

## tf.estimator.inputs.numpy\_input\_fn

```
numpy_input_fn(  
    x,  
    y=None,  
    batch_size=128,  
    num_epochs=1,  
    shuffle=None,  
    queue_capacity=1000,  
    num_threads=1  
)
```

Defined in [tensorflow/python/estimator/inputs/numpy\\_io.py](#).

Returns input function that would feed dict of numpy arrays into the model.

This returns a function outputting **features** and **target** based on the dict of numpy arrays. The dict **features** has the same keys as the **x**.

Example:

```
age = np.arange(4) * 1.0  
height = np.arange(32, 36)  
x = {'age': age, 'height': height}  
y = np.arange(-32, -28)  
  
with tf.Session() as session:  
    input_fn = numpy_io.numpy_input_fn(  
        x, y, batch_size=2, shuffle=False, num_epochs=1)
```

### Args:

- **x**: dict of numpy array object.
- **y**: numpy array object. **None** if absent.
- **batch\_size**: Integer, size of batches to return.
- **num\_epochs**: Integer, number of epochs to iterate over data. If **None** will run forever.
- **shuffle**: Boolean, if True shuffles the queue. Avoid shuffle at prediction time.
- **queue\_capacity**: Integer, size of queue to accumulate.
- **num\_threads**: Integer, number of threads used for reading and enqueueing. In order to have predicted and repeatable order of reading and enqueueing, such as in prediction and evaluation mode, **num\_threads** should be 1.

### Returns:

Function, that has signature of `()->(dict of features, target)`

### Raises:

- **ValueError**: if the shape of **y** mismatches the shape of values in **x** (i.e., values in **x** have same shape).

- `TypeError : x` is not a dict or `shuffle` is not bool.

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