## tensor.atan

# tensor.atan

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

Computes the arctangent (inverse of tangent) of all elements of the input tensor.

## Args

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

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#### Returns

A newTensor of the same shape as the input tensor with the arctangent (inverse of tangent) value of all elements in the input tensor.

## Type Constraints

Constrain input and output types to fixed point tensors.

## Example

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

 $use or ion:: operators:: tensor:: \{TensorTrait, Tensor, FP8x23Tensor\}; \ use or ion:: numbers:: \{FixedTrait, FP8x23\}; \ use or ion:: numbers:: numbers:$ 

fnatan\_example()->Tensor { lettensor=TensorTrait::::new( shape:array![3].span(), data:array![
FixedTrait::new\_unscaled(0,false), FixedTrait::new\_unscaled(2,false), ] .span(), );

returntensor.atan(); }

[0,6588397,9287028] // The fixed point representation of // [0,0.7853...,1.1071...]

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Previous tensor.tanh Next tensor.acos

Last updated3 months ago