

PyTorch vs. NumPy

	PyTorch	NumPy
Basic Entity	<code>torch.tensor([[1, 2], [3, 4]])</code>	<code>np.array([[1, 2], [3, 4]])</code>
Tensor with Gradient	<code>torch.tensor([[1, 2], [3, 4]], requires_grad=True)</code>	<is not possible>
Size	<code>tensor.shape</code> <code>tensor.dim()</code>	<code>array.shape</code> <code>array.ndim</code>
Indexing	<code>tensor[:, :10, 5:, ...]</code>	<code>array[:, :10, 5:, ...]</code>
Reshaping	<code>tensor.reshape((3, 224, 224))</code> <code>tensor.reshape(-1)</code>	<code>array.reshape((3, 224, 224))</code> <code>array.reshape(-1)</code>
Conversion	<code>torch.from_numpy(array)</code>	<code>tensor.numpy()</code>
Casting	<code>torch.tensor(2).long()</code> <code>torch.tensor(2.).float()</code> <code>torch.tensor(2.).double()</code>	<code>np.array(2).astype("int64")</code> <code>np.array(2).astype("float32")</code> <code>np.array(2).astype("float64")</code>