tf.contrib.metrics.streaming_curve_points

```
streaming_curve_points(
    labels=None,
    predictions=None,
    weights=None,
    num_thresholds=200,
    metrics_collections=None,
    updates_collections=None,
    curve='ROC',
    name=None
)
```

Defined in `tensorflow/contrib/metrics/python/ops/metric_ops.py`.

Computes curve (ROC or PR) values for a prespecified number of points.

The `streaming_curve_points` function creates four local variables, `true_positives`, `true_negatives`, `false_positives` and `false_negatives` that are used to compute the curve values. To discretize the curve, a linearly spaced set of thresholds is used to compute pairs of recall and precision values.

For best results, `predictions` should be distributed approximately uniformly in the range [0, 1] and not peaked around 0 or 1.

For estimation of the metric over a stream of data, the function creates an `update_op` operation that updates these variables.

If `weights` is `None`, weights default to 1. Use weights of 0 to mask values.

Args:

- `labels`: A `Tensor` whose shape matches `predictions`. Will be cast to `bool`.
- `predictions`: A floating point `Tensor` of arbitrary shape and whose values are in the range `[0, 1]`.
- `weights`: Optional `Tensor` whose rank is either 0, or the same rank as `labels`, and must be broadcastable to `labels` (i.e., all dimensions must be either `1`, or the same as the corresponding `labels` dimension).
- `num_thresholds`: The number of thresholds to use when discretizing the roc curve.
- `metrics_collections`: An optional list of collections that `auc` should be added to.
- `updates_collections`: An optional list of collections that `update_op` should be added to.
- `curve`: Specifies the name of the curve to be computed, 'ROC' [default] or 'PR' for the Precision-Recall-curve.
- `name`: An optional variable_scope name.

Returns:

- `points`: A `Tensor` with shape [num_thresholds, 2] that contains points of the curve.
- `update_op`: An operation that increments the `true_positives`, `true_negatives`, `false_positives` and `false_negatives` variables.

Raises:

- `ValueError`: If **`predictions`** and **`labels`** have mismatched shapes, or if **`weights`** is not **`None`** and its shape doesn't match **`predictions`**, or if either **`metrics_collections`** or **`updates_collections`** are not a list or tuple.

Last updated November 2, 2017.