tensor.scatter_nd

```

Copy fnscatter_nd(self:@Tensor, updates:Tensor, indices:Tensor, reduction:Option)->Tensor;

```

Produces a copy of input data, and updates value to values specified by updates at specific index positions specified by indices.

Args

- self
- (@Tensor
-) - The input tensor.
- updates
- (Tensor
-) - The updates tensor.
- indices
- (Tensor
-) - Tensor of indices.
- reduction
- (Option
-) - Reduction operation. Default: reduction='none'.
-

Panics

- Panics if index values are not within bounds [-s, s-1] along axis of size s.
- Panics if indices last axis is greater than data rank.
-

Returns

A newTensor .

Example

```

Copy usecore::array::{ArrayTrait,SpanTrait};

useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};

fnscatter_nd_example()->Tensor { lettensor=TensorTrait:::new( shape:array![4,4,4].span(), data:array!
[1,2,3,4,5,6,7,8,8,7,6,5,4,3,2,1,1,2,3,4,5,6, 7,8,8,7,6,5,4,3,2,1,8,7,6,5,4,3,2,1,1,2,3,4,
5,6,7,8,8,7,6,5,4,3,2,1,1,2,3,4,5,6,7,8].span() );

letupdates=TensorTrait::::new( shape:array![2,4,4].span(), data:array![5,5,5,5,6,6,6,6,7,7,7,7,8,8,8,8,1,1,1,1,2,2,
2,2,3,3,3,3,4,4,4,4].span(), );

letindices=TensorTrait::::new( shape:array![2,1].span(), data:array![0,2].span(), );

returntensor.scatter_nd( updates:updates indices:indices, reduction:Option::Some('add'), ); }

                    [[[6.,7.,8.,9.], [11.,12.,13.,14.], [15.,14.,13.,12.], [12.,11.,10.,9.]],

[[1.,2.,3.,4.], [5.,6.,7.,8.], [8.,7.,6.,5.], [4.,3.,2.,1.]],

[[9.,8.,7.,6.], [6.,5.,4.,3.], [4.,5.,6.,7.], [9.,10.,11.,12.]],

[[8.,7.,6.,5.], [4.,3.,2.,1.], [1.,2.,3.,4.], [5.,6.,7.,8.]]]

```

Previous tensor.layer_normalization Next tensor.optional

Last updated15 days ago