

THEANO PACKAGE INSTALLATION

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Please open the command window as administrator and run the following two commands:

Step 1: conda install theano

Step 2: conda install mingw libpython

Testing code:

Please run the following code in the **Jupyter notebook** to check if the Theano package is properly working or not.

```
import numpy as np
import time
import theano
A = np.random.rand(1000,10000).astype(theano.config.floatX)
B = np.random.rand(10000,1000).astype(theano.config.floatX)
np_start = time.time()
AB = A.dot(B)
np_end = time.time()
X,Y = theano.tensor.matrices('XY')
mf = theano.function([X,Y],X.dot(Y))
t_start = time.time()
tAB = mf(A,B)
t_end = time.time()
print("NP time: %f[s], theano time: %f[s] (times should be close when run on CPU!)" %(
        np_end-np_start, t_end-t_start))
print("Result difference: %f" % (np.abs(AB-tAB).max(), ))
```