tf.clip_by_average_norm

```
clip_by_average_norm(
    t,
    clip_norm,
    name=None
)
```

Defined in `tensorflow/python/ops/clip_ops.py`.

See the guide: Training > Gradient Clipping

Clips tensor values to a maximum average L2-norm.

Given a tensor `t`, and a maximum clip value `clip_norm`, this operation normalizes `t` so that its average L2-norm is less than or equal to `clip_norm`. Specifically, if the average L2-norm is already less than or equal to `clip_norm`, then `t` is not modified. If the average L2-norm is greater than `clip_norm`, then this operation returns a tensor of the same type and shape as `t` with its values set to:

`t * clip_norm / l2norm_avg(t)`

In this case, the average L2-norm of the output tensor is `clip_norm`.

This operation is typically used to clip gradients before applying them with an optimizer.

Args:

- `t`: A `Tensor`.
- `clip_norm`: A 0-D (scalar) `Tensor` > 0. A maximum clipping value.
- `name`: A name for the operation (optional).

Returns:

A clipped `Tensor`.

Except as otherwise noted, the content of this page is licensed under the Creative Commons Attribution 3.0 License, and code samples are licensed under the Apache 2.0 License. For details, see our Site Policies. Java is a registered trademark of Oracle and/or its affiliates.

Last updated November 2, 2017.