tensor.tanh

```

Copy fntanh(self:@Tensor)->Tensor;

```

Computes the hyperbolic tangent of all elements of the input tensor.

! y i = t a n h (x i) y_i=tanh({x_i})

Args

- self
- (@Tensor
-) - The input tensor.
-

Returns

Returns a new tensor inT with the hyperbolic tangent of the elements of the input tensor.

Type Constraints

Constrain input and output types to fixed point tensors.

Examples

```

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

useorion::operators::tensor::{TensorTrait,Tensor,FP8x23Tensor}; useorion::numbers::{FixedTrait,FP8x23};

fntanh_example()->Tensor { lettensor=TensorTrait:::new( shape:array![2,2].span(), data:array![
FixedTrait::new_unscaled(0,false), FixedTrait::new_unscaled(1,false), FixedTrait::new_unscaled(2,false),
FixedTrait::new_unscaled(3,false) ] .span(), );

returntensor.tanh(); }

[[0,6388715],[8086850,8347125]] // The fixed point representation of // [[0, 0.761594],
[0.96403, 0.9951]]

```

Previous tensor.acosh Next tensor.atan

Last updated3 months ago