

[Accelerate](#) /  / `scatter(input:indices:output:axis:reductionFunction:filterParameters:)` **Deprecated**

Type Method

`scatter(input:indices:output:axis:reductionFunction:filterParameters:)` **Deprecated**

Scatters the elements of a tensor along a single axis.

iOS 16.0+ | iPadOS 16.0+ | Mac Catalyst | macOS 13.0+ | tvOS 16.0+ | visionOS | watchOS 9.0+ |

```
static func scatter(  
    input: BNNSNDArrayDescriptor,  
    indices: BNNSNDArrayDescriptor,  
    output: BNNSNDArrayDescriptor,  
    axis: Int,  
    reductionFunction: BNNS.ReductionFunction,  
    filterParameters: BNNSFilterParameters? = nil  
) throws
```

Deprecated

Use the BNNSGraph API instead.

Parameters

`input`

The input descriptor.

`indices`

The indices descriptor.

output

The output descriptor.

axis

The axis along which the operation scatters elements.

reductionFunction

The reduction operation that the function uses to reduce existing output value with scattered value.

filterParameters

The runtime filter parameters.

See Also

Related Documentation

~~func BNNSScatter(Int, BNNSReduceFunction, UnsafePointer<BNNSNDArrayDescriptor>, UnsafePointer<BNNSNDArrayDescriptor>, UnsafeMutablePointer<BNNSNDArrayDescriptor>, UnsafePointer<BNNSFilterParameters>?) -> Int32~~

Scatters the elements of a tensor along a single axis.

Deprecated

Gather and scatter operations

{ } Calculating the dominant colors in an image

Find the main colors in an image by implementing k-means clustering using the Accelerate framework.

~~static func gather(input: BNNSNDArrayDescriptor, indices: BNNSNDArrayDescriptor, output: BNNSNDArrayDescriptor, axis: Int, filterParameters: BNNSFilterParameters?) throws~~

Gathers the elements of a tensor along a single axis.

Deprecated

~~static func gatherND(input: BNNSNDArrayDescriptor, indices: BNNSNDArrayDescriptor, output: BNNSNDArrayDescriptor, filterParameters: BNNSFilterParameters?) throws~~

Gathers the slices of a tensor.

Deprecated

```
static func scatterND(input: BNNSNDArrayDescriptor, indices:  
BNNSNDArrayDescriptor, output: BNNSNDArrayDescriptor, reductionFunction  
: BNNS.ReductionFunction, filterParameters: BNNSFilterParameters?)  
throws
```

Scatters the slices of a tensor.

Deprecated

```
func BNNSGather(Int, UnsafePointer<BNNSNDArrayDescriptor>, Unsafe  
Pointer<BNNSNDArrayDescriptor>, UnsafeMutablePointer<BNNSNDArray  
Descriptor>, UnsafePointer<BNNSFilterParameters>?) -> Int32
```

Gathers the elements of a tensor along a single axis.

Deprecated

```
func BNNSGatherND(UnsafePointer<BNNSNDArrayDescriptor>, UnsafePointer<  
BNNSNDArrayDescriptor>, UnsafeMutablePointer<BNNSNDArrayDescriptor>,  
UnsafePointer<BNNSFilterParameters>?) -> Int32
```

Gathers the slices of a tensor.

Deprecated

```
func BNNSScatter(Int, BNNSReduceFunction, UnsafePointer<BNNSNDArray  
Descriptor>, UnsafePointer<BNNSNDArrayDescriptor>, UnsafeMutablePointer  
<BNNSNDArrayDescriptor>, UnsafePointer<BNNSFilterParameters>?) -> Int32
```

Scatters the elements of a tensor along a single axis.

Deprecated

```
func BNNSScatterND(BNNSReduceFunction, UnsafePointer<BNNSNDArray  
Descriptor>, UnsafePointer<BNNSNDArrayDescriptor>, UnsafeMutablePointer  
<BNNSNDArrayDescriptor>, UnsafePointer<BNNSFilterParameters>?) -> Int32
```

Scatters the slices of a tensor.

Deprecated