tf.contrib.layers.bias_add

```
bias_add(
    inputs,
    activation_fn=None,
    initializer=tf.zeros_initializer(),
    regularizer=None,
    reuse=None,
    variables_collections=None,
    outputs_collections=None,
    trainable=True,
    data_format=DATA_FORMAT_NHWC,
    scope=None
)
```

Defined in `tensorflow/contrib/layers/python/layers/layers.py`.

Adds a bias to the inputs.

Can be used as a normalizer function for conv2d and fully_connected.

Args:

- `inputs`: A tensor of with at least rank 2 and value for the last dimension, e.g. `[batch_size, depth]`, `[None, None, None, depth]`.
- `activation_fn`: Activation function, default set to None to skip it and maintain a linear activation.
- `initializer`: An initializer for the bias, defaults to 0.
- `regularizer`: A regularizer like the result of `l1_regularizer` or `l2_regularizer`.
- `reuse`: Whether or not the layer and its variables should be reused. To be able to reuse the layer scope must be given.
- `variables_collections`: Optional collections for the variables.
- `outputs_collections`: Collections to add the outputs.
- `trainable`: If `True` also add variables to the graph collection `GraphKeys.TRAINABLE_VARIABLES` (see tf.Variable).
- `data_format`: A string. 'NHWC' and 'NCHW' are supported.
- `scope`: Optional scope for variable_scope.

Returns:

A tensor representing the result of adding biases to the inputs.

Raises:

- `ValueError`: If `data_format` is neither `NHWC` nor `NCHW`.
- `ValueError`: If `data_format` is `NCHW` and rank of `inputs` is not 4.
- `ValueError`: If the rank of `inputs` is undefined.
- `ValueError`: If rank or `C` dimension of `inputs` is undefined.

Last updated November 2, 2017.