3.12/site-packages/torchvision/models/_utils.py:223:
UserWarning: Arguments other than a weight enum or `None` for 'weights' are
deprecated since 0.13 and may be removed in the future. The current behavior is
equivalent to passing `weights=None'.
  warnings.warn(msg)
epoch 1, loss 0.7940, train acc 0.499, test acc 0.500
epoch 2, loss 0.7037, train acc 0.501, test acc 0.497
epoch 3, loss 0.6799, train acc 0.548, test acc 0.555
epoch 4, loss 0.6673, train acc 0.623, test acc 0.646
epoch 5, loss 0.6537, train acc 0.697, test acc 0.679
root@autodl-container-27bd46a6c6-f03a9356:~/autodl-tmp#
```