# deepLab训练

## 一 deeplab训练环境搭建

* 1. 参考

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| <https://lijiancheng0614.github.io/2018/03/13/2018_03_13_TensorFlow-DeepLab/> |

* 1. 数据集

准备[VOCtrainval\_11-May-2012.tar](http://geeekvr.com:18129/edit/work/deeplab/datasets/pascal_voc_seg/VOCtrainval_11-May-2012.tar)

* 1. 下载code

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| --- |
| git clone <https://github.com/sycophant-stone/tf_base.git> |

* 1. 把VOC放到research/deeplab/datasets中
  2. 运行[download\_and\_convert\_voc2012.sh](http://geeekvr.com:18129/edit/work/deeplab/datasets/download_and_convert_voc2012.sh)
  3. 使用slim的env环境设置

首先先解压缩(注意这里-o的用法)

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| --- |
| root@df4112054141:/work/gi/tf\_base/research# **unzip -o protobuf.zip** |

然后运行工具脚本

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| --- |
| #!/bin/bash  echo "export"  export PYTHONPATH=$PYTHONPATH:`pwd`:`pwd`/slim  echo "protoc"  /home/julyedu\_433249/work/tf\_base/research/bin/protoc object\_detection/protos/\*.proto --python\_out=. |

* 1. 下载pretrain模型

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| --- |
| # From deeplab/datasets/pascal\_voc\_seg/  mkdir init\_models  cd init\_models  wget http://download.tensorflow.org/models/deeplabv3\_pascal\_train\_aug\_2018\_01\_04.tar.gz  tar zxf ssd\_mobilenet\_v1\_coco\_11\_06\_2017.tar.gz |

* 1. train用的命令

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| --- |
| python deeplab/train.py --logtostderr --training\_number\_of\_steps=30000 --train\_split="train" --model\_variant="xception\_65" --atrous\_rates=6 --atrous\_rates=12 --atrous\_rates=18 --output\_stride=16 --decoder\_output\_stride=4 --train\_crop\_size=513 --train\_crop\_size=513 --train\_batch\_size=1 --dataset="pascal\_voc\_seg" --tf\_initial\_checkpoint=deeplab/init\_models/deeplabv3\_pascal\_train\_aug/model.ckpt --train\_logdir=deeplab/trainlog --dataset\_dir=deeplab/datasets/pascal\_voc\_seg/tfrecord |

## 二 可用的gpu环境

2.1 极客云

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| --- |
| ssh -p 8065 [root@geeekvr.com](mailto:root@geeekvr.com)  ssh -L 16006:127.0.0.1:6006 -p 8065 [root@geeekvr.com](mailto:root@geeekvr.com) |

## 三 tensorboard使用方法

3.1 tensorboard映射

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| --- |
| ssh -L 16006:127.0.0.1:6006 julyedu\_433249@101.132.121.198  tensorboard --logdir="/path/to/log-directory"  最后，在本地访问地址：http://127.0.0.1:16006/ |