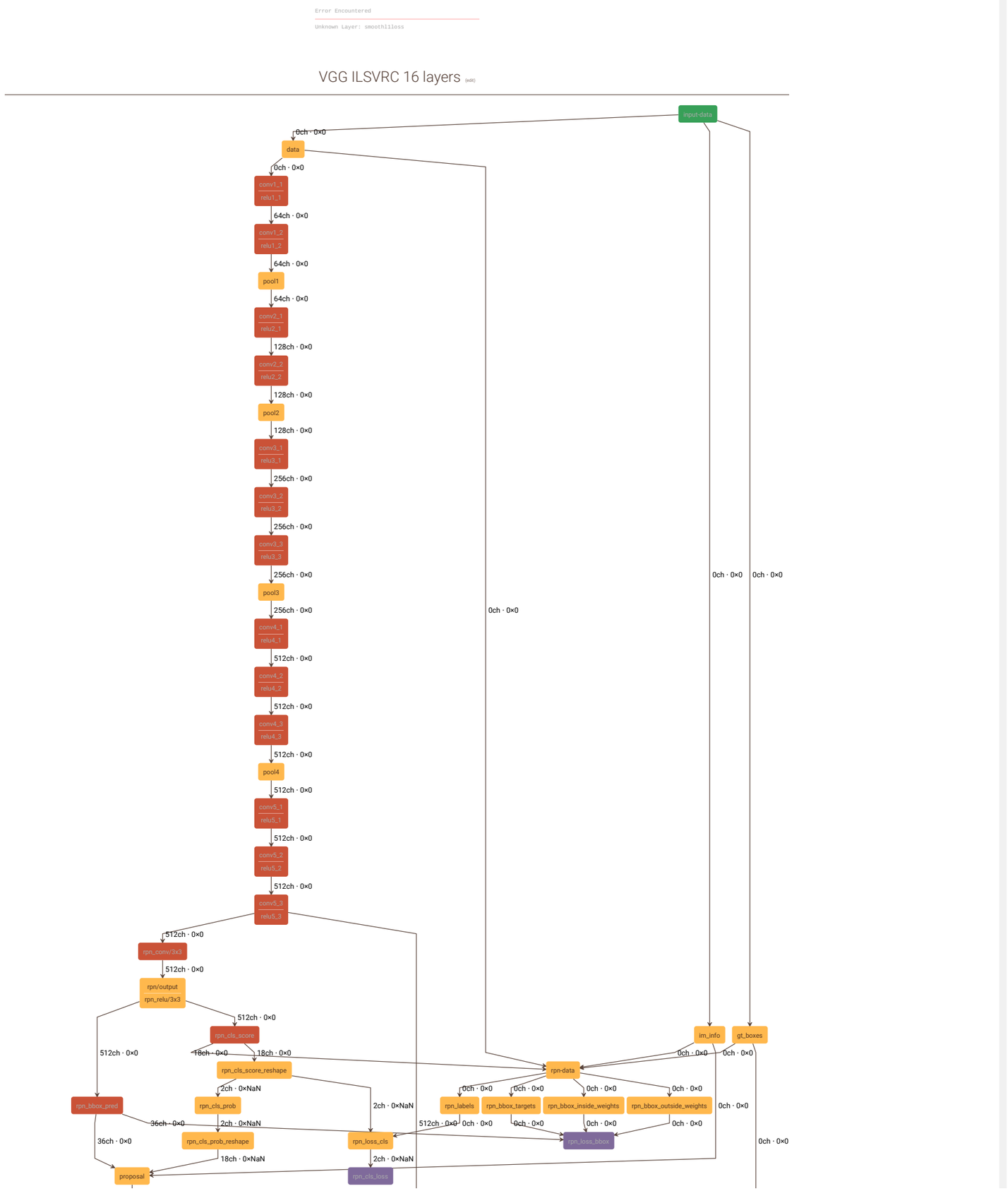
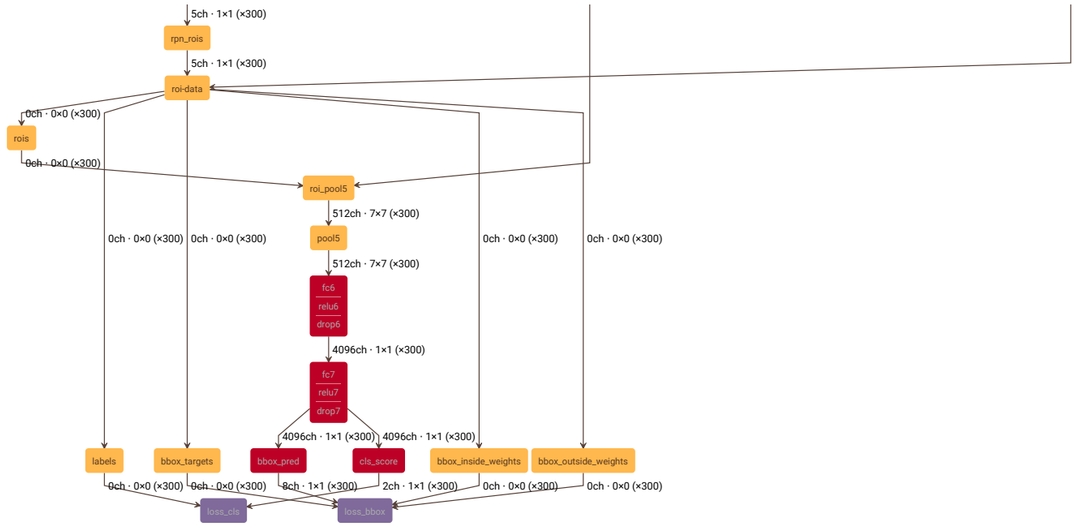
```
name: "VGG_ILSVRC_16_layers"
layer {
  name: 'input-data'
  type: 'Python'
  top: 'data'
  top: 'im_info'
  top: 'gt_boxes'
  python_param {
    module: 'roi_data_layer.layer'
    layer: 'RoIDataLayer'
    param_str: "'num_classes': 2"
  }
}

layer {
  name: "conv1_1"
  type: "Convolution"
  bottom: "data"
  top: "conv1_1"
  param {
    lr_mult: 0
    decay_mult: 0
  }
  param {
    lr_mult: 0
    decay_mult: 0
  }
  convolution_param {
    num_output: 64
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu1_1"
  type: "ReLU"
  bottom: "conv1_1"
  top: "conv1_1"
}
layer {
  name: "conv1_2"
  type: "Convolution"
  bottom: "conv1_1"
  top: "conv1_2"
  param {
    lr_mult: 0
    decay_mult: 0
  }
  param {
    lr_mult: 0
    decay_mult: 0
  }
  convolution_param {
    num_output: 64
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu1_2"
  type: "ReLU"
  bottom: "conv1_2"
  top: "conv1_2"
}
layer {
  name: "pool1"
  type: "Pooling"
  bottom: "conv1_2"
  top: "pool1"
  pooling_param {
    pool: MAX
    kernel_size: 2
    stride: 2
  }
}
layer {
  name: "conv2_1"
  type: "Convolution"
  bottom: "pool1"
  top: "conv2_1"
  param {
    lr_mult: 0
    decay_mult: 0
  }
  param {
    lr_mult: 0
    decay_mult: 0
  }
  convolution_param {
    num_output: 128
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu2_1"
  type: "ReLU"
  bottom: "conv2_1"
  top: "conv2_1"
}
layer {
  name: "conv2_2"
  type: "Convolution"
  bottom: "conv2_1"
  top: "conv2_2"
  param {
    lr_mult: 0
    decay_mult: 0
  }
  param {
    lr_mult: 0
    decay_mult: 0
  }
  convolution_param {
    num_output: 128
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu2_2"
  type: "ReLU"
  bottom: "conv2_2"
  top: "conv2_2"
}
layer {
  name: "pool2"
  type: "Pooling"
  bottom: "conv2_2"
  top: "pool2"
  pooling_param {
    pool: MAX
    kernel_size: 2
    stride: 2
  }
}
layer {
  name: "conv3_1"
  type: "Convolution"
  bottom: "pool2"
  top: "conv3_1"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 256
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu3_1"
  type: "ReLU"
  bottom: "conv3_1"
  top: "conv3_1"
}
layer {
  name: "conv3_2"
  type: "Convolution"
  bottom: "conv3_1"
```



```
  top: "conv3_2"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 256
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu3_2"
  type: "ReLU"
  bottom: "conv3_2"
  top: "conv3_2"
}
layer {
  name: "conv3_3"
  type: "Convolution"
  bottom: "conv3_2"
  top: "conv3_3"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 256
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu3_3"
  type: "ReLU"
  bottom: "conv3_3"
  top: "conv3_3"
}
layer {
  name: "pool3"
  type: "Pooling"
  bottom: "conv3_3"
  top: "pool3"
  pooling_param {
    pool: MAX
    kernel_size: 2
    stride: 2
  }
}
layer {
  name: "conv4_1"
  type: "Convolution"
  bottom: "pool3"
  top: "conv4_1"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu4_1"
  type: "ReLU"
  bottom: "conv4_1"
  top: "conv4_1"
}
layer {
  name: "conv4_2"
  type: "Convolution"
  bottom: "conv4_1"
  top: "conv4_2"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu4_2"
  type: "ReLU"
  bottom: "conv4_2"
  top: "conv4_2"
}
layer {
  name: "conv4_3"
  type: "Convolution"
  bottom: "conv4_2"
  top: "conv4_3"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu4_3"
  type: "ReLU"
  bottom: "conv4_3"
  top: "conv4_3"
}
layer {
  name: "pool4"
  type: "Pooling"
  bottom: "conv4_3"
  top: "pool4"
  pooling_param {
    pool: MAX
    kernel_size: 2
    stride: 2
  }
}
layer {
  name: "conv5_1"
  type: "Convolution"
  bottom: "pool4"
  top: "conv5_1"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu5_1"
  type: "ReLU"
  bottom: "conv5_1"
  top: "conv5_1"
}
layer {
  name: "conv5_2"
  type: "Convolution"
  bottom: "conv5_1"
  top: "conv5_2"
  param {
    lr_mult: 1
```



Network Analysis

Summary:

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops	mem
1	input-data	Python			undefinedxundefined	0	0x0		
2	data	implicit		0	0x0	0	0x0		
3	conv1_1	Convolution		0	0x0	64	0x0		**param** 64
4	relu1_1	ReLU		64	0x0	64	0x0		
5	conv1_2	Convolution		64	0x0	64	0x0		**param** 36.93k
6	relu1_2	ReLU		64	0x0	64	0x0		
7	pool1	Pooling		64	0x0	64	0x0		
8	conv2_1	Convolution		64	0x0	128	0x0		**param** 73.86k
9	relu2_1	ReLU		128	0x0	128	0x0		
10	conv2_2	Convolution		128	0x0	128	0x0		**param** 147.58k
11	relu2_2	ReLU		128	0x0	128	0x0		
12	pool2	Pooling		128	0x0	128	0x0		
13	conv3_1	Convolution		128	0x0	256	0x0		**param** 295.17k
14	relu3_1	ReLU		256	0x0	256	0x0		
15	conv3_2	Convolution		256	0x0	256	0x0		**param** 590.08k
16	relu3_2	ReLU		256	0x0	256	0x0		
17	conv3_3	Convolution		256	0x0	256	0x0		**param** 590.08k
18	relu3_3	ReLU		256	0x0	256	0x0		
19	pool3	Pooling		256	0x0	256	0x0		
20	conv4_1	Convolution		256	0x0	512	0x0		**param** 1.18M
21	relu4_1	ReLU		512	0x0	512	0x0		
22	conv4_2	Convolution		512	0x0	512	0x0		**param** 2.36M
23	relu4_2	ReLU		512	0x0	512	0x0		
24	conv4_3	Convolution		512	0x0	512	0x0		**param** 2.36M
25	relu4_3	ReLU		512	0x0	512	0x0		
26	pool4	Pooling		512	0x0	512	0x0		
27	conv5_1	Convolution		512	0x0	512	0x0		**param** 2.36M
28	relu5_1	ReLU		512	0x0	512	0x0		
29	conv5_2	Convolution		512	0x0	512	0x0		**param** 2.36M
30	relu5_2	ReLU		512	0x0	512	0x0		
31	conv5_3	Convolution		512	0x0	512	0x0		**param** 2.36M
32	relu5_3	ReLU		512	0x0	512	0x0		
33	rpn_conv/3x3	Convolution		512	0x0	512	0x0		**param** 2.36M
34	im_info	implicit		0	0x0	0	0x0		
35	gt_boxes	implicit		0	0x0	0	0x0		
36	rpn/output	implicit		512	0x0	512	0x0		
37	rpn_relu/3x3	ReLU		512	0x0	512	0x0		
38	rpn_bbox_pred	Convolution		512	0x0	36	0x0		**param** 18.47k
39	rpn_cls_score	Convolution		512	0x0	18	0x0		**param** 9.23k
40	rpn-data	Python		18	0x0	0	0x0		
41	rpn_cls_score_reshape	Reshape		18	0x0	2	0xNaN		
42	rpn_cls_prob	Softmax		2	0xNaN	2	0xNaN		
43	rpn_cls_prob_reshape	Reshape		2	0xNaN	18	0xNaN		
44	proposal	Python		18	0xNaN	5	1x1	**div** 44.85k	**activation** 1.5k
45	rpn_labels	implicit		0	0x0	0	0x0		
46	rpn_loss_cls	SoftmaxWithLoss		2	0xNaN	2	0xNaN		
47	rpn_bbox_targets	implicit		0	0x0	0	0x0		
48	rpn_bbox_inside_weights	implicit		0	0x0	0	0x0		

```
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu5_2"
  type: "ReLU"
  bottom: "conv5_2"
  top: "conv5_2"
}
layer {
  name: "conv5_3"
  type: "Convolution"
  bottom: "conv5_2"
  top: "conv5_3"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  convolution_param {
    num_output: 512
    pad: 1
    kernel_size: 3
  }
}
layer {
  name: "relu5_3"
  type: "ReLU"
  bottom: "conv5_3"
  top: "conv5_3"
}

#========= RPN ============

layer {
  name: "rpn_conv/3x3"
  type: "Convolution"
  bottom: "conv5_3"
  top: "rpn/output"
  param { lr_mult: 1.0 }
  param { lr_mult: 2.0 }
  convolution_param {
    num_output: 512
    kernel_size: 3 pad: 1 stride: 1
    weight_filler { type: "gaussian" std: 0.01 }
    bias_filler { type: "constant" value: 0 }
  }
}
layer {
  name: "rpn_relu/3x3"
  type: "ReLU"
  bottom: "rpn/output"
  top: "rpn/output"
}

layer {
  name: "rpn_cls_score"
  type: "Convolution"
  bottom: "rpn/output"
  top: "rpn_cls_score"
  param { lr_mult: 1.0 }
  param { lr_mult: 2.0 }
  convolution_param {
    num_output: 18   # 2(bg/fg) * 9(anchors)
    kernel_size: 1 pad: 0 stride: 1
    weight_filler { type: "gaussian" std: 0.01 }
    bias_filler { type: "constant" value: 0 }
  }
}

layer {
  name: "rpn_bbox_pred"
  type: "Convolution"
  bottom: "rpn/output"
  top: "rpn_bbox_pred"
  param { lr_mult: 1.0 }
  param { lr_mult: 2.0 }
  convolution_param {
    num_output: 36   # 4 * 9(anchors)
    kernel_size: 1 pad: 0 stride: 1
    weight_filler { type: "gaussian" std: 0.01 }
    bias_filler { type: "constant" value: 0 }
  }
}

layer {
  bottom: "rpn_cls_score"
  top: "rpn_cls_score_reshape"
  name: "rpn_cls_score_reshape"
  type: "Reshape"
  reshape_param { shape { dim: 0 dim: 2 dim: -1 dim: 0 } }
}

layer {
  name: 'rpn-data'
  type: 'Python'
  bottom: 'rpn_cls_score'
  bottom: 'gt_boxes'
  bottom: 'im_info'
  bottom: 'data'
  top: 'rpn_labels'
  top: 'rpn_bbox_targets'
  top: 'rpn_bbox_inside_weights'
  top: 'rpn_bbox_outside_weights'
  python_param {
    module: 'rpn.anchor_target_layer'
    layer: 'AnchorTargetLayer'
    param_str: "'feat_stride': 16"
  }
}

layer {
  name: "rpn_loss_cls"
  type: "SoftmaxWithLoss"
  bottom: "rpn_cls_score_reshape"
  bottom: "rpn_labels"
  propagate_down: 1
  propagate_down: 0
  top: "rpn_cls_loss"
  loss_weight: 1
  loss_param {
    ignore_label: -1
    normalize: true
  }
}

layer {
  name: "rpn_loss_bbox"
  type: "SmoothL1Loss"
  bottom: "rpn_bbox_pred"
  bottom: "rpn_bbox_targets"
  bottom: 'rpn_bbox_inside_weights'
  bottom: 'rpn_bbox_outside_weights'
  top: "rpn_loss_bbox"
  loss_weight: 1
  smooth_l1_loss_param { sigma: 3.0 }
}

#========= RoI Proposal ============

layer {
  name: "rpn_cls_prob"
  type: "Softmax"
  bottom: "rpn_cls_score_reshape"
  top: "rpn_cls_prob"
}

layer {
  name: 'rpn_cls_prob_reshape'
  type: 'Reshape'
  bottom: 'rpn_cls_prob'
  top: 'rpn_cls_prob_reshape'
  reshape_param { shape { dim: 0 dim: 18 dim: -1 dim: 0 } }
}

```

49	rpn_bbox_outside_weights	implicit		0	0x0	0	0x0		
50	rpn_loss_bbox	SmoothL1Loss		36	0x0	0	0x0		
51	rpn_cls_loss	implicit		2	0xNaN	2	0xNaN		
52	rpn_rois	implicit		5	1x1	5	1x1		activation 1.5k
53	roi-data	Python		5	1x1	0	0x0		
54	rois	implicit		0	0x0	0	0x0		
55	roi_pool5	ROIPooling		512	0x0	512	7x7	macc 300 add 300 div 300	activation 7.53M
56	labels	implicit		0	0x0	0	0x0		
57	bbox_targets	implicit		0	0x0	0	0x0		
58	bbox_inside_weights	implicit		0	0x0	0	0x0		
59	bbox_outside_weights	implicit		0	0x0	0	0x0		
60	pool5	implicit		512	7x7	512	7x7		activation 7.53M
61	fc6	InnerProduct		512	7x7	4096	1x1	macc 30.83G	activation 1.23M param 102.76M
62	relu6	ReLU		4096	1x1	4096	1x1	comp 1.23M	activation 1.23M
63	drop6	Dropout		4096	1x1	4096	1x1	comp 1.23M	activation 1.23M
64	fc7	InnerProduct		4096	1x1	4096	1x1	macc 5.03G	activation 1.23M param 16.78M
65	relu7	ReLU		4096	1x1	4096	1x1	comp 1.23M	activation 1.23M
66	drop7	Dropout		4096	1x1	4096	1x1	comp 1.23M	activation 1.23M
67	bbox_pred	InnerProduct		4096	1x1	8	1x1	macc 9.83M	activation 2.4k param 32.78k
68	loss_bbox	SmoothL1Loss		8	1x1	0	0x0		
69	cls_score	InnerProduct		4096	1x1	2	1x1	macc 2.46M	activation 600 param 8.19k
ID	**name**	**type**	**batch**	**ch_in**	**dim_in**	**ch_out**	**dim_out**	**ops**	**mem**
70	loss_cls	SoftmaxWithLoss		2	1x1	2	1x1	add 600 div 600 exp 600	activation 600
	TOTAL							macc NaN comp NaN add NaN div NaN exp NaN	activation NaN param 136.69M

Details:

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops_raw	mem_raw
1	input-data	Python			undefinedxundefined	0	0x0	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
2	data	implicit	?	0	0x0	0	0x0	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
3	conv1_1	Convolution	?	0	0x0	64	0x0	macc NaN comp 0 add 0 div 0 exp 0	activation NaN param 64
4	relu1_1	ReLU	?	64	0x0	64	0x0	macc 0 comp NaN add 0 div 0 exp 0	activation NaN param 0
5	conv1_2	Convolution	?	64	0x0	64	0x0	macc NaN comp 0 add 0 div 0 exp 0	activation NaN param 36928
6	relu1_2	ReLU	?	64	0x0	64	0x0	macc 0 comp NaN add 0 div 0 exp 0	activation NaN param 0
7	pool1	Pooling	?	64	0x0	64	0x0	macc 0 comp NaN add 0 div 0 exp 0	activation NaN param 0
8	conv2_1	Convolution	?	64	0x0	128	0x0	macc NaN comp 0 add 0 div 0	activation NaN param 73856

```
layer {
  name: 'proposal'
  type: 'Python'
  bottom: 'rpn_cls_prob_reshape'
  bottom: 'rpn_bbox_pred'
  bottom: 'im_info'
  top: 'rpn_rois'
#  top: 'rpn_scores'
  python_param {
    module: 'rpn.proposal_layer'
    layer: 'ProposalLayer'
    param_str: "'feat_stride': 16"
  }
}

#layer {
#  name: 'debug-data'
#  type: 'Python'
#  bottom: 'data'
#  bottom: 'rpn_rois'
#  bottom: 'rpn_scores'
#  python_param {
#    module: 'rpn.debug_layer'
#    layer: 'RPNDebugLayer'
#  }
#}

layer {
  name: 'roi-data'
  type: 'Python'
  bottom: 'rpn_rois'
  bottom: 'gt_boxes'
  top: 'rois'
  top: 'labels'
  top: 'bbox_targets'
  top: 'bbox_inside_weights'
  top: 'bbox_outside_weights'
  python_param {
    module: 'rpn.proposal_target_layer'
    layer: 'ProposalTargetLayer'
    param_str: "'num_classes': 2"
  }
}

######### RCNN ############

layer {
  name: "roi_pool5"
  type: "ROIPooling"
  bottom: "conv5_3"
  bottom: "rois"
  top: "pool5"
  roi_pooling_param {
    pooled_w: 7
    pooled_h: 7
    spatial_scale: 0.0625 # 1/16
  }
}
layer {
  name: "fc6"
  type: "InnerProduct"
  bottom: "pool5"
  top: "fc6"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  inner_product_param {
    num_output: 4096
  }
}
layer {
  name: "relu6"
  type: "ReLU"
  bottom: "fc6"
  top: "fc6"
}
layer {
  name: "drop6"
  type: "Dropout"
  bottom: "fc6"
  top: "fc6"
  dropout_param {
    dropout_ratio: 0.5
  }
}
layer {
  name: "fc7"
  type: "InnerProduct"
  bottom: "fc6"
  top: "fc7"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  inner_product_param {
    num_output: 4096
  }
}
layer {
  name: "relu7"
  type: "ReLU"
  bottom: "fc7"
  top: "fc7"
}
layer {
  name: "drop7"
  type: "Dropout"
  bottom: "fc7"
  top: "fc7"
  dropout_param {
    dropout_ratio: 0.5
  }
}
layer {
  name: "cls_score"
  type: "InnerProduct"
  bottom: "fc7"
  top: "cls_score"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  inner_product_param {
    num_output: 2
    weight_filler {
      type: "gaussian"
      std: 0.01
    }
    bias_filler {
      type: "constant"
      value: 0
    }
  }
}
layer {
  name: "bbox_pred"
  type: "InnerProduct"
  bottom: "fc7"
  top: "bbox_pred"
  param {
    lr_mult: 1
  }
  param {
    lr_mult: 2
  }
  inner_product_param {
    num_output: 8
    weight_filler {
      type: "gaussian"
      std: 0.001
    }
    bias_filler {
      type: "constant"
      value: 0
    }
  }
```

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops_re	mem_raw
								div 0 **exp** 0	
9	relu2_1	ReLU	?	128	0x0	128	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
10	conv2_2	Convolution	?	128	0x0	128	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 147584
11	relu2_2	ReLU	?	128	0x0	128	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
12	pool2	Pooling	?	128	0x0	128	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
13	conv3_1	Convolution	?	128	0x0	256	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 295168
14	relu3_1	ReLU	?	256	0x0	256	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
15	conv3_2	Convolution	?	256	0x0	256	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 590080
16	relu3_2	ReLU	?	256	0x0	256	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
17	conv3_3	Convolution	?	256	0x0	256	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 590080
18	relu3_3	ReLU	?	256	0x0	256	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
19	pool3	Pooling	?	256	0x0	256	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
20	conv4_1	Convolution	?	256	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 1180160
21	relu4_1	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
22	conv4_2	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 2359808
23	relu4_2	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
24	conv4_3	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0	**activation** NaN **param** 2359808

```
}
layer {
  name: "loss_cls"
  type: "SoftmaxWithLoss"
  bottom: "cls_score"
  bottom: "labels"
  propagate_down: 1
  propagate_down: 0
  top: "loss_cls"
  loss_weight: 1
}
layer {
  name: "loss_bbox"
  type: "SmoothL1Loss"
  bottom: "bbox_pred"
  bottom: "bbox_targets"
  bottom: "bbox_inside_weights"
  bottom: "bbox_outside_weights"
  top: "loss_bbox"
  loss_weight: 1
}
```

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops_raw	mem_raw
								div 0 **exp** 0	
25	relu4_3	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
26	pool4	Pooling	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
27	conv5_1	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 2359808
28	relu5_1	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
29	conv5_2	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 2359808
30	relu5_2	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
31	conv5_3	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 2359808
32	relu5_3	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
33	rpn_conv/3x3	Convolution	?	512	0x0	512	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 2359808
34	im_info	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
35	gt_boxes	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
36	rpn/output	implicit	?	512	0x0	512	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
37	rpn_relu/3x3	ReLU	?	512	0x0	512	0x0	**macc** 0 **comp** NaN **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 0
38	rpn_bbox_pred	Convolution	?	512	0x0	36	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 18468
39	rpn_cls_score	Convolution	?	512	0x0	18	0x0	**macc** NaN **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** NaN **param** 9234
40	rpn-data	Python	?	18	0x0	0	0x0	**macc** 0 **comp** 0	**activation** 0 **param** 0

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	compute	memory
								add 0 **div** 0 **exp** 0	
41	rpn_cls_score_reshape	Reshape	?	18	0x0	2	0xNaN	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
42	rpn_cls_prob	Softmax	?	2	0xNaN	2	0xNaN	**macc** 0 **comp** 0 **add** NaN **div** NaN **exp** NaN	**activation** NaN **param** 0
43	rpn_cls_prob_reshape	Reshape	?	2	0xNaN	18	0xNaN	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
44	proposal	Python	?	18	0xNaN	5	1x1	**macc** NaN **comp** NaN **add** NaN **div** 44850 **exp** NaN	**activation** 1500 **param** 0
45	rpn_labels	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
46	rpn_loss_cls	SoftmaxWithLoss	?	2	0xNaN	2	0xNaN	**macc** 0 **comp** 0 **add** NaN **div** NaN **exp** NaN	**activation** NaN **param** 0
47	rpn_bbox_targets	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
48	rpn_bbox_inside_weights	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
49	rpn_bbox_outside_weights	implicit	?	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
50	rpn_loss_bbox	SmoothL1Loss	?	36	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
51	rpn_cls_loss	implicit	?	2	0xNaN	2	0xNaN	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
52	rpn_rois	implicit	300	5	1x1	5	1x1	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 1500 **param** 0
53	roi-data	Python	300	5	1x1	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
54	rois	implicit	300	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
55	roi_pool5	ROIPooling	300	512	0x0	512	7x7	**macc** 300 **comp** 0 **add** 300 **div** 300 **exp** 0	**activation** 7526400 **param** 0
56	labels	implicit	300	0	0x0	0	0x0	**macc** 0	**activation** 0

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops	memsize
								comp 0 **add** 0 **div** 0 **exp** 0	**param** 0
57	bbox_targets	implicit	300	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
58	bbox_inside_weights	implicit	300	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
59	bbox_outside_weights	implicit	300	0	0x0	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
60	pool5	implicit	300	512	7x7	512	7x7	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 7526400 **param** 0
61	fc6	InnerProduct	300	512	7x7	4096	1x1	**macc** 30828134400 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 102764544
62	relu6	ReLU	300	4096	1x1	4096	1x1	**macc** 0 **comp** 1228800 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 0
63	drop6	Dropout	300	4096	1x1	4096	1x1	**macc** 0 **comp** 1228800 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 0
64	fc7	InnerProduct	300	4096	1x1	4096	1x1	**macc** 5033164800 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 16781312
65	relu7	ReLU	300	4096	1x1	4096	1x1	**macc** 0 **comp** 1228800 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 0
66	drop7	Dropout	300	4096	1x1	4096	1x1	**macc** 0 **comp** 1228800 **add** 0 **div** 0 **exp** 0	**activation** 1228800 **param** 0
67	bbox_pred	InnerProduct	300	4096	1x1	8	1x1	**macc** 9830400 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 2400 **param** 32776
68	loss_bbox	SmoothL1Loss	300	8	1x1	0	0x0	**macc** 0 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 0 **param** 0
69	cls_score	InnerProduct	300	4096	1x1	2	1x1	**macc** 2457600 **comp** 0 **add** 0 **div** 0 **exp** 0	**activation** 600 **param** 8194
70	loss_cls	SoftmaxWithLoss	300	2	1x1	2	1x1	**macc** 0 **comp** 0 **add** 600 **div** 600 **exp** 600	**activation** 600 **param** 0

Excel-compatible Analysis Results (experimental)