Neural Network

This module contains primitive Neural Net (NN) operations.

```

Copy useorion::operators::nn;

```

Data types

Orion supports currently theseNN types.

Data type dtype 32-bit integer (signed) Tensor 8-bit integer (signed) Tensor 32-bit integer (unsigned) Tensor Fixed point (signed) Tensor

NNTrait

NNTrait contains the primitive functions to build a Neural Network.

function description nn.relu Applies the rectified linear unit function element-wise.nn.leaky_relu Applies the leaky rectified linear unit (Leaky ReLU) activation function element-wise. nn.sigmoid Applies the Sigmoid function to an n-dimensional input tensor. nn.softmax Computes softmax activations. nn.softmax_zero Computes softmax zero. nn.logsoftmax Applies the natural log to Softmax function to an n-dimensional input Tensor. nn.softsign Applies the Softsign function element-wise. nn.softplus Applies the Softplus function element-wise.nn.linear Performs a linear transformation of the input tensor using the provided weights and bias. nn.hard_sigmoid Applies the Hard Sigmoid function to an n-dimensional input tensor. nn.thresholded_relu Performs the thresholded relu activation function element-wise.nn.gemm Performs General Matrix multiplication.

Previous tensor.layer_normalization Next nn.relu

Last updated2 months ago