nn.leaky_relu

```

Copy fnleaky_relu(inputs:@Tensor, alpha:@T)->Tensor

```

Applies the leaky rectified linear unit (Leaky ReLU) activation function element-wise to a given tensor.

The Leaky ReLU function is defined as f(x) = alpha * x if x < 0, f(x) = x otherwise, where x is the input element.

Args

- inputs
- (@Tensor
-) - A snapshot of a tensor to which the Leaky ReLU function will be applied.
- alpha
- (@T
-) - A snapshot of a fixed point scalar that defines the alpha value of the Leaky ReLU function.
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Returns

A new fixed point tensor with the same shape as the input tensor and the Leaky ReLU function applied element-wise.

Type Constraints

Constrain input and output types to fixed point tensors.

Examples

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

useorion::operators::tensor::{TensorTrait,Tensor,FP8x23}; useorion::operators::nn::{NNTrait,FP8x23NN};
useorion::numbers::{FP8x23,FixedTrait};

fnleaky_relu_example()->Tensor { lettensor=TensorTrait:::new( shape:array![2,3].span(), data:array![
FixedTrait::new(1,false), FixedTrait::new(2,false), FixedTrait::new(1,true), FixedTrait::new(2,true), FixedTrait::new(0,false),
FixedTrait::new(0,false), ] .span(), ); letalpha=FixedTrait::from_felt(838861);// 0.1

returnNNTrait::leaky_relu(@tensor,@alpha); }

                [[8388608,16777216,838861], [1677722,0,0]] // The fixed point representation of [[1,2,0.1],
                [0.2,0,0]]

```

Previous nn.relu Next nn.sigmoid

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