

tf.contrib.gan.losses.wargs.acgan_generator_loss

```
acgan_generator_loss(  
    discriminator_gen_classification_logits,  
    one_hot_labels,  
    weights=1.0,  
    scope=None,  
    loss_collection=tf.GraphKeys.LOSSES,  
    reduction=losses.Reduction.SUM_BY_NONZERO_WEIGHTS,  
    add_summaries=False  
)
```

Defined in [tensorflow/contrib/gan/python/losses/python/losses_impl.py](#).

ACGAN loss for the generator.

The ACGAN loss adds a classification loss to the conditional discriminator. Therefore, the discriminator must output a tuple consisting of (1) the real/fake prediction and (2) the logits for the classification (usually the last conv layer, flattened).

For more details: ACGAN: <https://arxiv.org/abs/1610.09585>

Args:

- `discriminator_gen_classification_logits`: Classification logits for generated data.
- `one_hot_labels`: A Tensor holding one-hot labels for the batch.
- `weights`: Optional **Tensor** whose rank is either 0, or the same rank as `discriminator_gen_classification_logits`, and must be broadcastable to `discriminator_gen_classification_logits` (i.e., all dimensions must be either 1, or the same as the corresponding dimension).
- `scope`: The scope for the operations performed in computing the loss.
- `loss_collection`: collection to which this loss will be added.
- `reduction`: A **tf.losses.Reduction** to apply to loss.
- `add_summaries`: Whether or not to add summaries for the loss.

Returns:

A loss Tensor. Shape depends on `reduction`.

Raises:

- ValueError**: if arg module not either `generator` or `discriminator`
- TypeError**: if the discriminator does not output a tuple.

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