

# tensor.random\_uniform\_like

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...  
  
Copy fnrandom_uniform_like(tensor:@Tensor, high:Option, low:Option, seed:Option)->Tensor;  
  
...
```

RandomUniformLike generates a tensor with random values using a uniform distribution, matching the shape of the input tensor.

This operation creates a new tensor with the same shape as the input tensor, where each element is initialized with a random value sampled from a uniform distribution.

## Args

- tensor
- (@Tensor
- ) - The input tensor of [N,C,H,W], where N is the batch axis, C is the channel or depth, H is the height and W is the width.
- high
- (Option) - An optional parameter specifying the upper bound (exclusive) of the uniform distribution. If not provided, defaults to 1.0.
- low
- (Option) - An optional parameter specifying the lower bound (inclusive) of the uniform distribution. If not provided, defaults to 0.0.
- seed
- (Option) - An optional parameter specifying the seed for the random number generator. If not provided, a random seed will be used.
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## Returns

- ATensor
- with the same shape as the input tensor, filled with random values from a uniform distribution within the specified range.
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## Examples

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...  
  
Copy useorion::operators::tensor::FP8x23Tensor,FP8x23TensorAdd}; usecore::array::{ArrayTrait,SpanTrait};  
useorion::operators::tensor::TensorTrait,Tensor}; useorion::utils::{assert_eq, assert_seq_eq};  
useorion::operators::tensor::FP8x23TensorPartialEq; useorion::numbers::{FixedTrait,FP8x23};  
  
fnexample()->Tensor { letmutshape=ArrayTrait::new(); shape.append(1); shape.append(8); shape.append(1);  
shape.append(2);  
  
letmutdata=ArrayTrait::new(); data.append(FP8x23{ mag:70016, sign:true}); data.append(FP8x23{ mag:57536, sign:false});  
data.append(FP8x23{ mag:116032, sign:false}); data.append(FP8x23{ mag:162944, sign:true}); data.append(FP8x23{  
mag:43360, sign:false}); data.append(FP8x23{ mag:128960, sign:false}); data.append(FP8x23{ mag:151808, sign:true});  
data.append(FP8x23{ mag:28368, sign:false}); data.append(FP8x23{ mag:21024, sign:false}); data.append(FP8x23{  
mag:24992, sign:false}); data.append(FP8x23{ mag:125120, sign:true}); data.append(FP8x23{ mag:79168, sign:true});  
data.append(FP8x23{ mag:136960, sign:true}); data.append(FP8x23{ mag:10104, sign:true}); data.append(FP8x23{  
mag:136704, sign:false}); data.append(FP8x23{ mag:184960, sign:true}); lettensor=TensorTrait::new(shape.span(),  
data.span()); return TensorTrait::random_uniform_like(@tensor, Option::Some(FP8x23 { mag: 83886080, sign: false  
}),Option::Some(FP8x23 { mag: 8388608, sign: false })), Option::Some(354145)); }  
  
[[[7299130, 4884492]], [[2339070, 1559536]], [[3448557, 984617]], [[5745934, 3670947]],  
[[4665989, 3079292]], [[3375288, 948254]], [[3749966, 4911069]], [[1358829, 4368105]]]  
  
...
```

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Last updated15 days ago