

START

Code automatically performs:

- 1) *Spatial decomposition*
- 2) *Channel decomposition*
- 3) *Channel pruning*

Code supports:

- 1) VGG,
- 2) ResNet and Xception



END

Code performs:

- 1) *Full Channel pruning*
- 2) *Single-layer pruning †*

Code supports:

- 1) VGG, AlexNet † †
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† The code includes a operation mode that may serve this porpoise, but I haven't figured out how to use it.

cfgs.py, line 47

```
class pruning_options:  
    prb=0  
    vgg=3  
    resnet=4  
    single=10
```

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† † Including AlexNet might be simple: Just include a argument in the args parser so that the code creates a different dictionary for AlexNet.

Note: Should also change the directory of the .prototxt and .caffemodel

net.py, line 1301

```
alldic = ['conv%d_1' % i for i in range(1,end)] + ['conv%d_2' % i for i in range(3, end)]
pooldic = ['conv1_2', 'conv2_2']#, 'conv3_3']
rankdic = {'conv1_1': 17,
           'conv1_2': 17,
           'conv2_1': 37,
           'conv2_2': 47,
           'conv3_1': 83,
           'conv3_2': 89,
           'conv3_3': 106,
           'conv4_1': 175,
           'conv4_2': 192,
           'conv4_3': 227,
           'conv5_1': 398,
           'conv5_2': 390,
           'conv5_3': 379}
```

cfgs.py, line 116

```
c.weights= 'temp/vgg.caffemodel'
c.prototxt= 'temp/vgg.prototxt'
```

cfgs.py, line 56

```
class Models:
    vgg='vgg'
    xception='xception'
    resnet='resnet'
    rescifar='rescifar'

class vgg:
    model='temp/vgg.prototxt'
    weights='temp/vgg.caffemodel'
    accname='accuracy@5'
    flop=15346630656
```

