

torch.nn

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\pytorch-master) (docs) (source) nn.rst, line 6)

Unknown directive type "automodule".

```
.. automodule:: torch.nn
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\pytorch-master) (docs) (source) nn.rst, line 7)

Unknown directive type "automodule".

```
.. automodule:: torch.nn.modules
```

These are the basic building blocks for graphs:

torch.nn

- [Containers](#)
- [Convolution Layers](#)
- [Pooling layers](#)
- [Padding Layers](#)
- [Non-linear Activations \(weighted sum, nonlinearity\)](#)
- [Non-linear Activations \(other\)](#)
- [Normalization Layers](#)
- [Recurrent Layers](#)
- [Transformer Layers](#)
- [Linear Layers](#)
- [Dropout Layers](#)
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- [Distance Functions](#)
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- [Utilities](#)
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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\pytorch-master) (docs) (source) nn.rst, line 17)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.nn
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\pytorch-master) (docs) (source) nn.rst, line 20)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   ~parameter.Parameter
   ~parameter.UninitializedParameter
   ~parameter.UninitializedBuffer
```

Containers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 32)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

Module
Sequential
ModuleList
ModuleDict
ParameterList
ParameterDict
```

Global Hooks For Module

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 46)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.nn.modules.module
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 47)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:

   register_module_forward_pre_hook
   register_module_forward_hook
   register_module_backward_hook
   register_module_full_backward_hook
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 56)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch
```

Convolution Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 61)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

nn.Conv1d
nn.Conv2d
nn.Conv3d
nn.ConvTranspose1d
nn.ConvTranspose2d
nn.ConvTranspose3d
nn.LazyConv1d
nn.LazyConv2d
nn.LazyConv3d
nn.LazyConvTranspose1d
nn.LazyConvTranspose2d
nn.LazyConvTranspose3d
```

```
nn.Unfold
nn.Fold
```

Pooling layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 84)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.MaxPool1d
   nn.MaxPool2d
   nn.MaxPool3d
   nn.MaxUnpool1d
   nn.MaxUnpool2d
   nn.MaxUnpool3d
   nn.AvgPool1d
   nn.AvgPool2d
   nn.AvgPool3d
   nn.FractionalMaxPool2d
   nn.FractionalMaxPool3d
   nn.LPPool1d
   nn.LPPool2d
   nn.AdaptiveMaxPool1d
   nn.AdaptiveMaxPool2d
   nn.AdaptiveMaxPool3d
   nn.AdaptiveAvgPool1d
   nn.AdaptiveAvgPool2d
   nn.AdaptiveAvgPool3d
```

Padding Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 112)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.ReflectionPad1d
   nn.ReflectionPad2d
   nn.ReflectionPad3d
   nn.ReplicationPad1d
   nn.ReplicationPad2d
   nn.ReplicationPad3d
   nn.ZeroPad2d
   nn.ConstantPad1d
   nn.ConstantPad2d
   nn.ConstantPad3d
```

Non-linear Activations (weighted sum, nonlinearity)

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 131)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.ELU
   nn.Hardshrink
```

```
nn.Hardsigmoid
nn.Hardtanh
nn.Hardswish
nn.LeakyReLU
nn.LogSigmoid
nn.MultiheadAttention
nn.PReLU
nn.ReLU
nn.ReLU6
nn.RReLU
nn.SELU
nn.CELU
nn.GELU
nn.Sigmoid
nn.SiLU
nn.Mish
nn.Softplus
nn.Softshrink
nn.Softsign
nn.Tanh
nn.Tanhshrink
nn.Threshold
nn.GLU
```

Non-linear Activations (other)

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 165)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

nn.Softmin
nn.Softmax
nn.Softmax2d
nn.LogSoftmax
nn.AdaptiveLogSoftmaxWithLoss
```

Normalization Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 179)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

nn.BatchNorm1d
nn.BatchNorm2d
nn.BatchNorm3d
nn.LazyBatchNorm1d
nn.LazyBatchNorm2d
nn.LazyBatchNorm3d
nn.GroupNorm
nn.SyncBatchNorm
nn.InstanceNorm1d
nn.InstanceNorm2d
nn.InstanceNorm3d
nn.LazyInstanceNorm1d
nn.LazyInstanceNorm2d
nn.LazyInstanceNorm3d
nn.LayerNorm
nn.LocalResponseNorm
```

Recurrent Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 204)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

nn.RNNBase
nn.RNN
nn.LSTM
nn.GRU
nn.RNNCell
nn.LSTMCell
nn.GRUCell
```

Transformer Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 220)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

nn.Transformer
nn.TransformerEncoder
nn.TransformerDecoder
nn.TransformerEncoderLayer
nn.TransformerDecoderLayer
```

Linear Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 234)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

nn.Identity
nn.Linear
nn.Bilinear
nn.LazyLinear
```

Dropout Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 247)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

nn.Dropout
nn.Dropout2d
nn.Dropout3d
nn.AlphaDropout
nn.FeatureAlphaDropout
```

Sparse Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 261)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.Embedding
   nn.EmbeddingBag
```

Distance Functions

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 272)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.CosineSimilarity
   nn.PairwiseDistance
```

Loss Functions

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 283)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

   nn.L1Loss
   nn.MSELoss
   nn.CrossEntropyLoss
   nn.CTCLoss
   nn.NLLLoss
   nn.PoissonNLLLoss
   nn.GaussianNLLLoss
   nn.KLDivLoss
   nn.BCELoss
   nn.BCEWithLogitsLoss
   nn.MarginRankingLoss
   nn.HingeEmbeddingLoss
   nn.MultiLabelMarginLoss
   nn.HuberLoss
   nn.SmoothL1Loss
   nn.SoftMarginLoss
   nn.MultiLabelSoftMarginLoss
   nn.CosineEmbeddingLoss
   nn.MultiMarginLoss
   nn.TripletMarginLoss
   nn.TripletMarginWithDistanceLoss
```

Vision Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 313)

Unknown directive type "autosummary".

```
.. autosummary::
  :toctree: generated
  :nosignatures:
  :template: classtemplate.rst

nn.PixelShuffle
nn.PixelUnshuffle
nn.Upsample
nn.UpsamplingNearest2d
nn.UpsamplingBilinear2d
```

Shuffle Layers

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 327)

Unknown directive type "autosummary".

```
.. autosummary::
  :toctree: generated
  :nosignatures:
  :template: classtemplate.rst

nn.ChannelShuffle
```

DataParallel Layers (multi-GPU, distributed)

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 336)

Unknown directive type "automodule".

```
.. automodule:: torch.nn.parallel
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 337)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 339)

Unknown directive type "autosummary".

```
.. autosummary::
  :toctree: generated
  :nosignatures:
  :template: classtemplate.rst

nn.DataParallel
nn.parallel.DistributedDataParallel
```

Utilities

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 349)

Unknown directive type "automodule".

```
.. automodule:: torch.nn.utils
```

From the `torch.nn.utils` module

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-

master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 353)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.nn.utils
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 354)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:

    clip_grad_norm_
    clip_grad_value_
    parameters_to_vector
    vector_to_parameters
    prune.BasePruningMethod
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 364)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:

    prune.PruningContainer
    prune.Identity
    prune.RandomUnstructured
    prune.L1Unstructured
    prune.RandomStructured
    prune.LnStructured
    prune.CustomFromMask
    prune.identity
    prune.random_unstructured
    prune.l1_unstructured
    prune.random_structured
    prune.ln_structured
    prune.global_unstructured
    prune.custom_from_mask
    prune.remove
    prune.is_pruned
    weight_norm
    remove_weight_norm
    spectral_norm
    remove_spectral_norm
    skip_init
```

Parametrizations implemented using the new parametrization functionality in
:func:`torch.nn.utils.parameterize.register_parametrization`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 390); [backlink](#)

Unknown interpreted text role "func".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 393)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:

    parametrizations.orthogonal
    parametrizations.spectral_norm
```


Utility functions to parametrize Tensors on existing Modules. Note that these functions can be used to parametrize a given Parameter or Buffer given a specific function that maps from an input space to the parametrized space. They are not parameterizations that would transform an object into a parameter. See the [Parametrizations tutorial](#) for more information on how to implement your own parametrizations.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 408)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:

    parametrize.register_parametrization
    parametrize.remove_parametrizations
    parametrize.cached
    parametrize.is_parametrized
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 417)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

    parametrize.ParametrizationList
```

Utility functions in other modules

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 426)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 427)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:

    nn.utils.rnn.PackedSequence
    nn.utils.rnn.pack_padded_sequence
    nn.utils.rnn.pad_packed_sequence
    nn.utils.rnn.pad_sequence
    nn.utils.rnn.pack_sequence
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 437)

Unknown directive type "autosummary".

```
.. autosummary::
    :toctree: generated
    :nosignatures:
    :template: classtemplate.rst

    nn.Flatten
    nn.Unflatten
```

Quantized Functions

Quantization refers to techniques for performing computations and storing tensors at lower bitwidths than floating point precision. PyTorch supports both per tensor and per channel asymmetric linear quantization. To learn more how to use quantized functions in PyTorch, please refer to the [ref`quantization-doc`](#) documentation.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 448); [backlink](#)

Unknown interpreted text role "ref".

Lazy Modules Initialization

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 454)

Unknown directive type "currentmodule".

```
.. currentmodule:: torch
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 455)

Unknown directive type "autosummary".

```
.. autosummary::
   :toctree: generated
   :nosignatures:
   :template: classtemplate.rst

nn.modules.lazy.LazyModuleMixin
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\ (pytorch-master) (docs) (source) nn.rst, line 464)

Unknown directive type "py:module".

```
.. py:module:: torch.nn.backends
```