tf.image.non_max_suppression

```
non_max_suppression(
    boxes,
    scores,
    max_output_size,
    iou_threshold=0.5,
    name=None
)
```

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

See the guide: Images > Working with Bounding Boxes

Greedily selects a subset of bounding boxes in descending order of score.

Prunes away boxes that have high intersection-over-union (IOU) overlap with previously selected boxes. Bounding boxes are supplied as [y1, x1, y2, x2], where (y1, x1) and (y2, x2) are the coordinates of any diagonal pair of box corners and the coordinates can be provided as normalized (i.e., lying in the interval [0, 1]) or absolute. Note that this algorithm is agnostic to where the origin is in the coordinate system. Note that this algorithm is invariant to orthogonal transformations and translations of the coordinate system; thus translating or reflections of the coordinate system result in the same boxes being selected by the algorithm. The output of this operation is a set of integers indexing into the input collection of bounding boxes representing the selected boxes. The bounding box coordinates corresponding to the selected indices can then be obtained using the `tf.gather operation`. For example: selected_indices = tf.image.non_max_suppression(boxes, scores, max_output_size, iou_threshold) selected_boxes = tf.gather(boxes, selected_indices)

Args:

- `boxes` : A 2-D float `Tensor` of shape `[num_boxes, 4]` .
- `scores` : A 1-D float `Tensor` of shape `[num_boxes]` representing a single score corresponding to each box (each row of boxes).
- `max_output_size` : A scalar integer `Tensor` representing the maximum number of boxes to be selected by non max suppression.
- `iou_threshold` : A float representing the threshold for deciding whether boxes overlap too much with respect to IOU.
- `name` : A name for the operation (optional).

Returns:

- `selected_indices` : A 1-D integer `Tensor` of shape `[M]` representing the selected indices from the boxes tensor, where `M <= max_output_size` .

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