Python + NEURON

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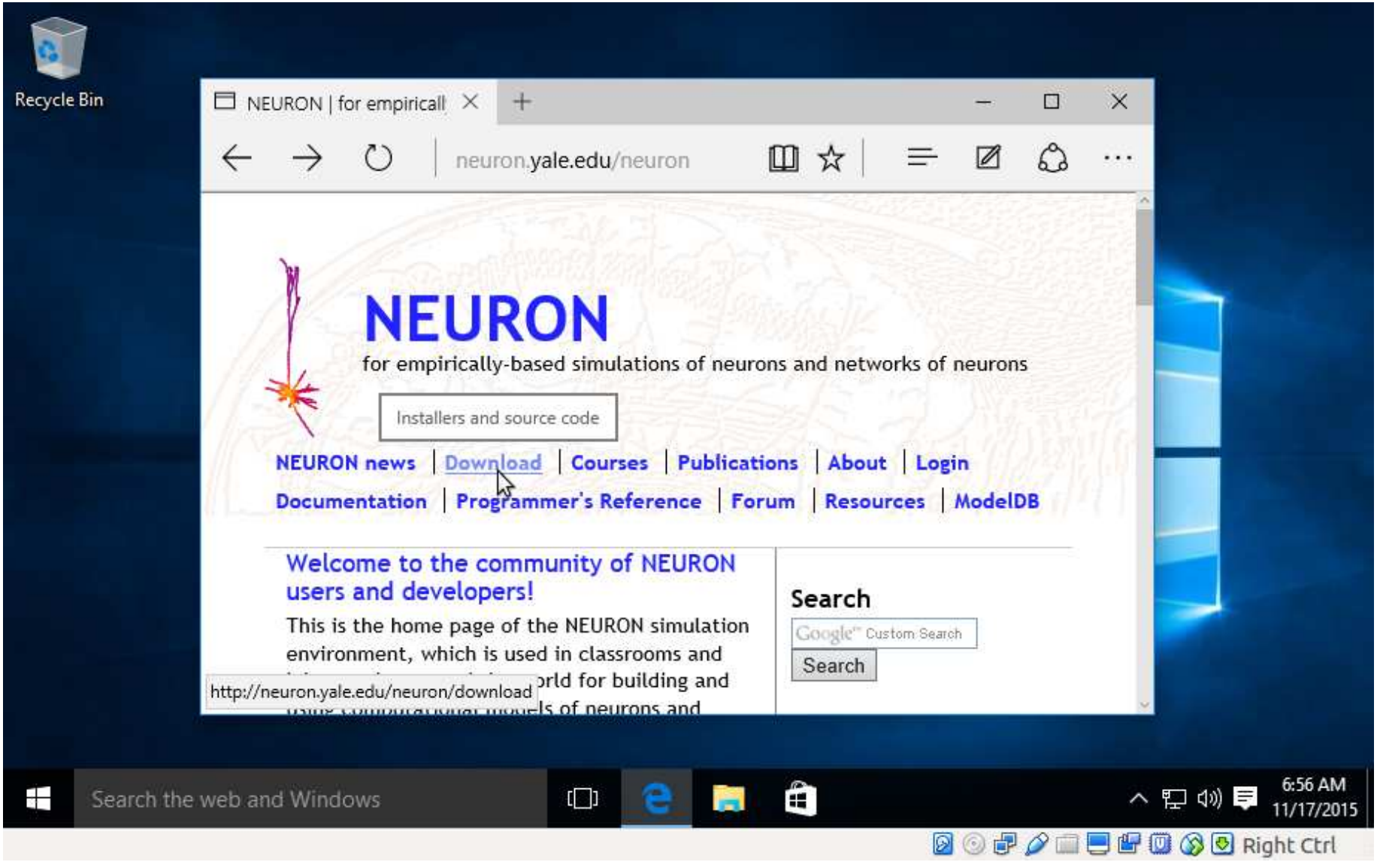
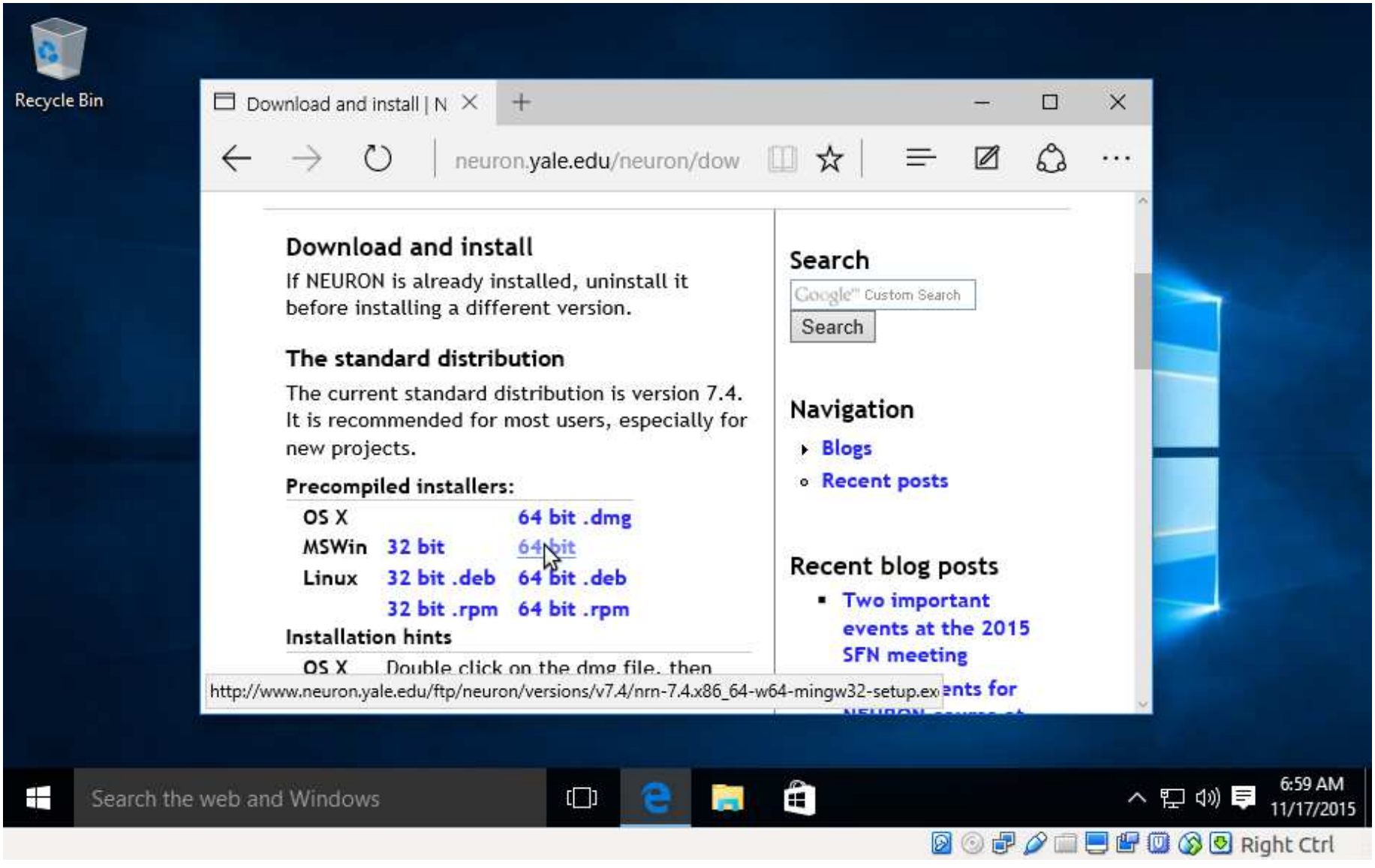
School of Brain Cells and Circuits
Erice 2015

NINDS

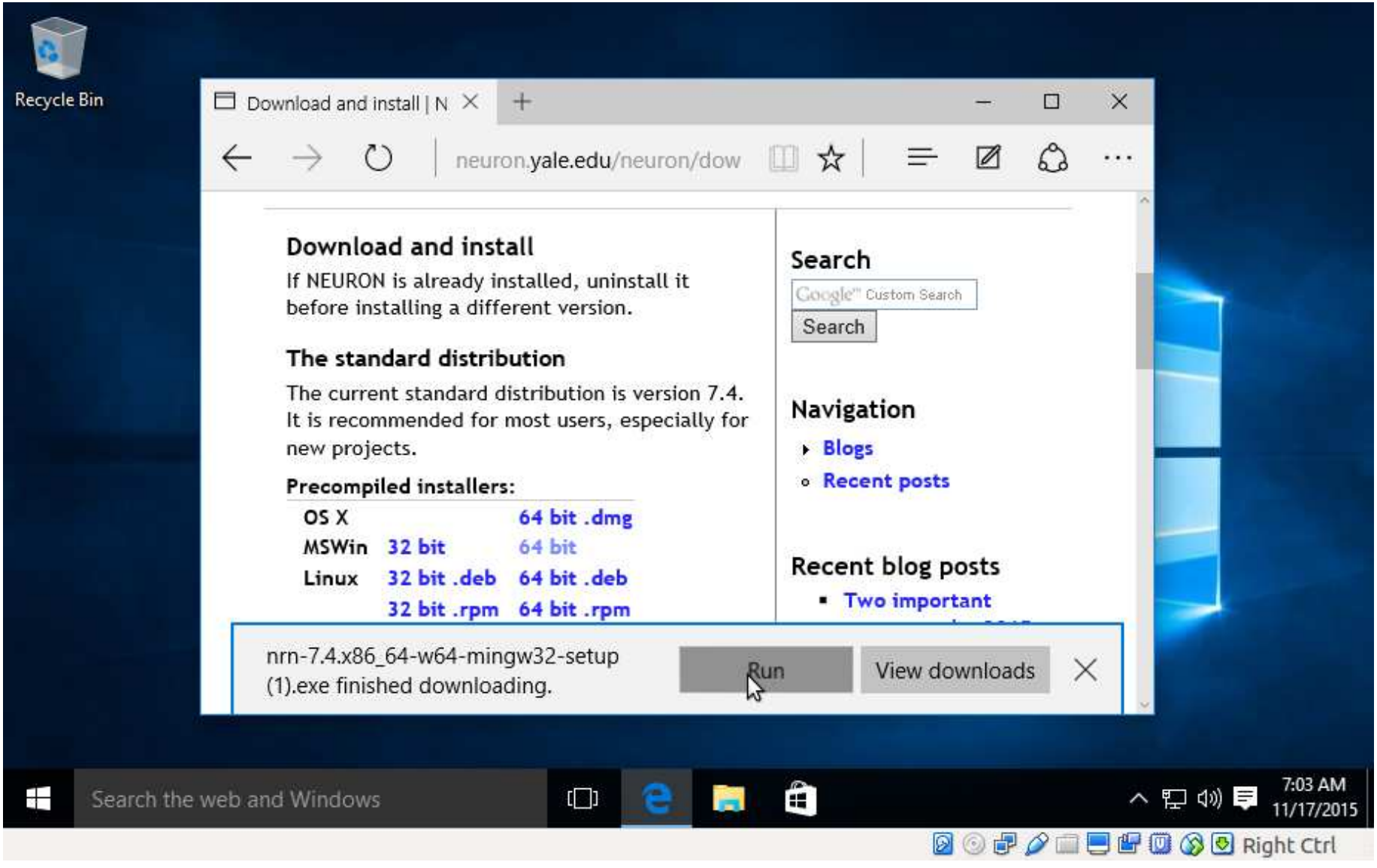
Installing ...


Recycle Bin
NEURON | for empiricall
neuron.yale.edu/neuron
NEURON
for empirically-based simulations of neurons and networks of neurons
Installers and source code
NEURON news | Download | Courses | Publications | About | Login
Documentation | Programmer's Reference | Forum | Resources | ModelDB
Welcome to the community of NEURON users and developers!
This is the home page of the NEURON simulation environment, which is used in classrooms and
rld for building and
ls of neurons and
Search
Google™ Custom Search
Search
http://neuron.yale.edu/neuron/download
Search the web and Windows
6:56 AM
11/17/2015
Right Ctrl

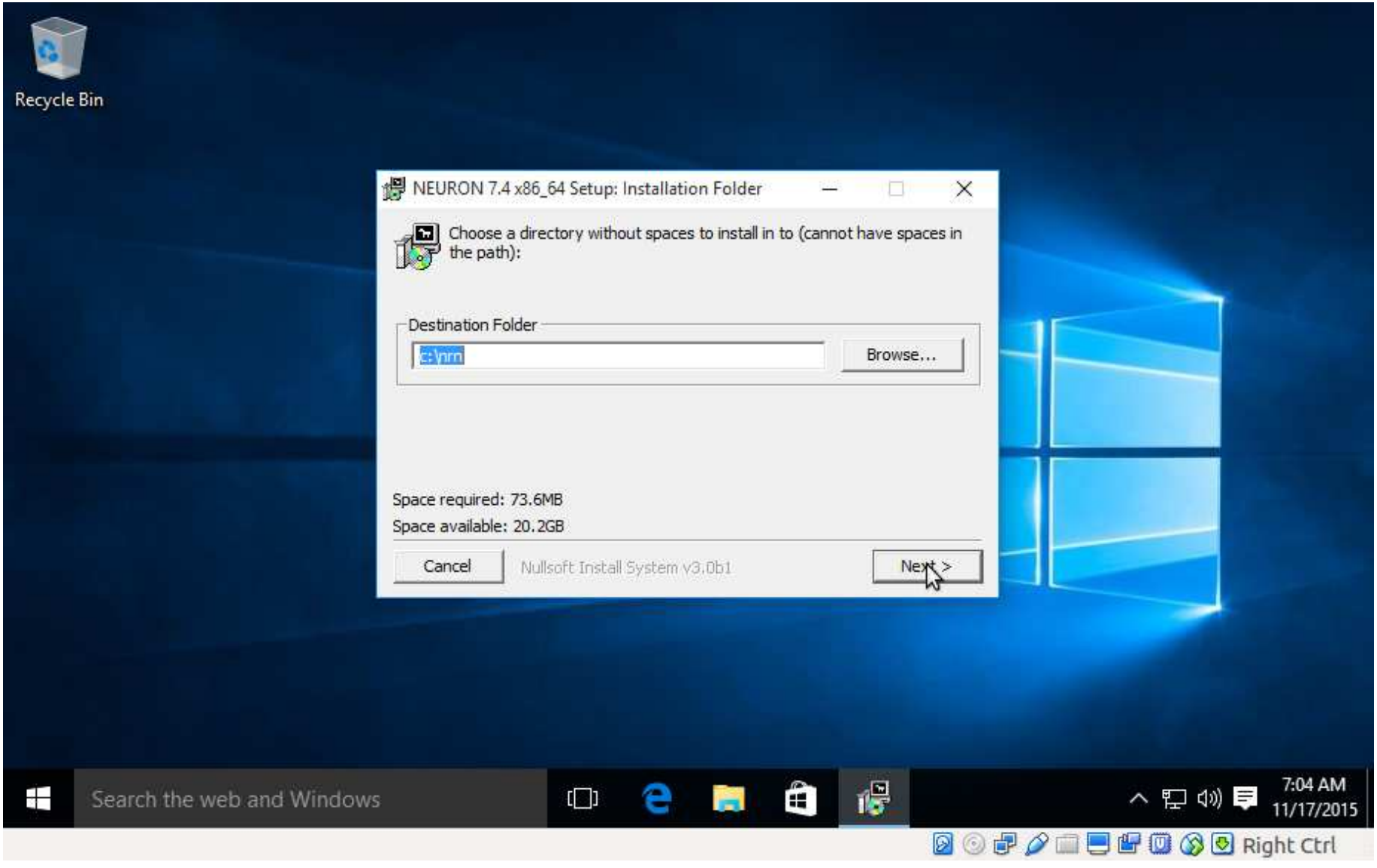
Installing on 64bit Windows 10 ...



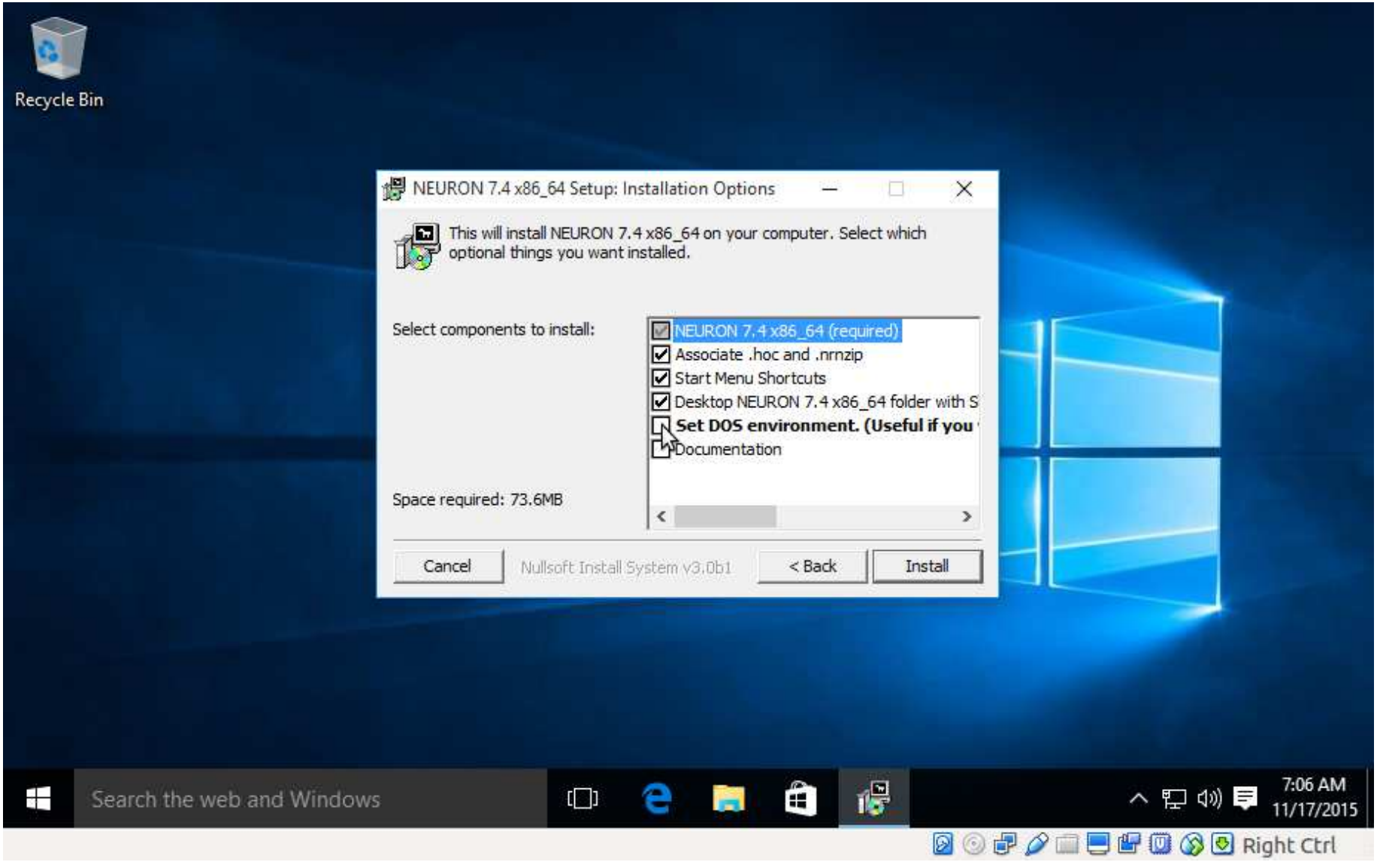
Run the downloaded file



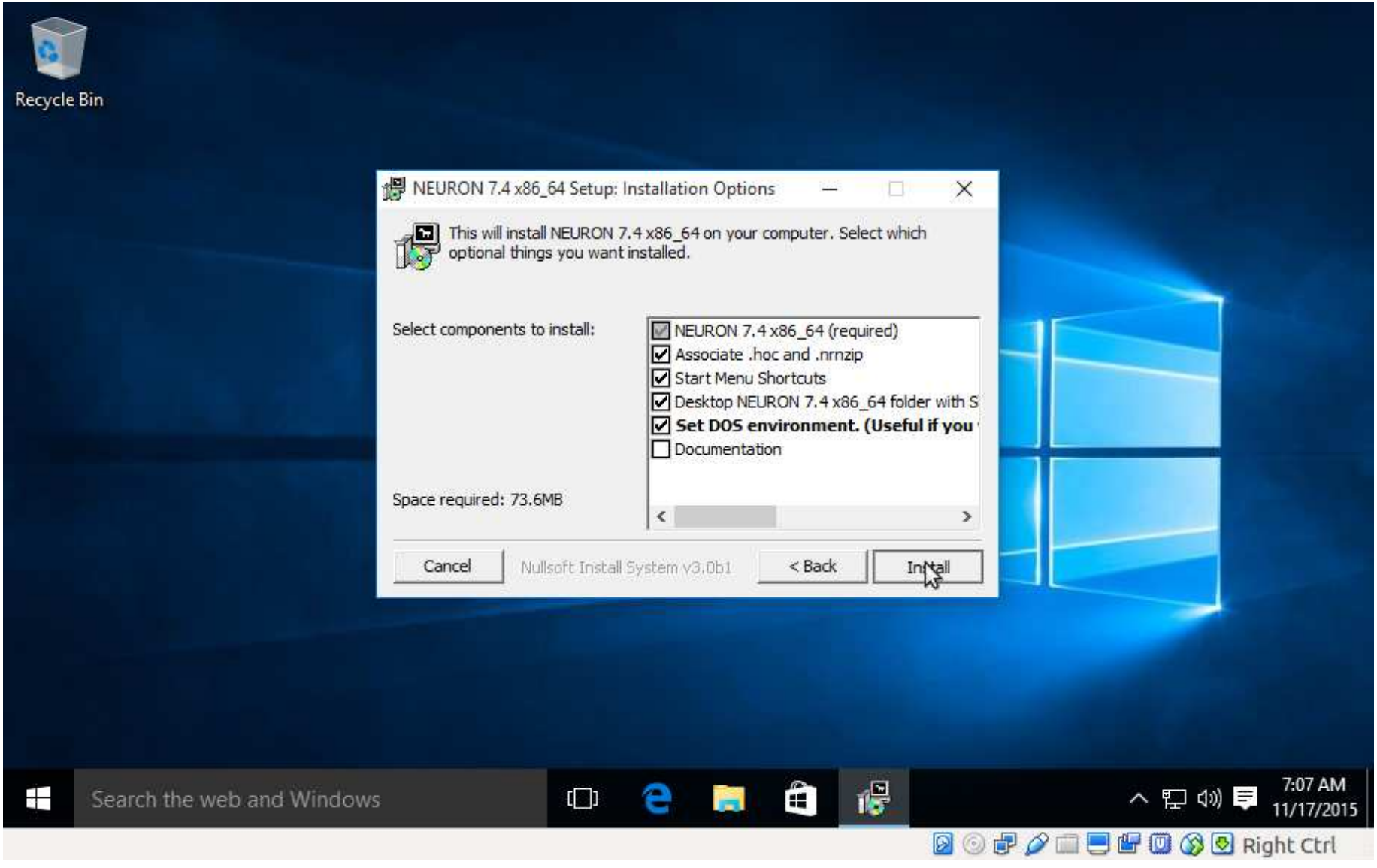
Install into selected destination folder



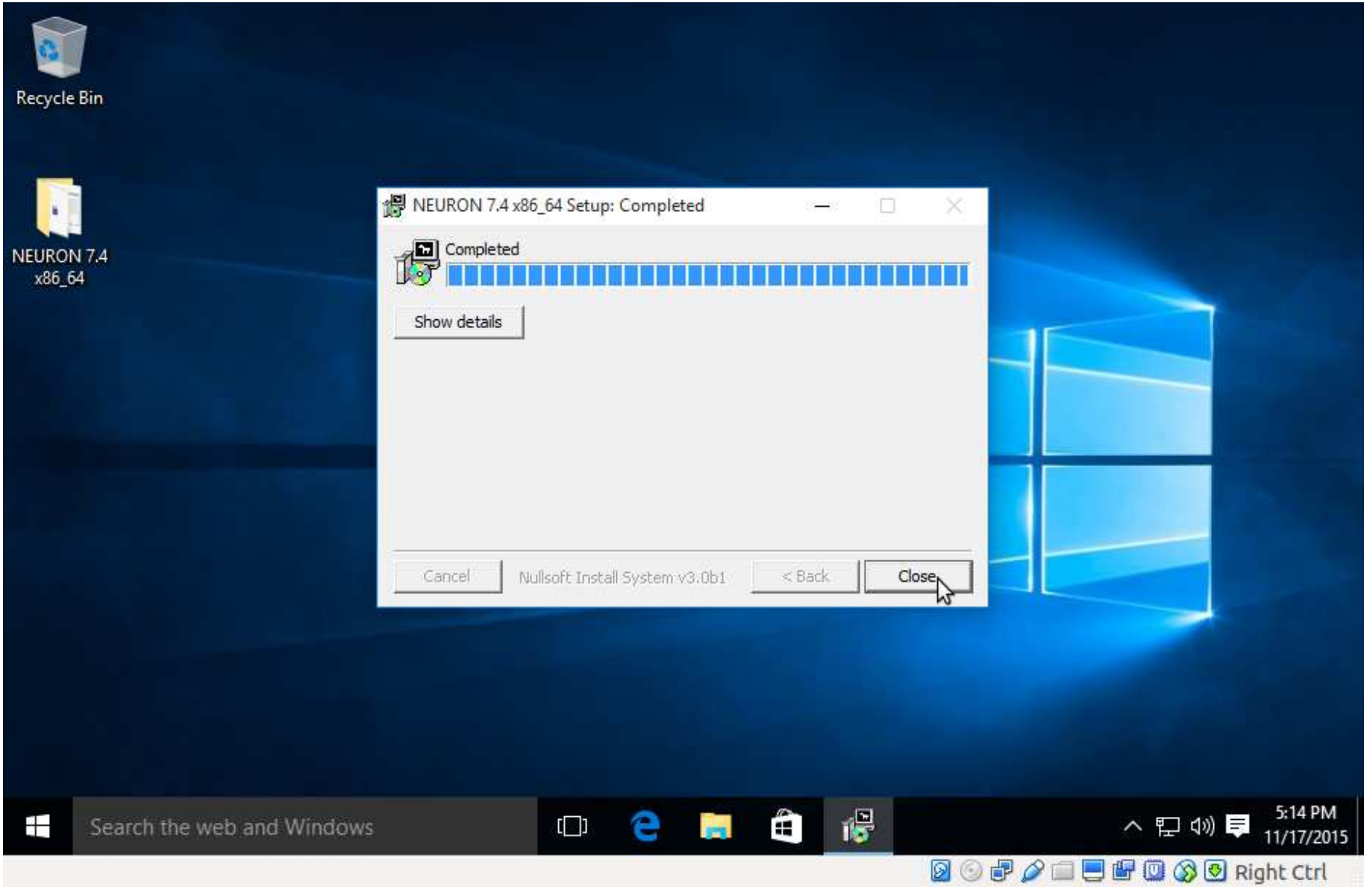
Useful if launching IPython.



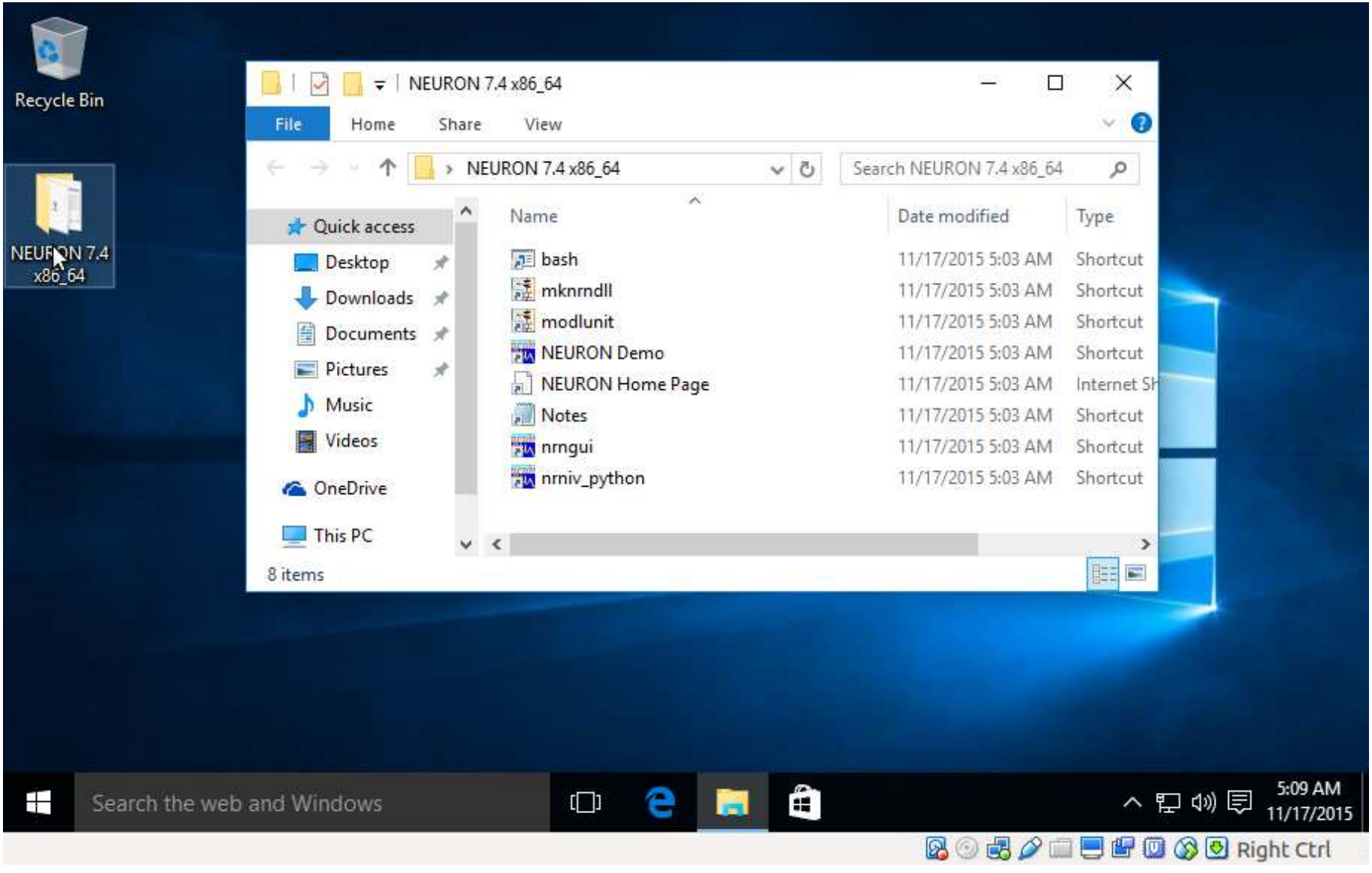
Install NEURON



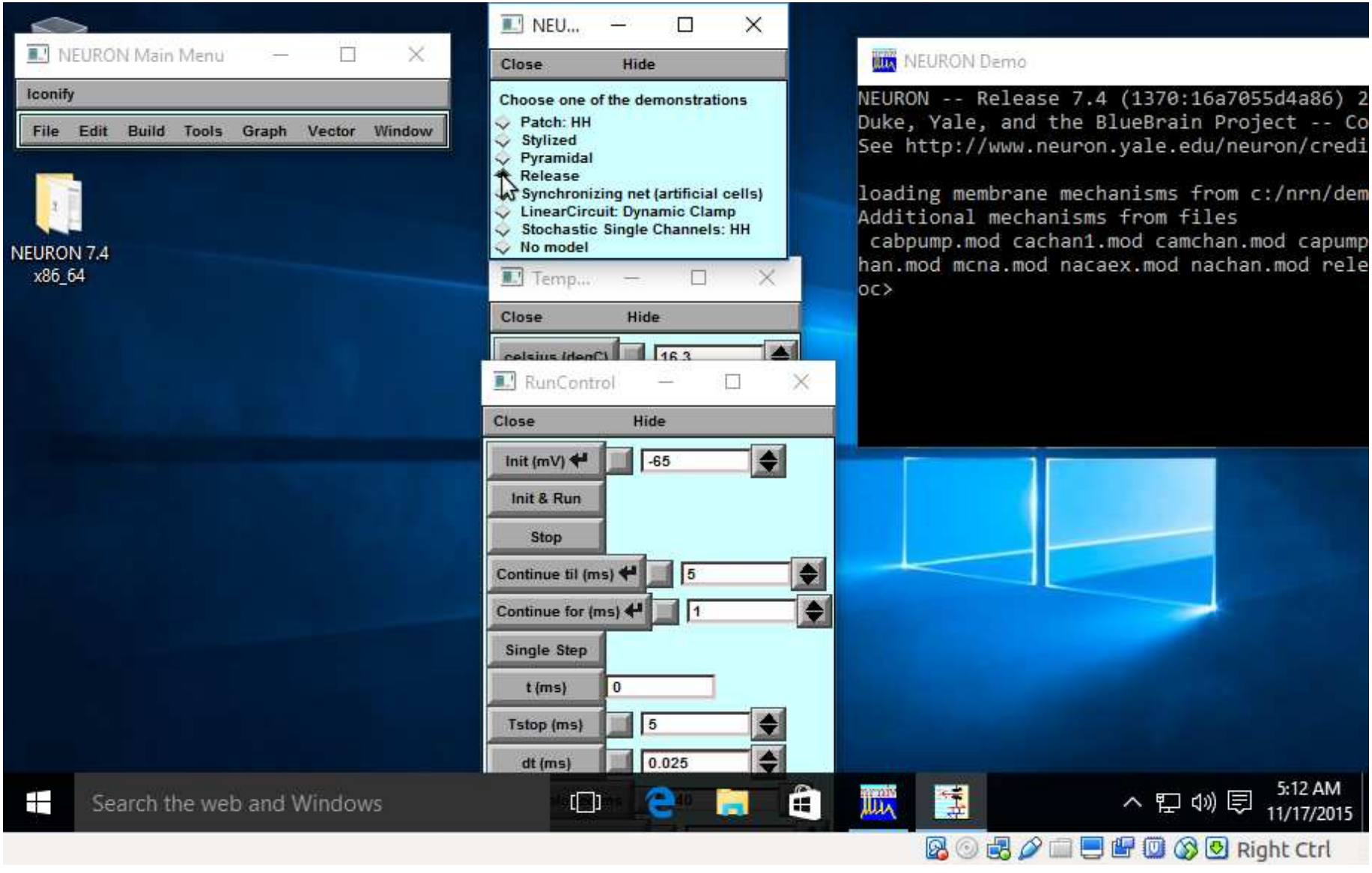
NEURON installed



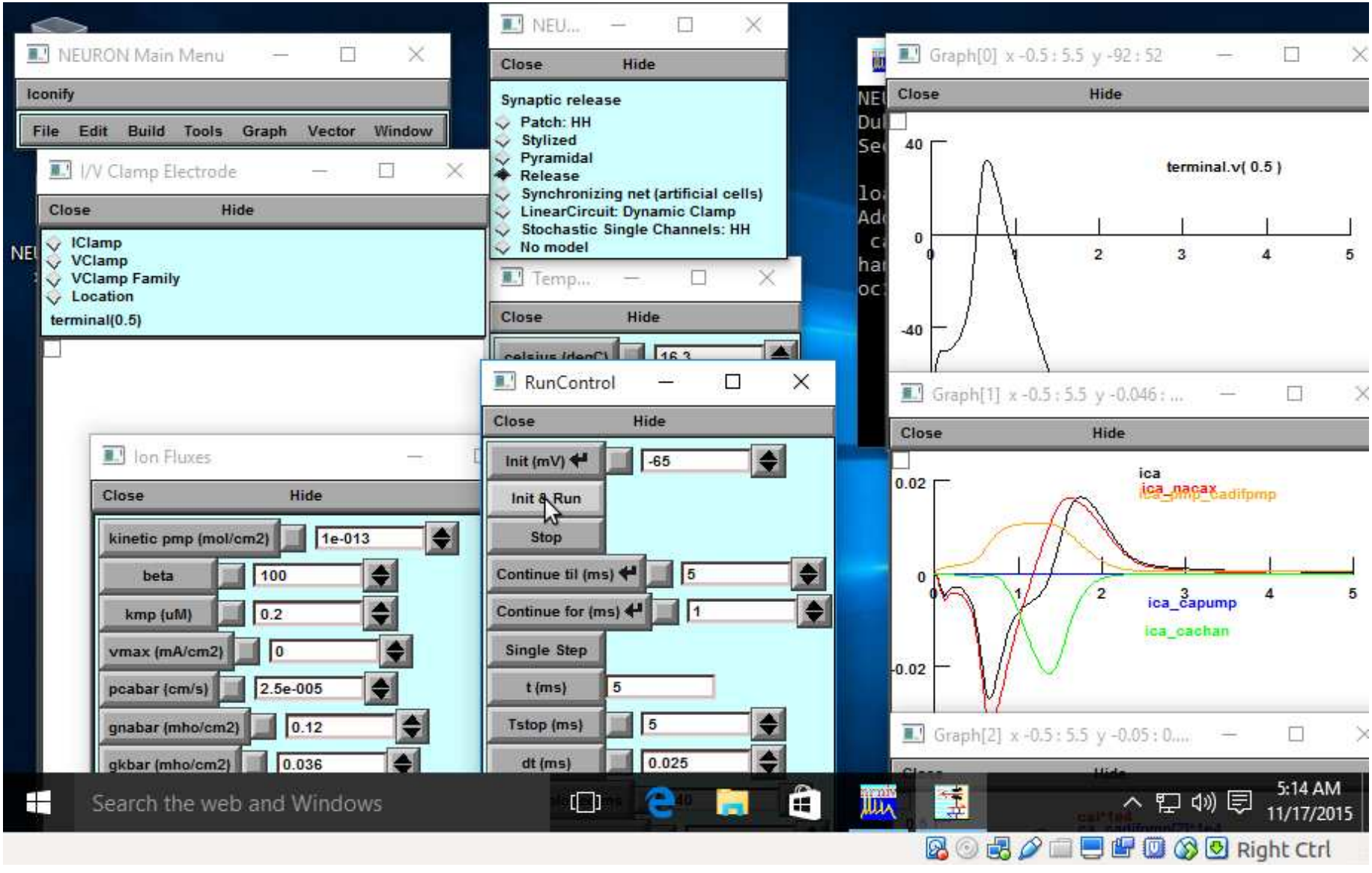
Test by double clicking ’NEURON Demo’



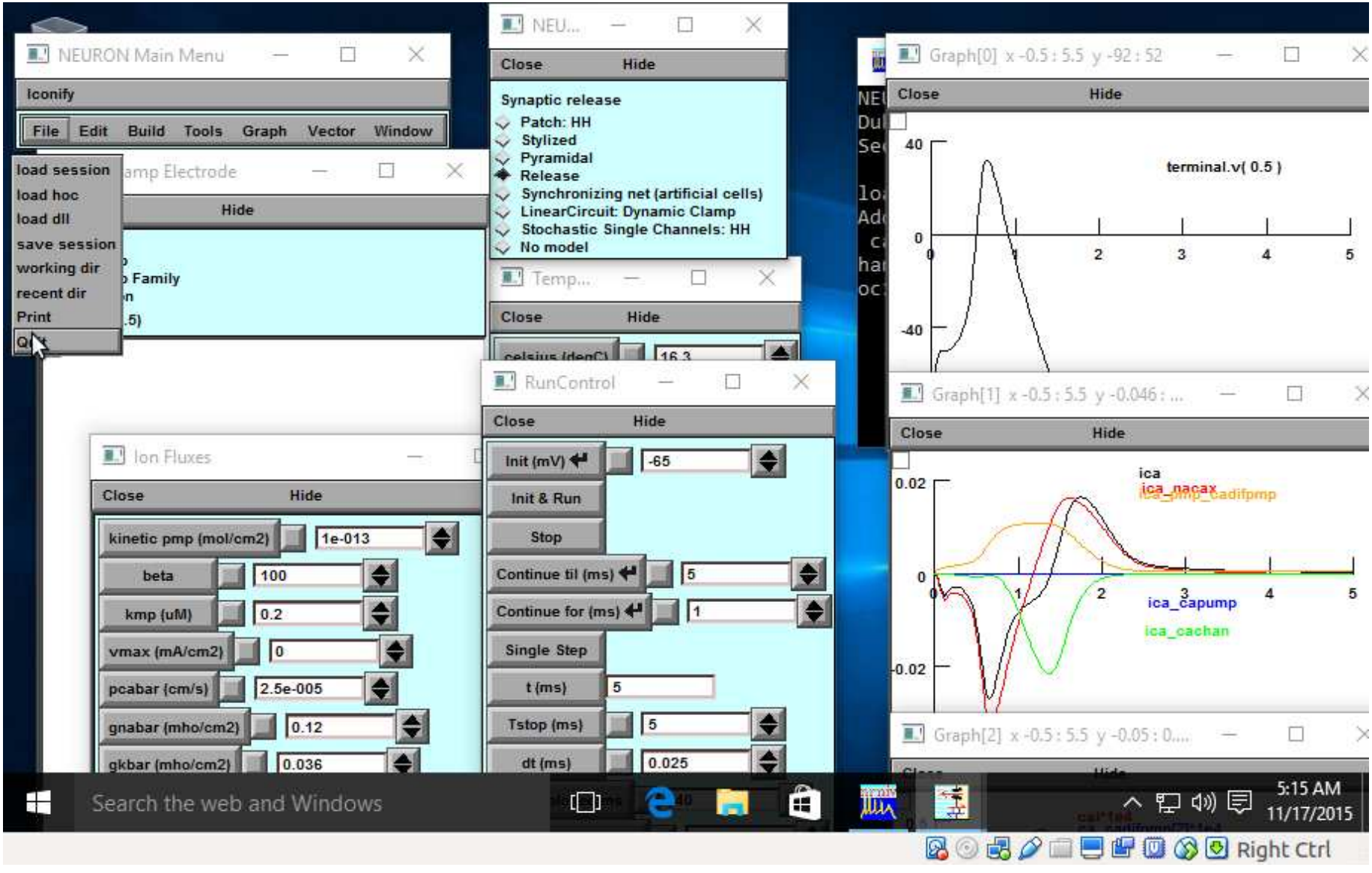
Selecting the ’Release’ button starts a demo.



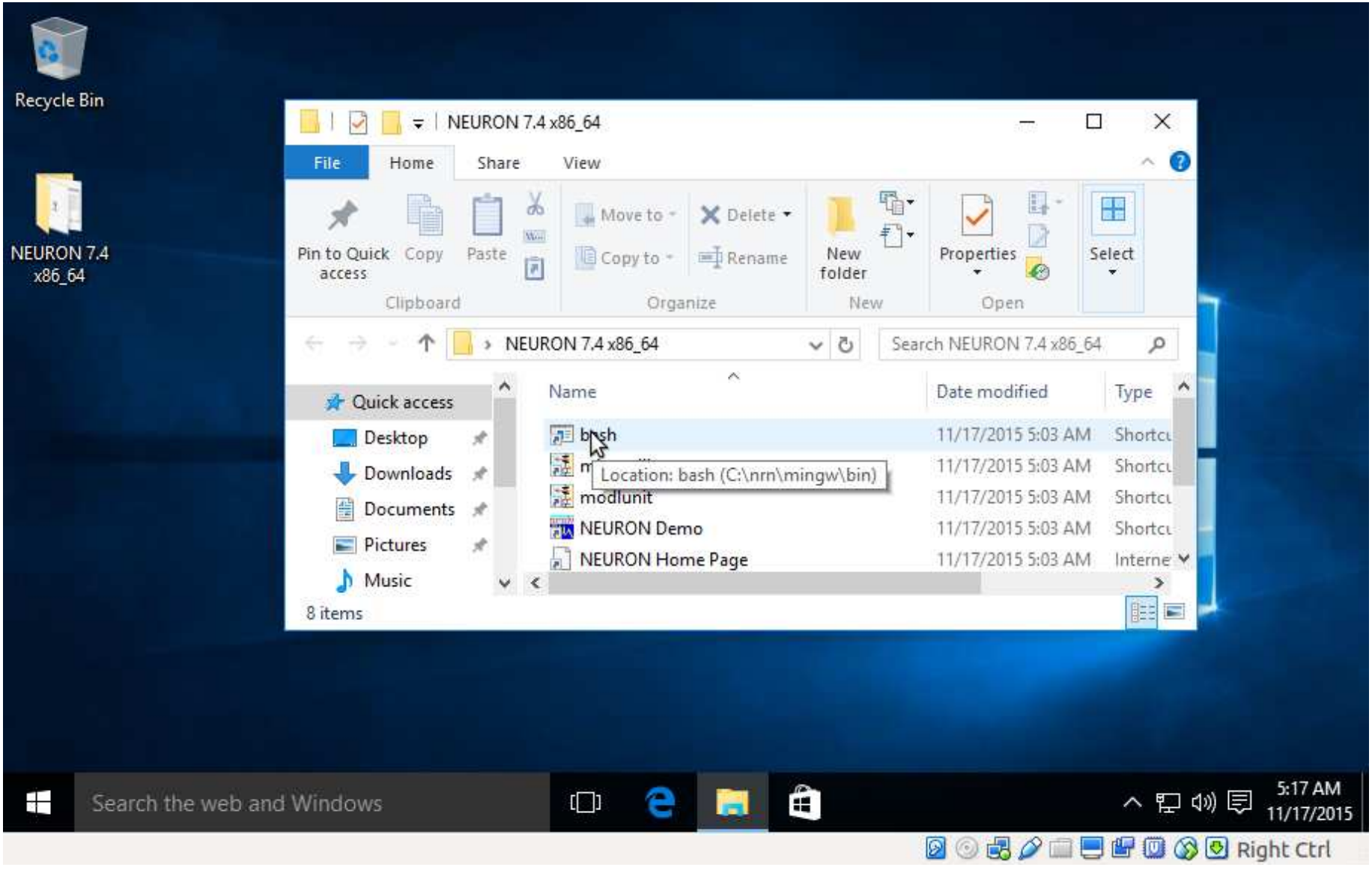
’Init&Run’ button runs the simulation



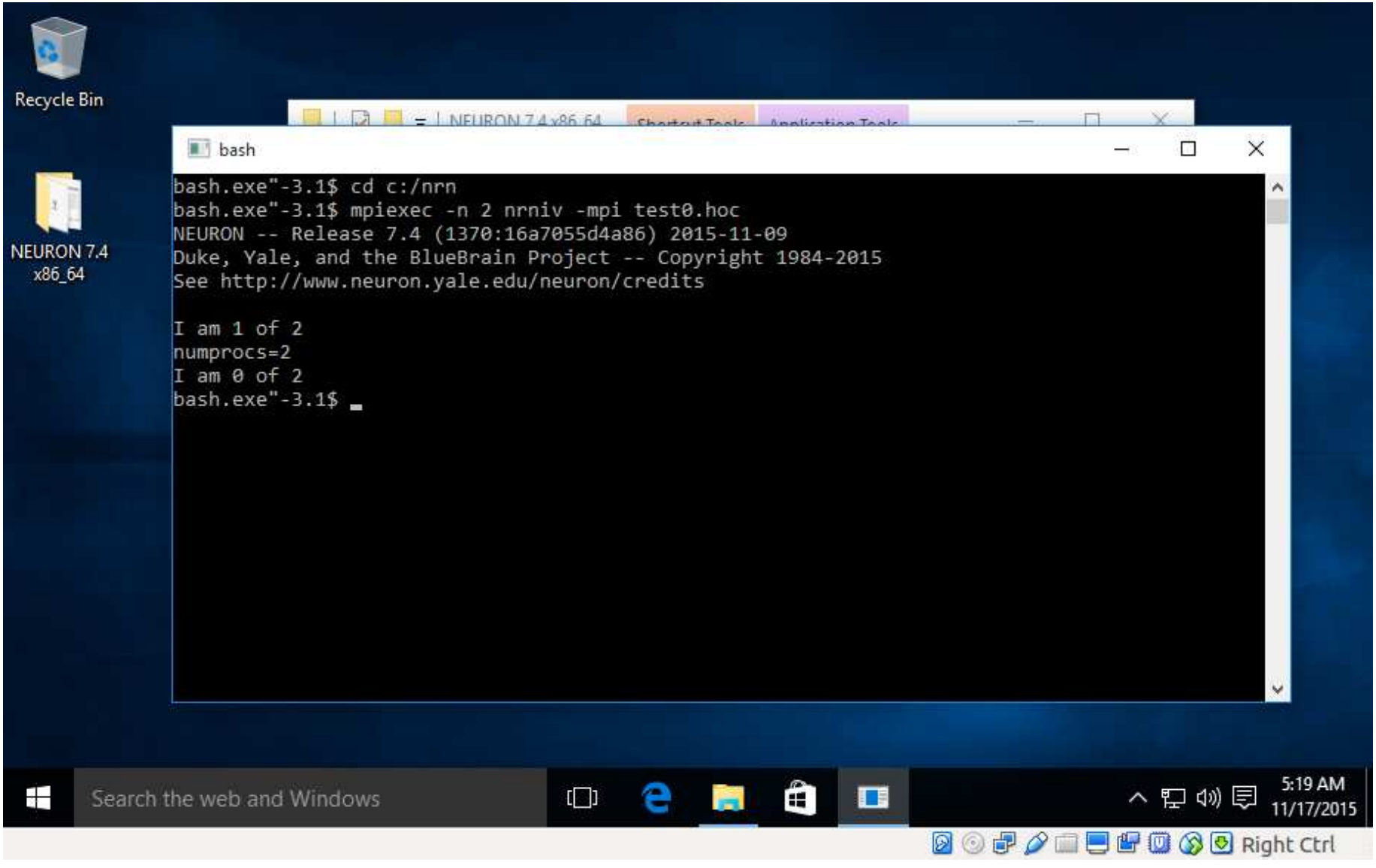
Exit by pressing 'NEURONMainMenu/File/Quit'



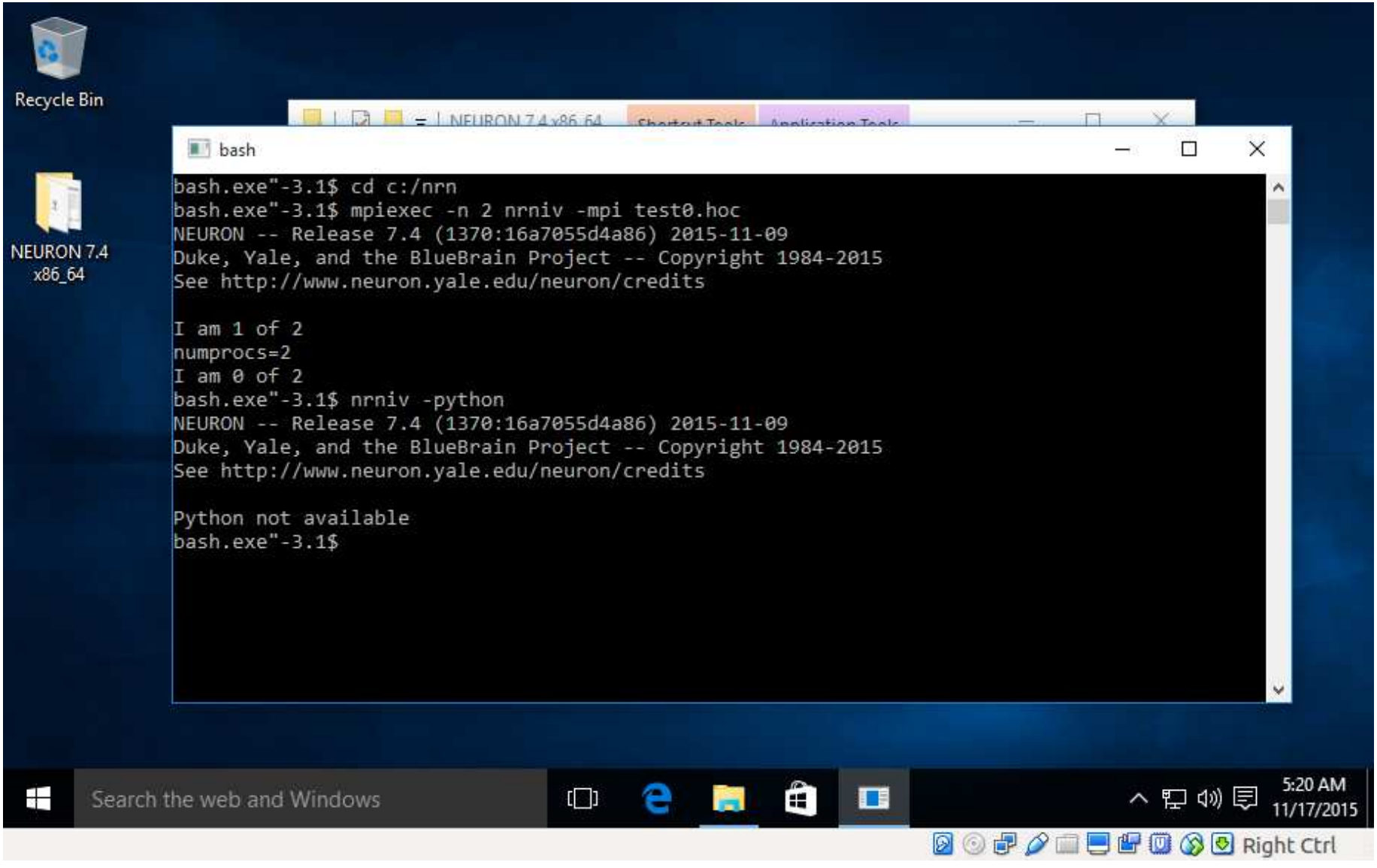
Test MPI by starting the bash terminal



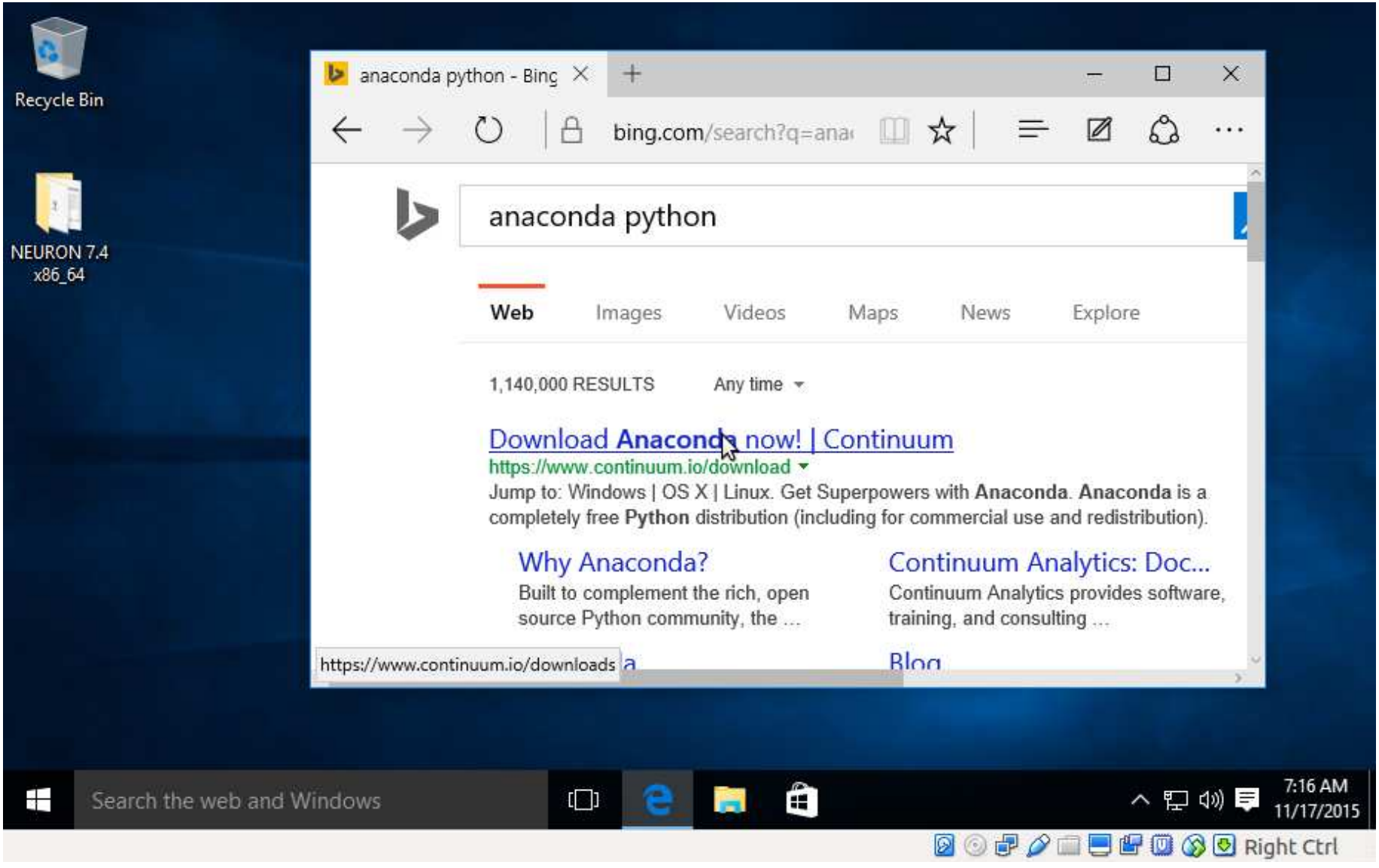
MPI works? mpiexec −n 2 nrniv −mpi test0.hoc



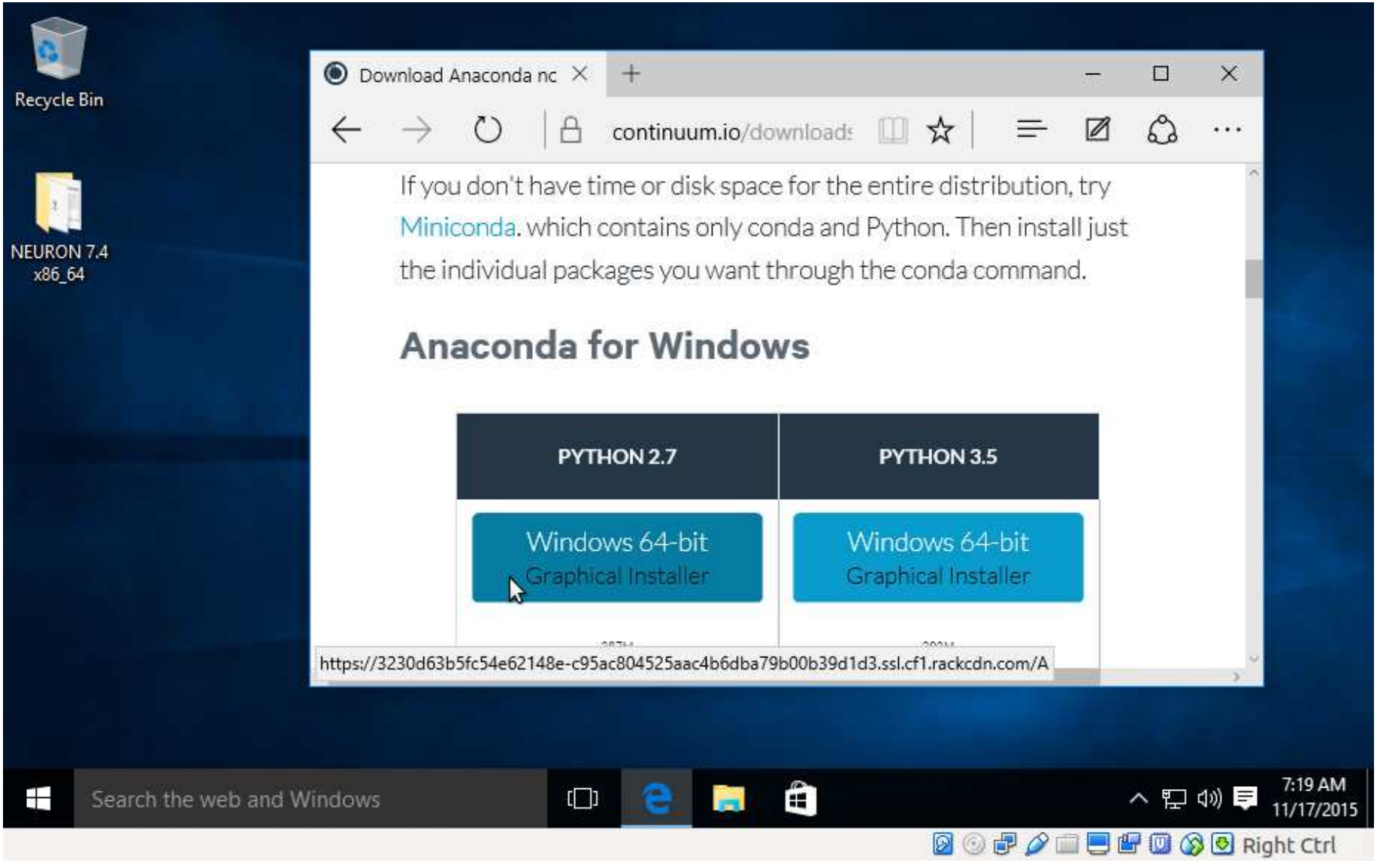
... but Python not yet installed.



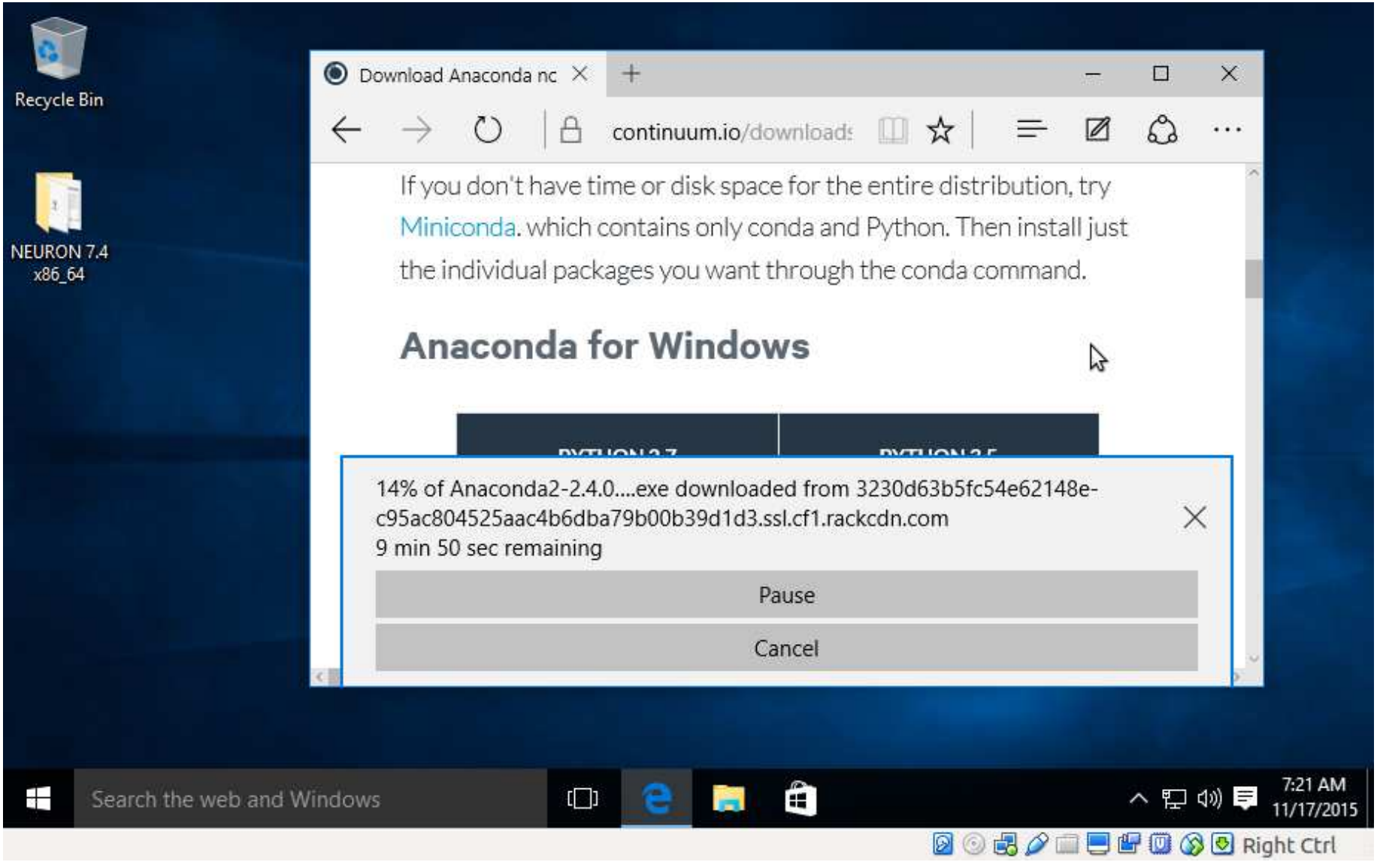
Anaconda is one of several excellent distributions.



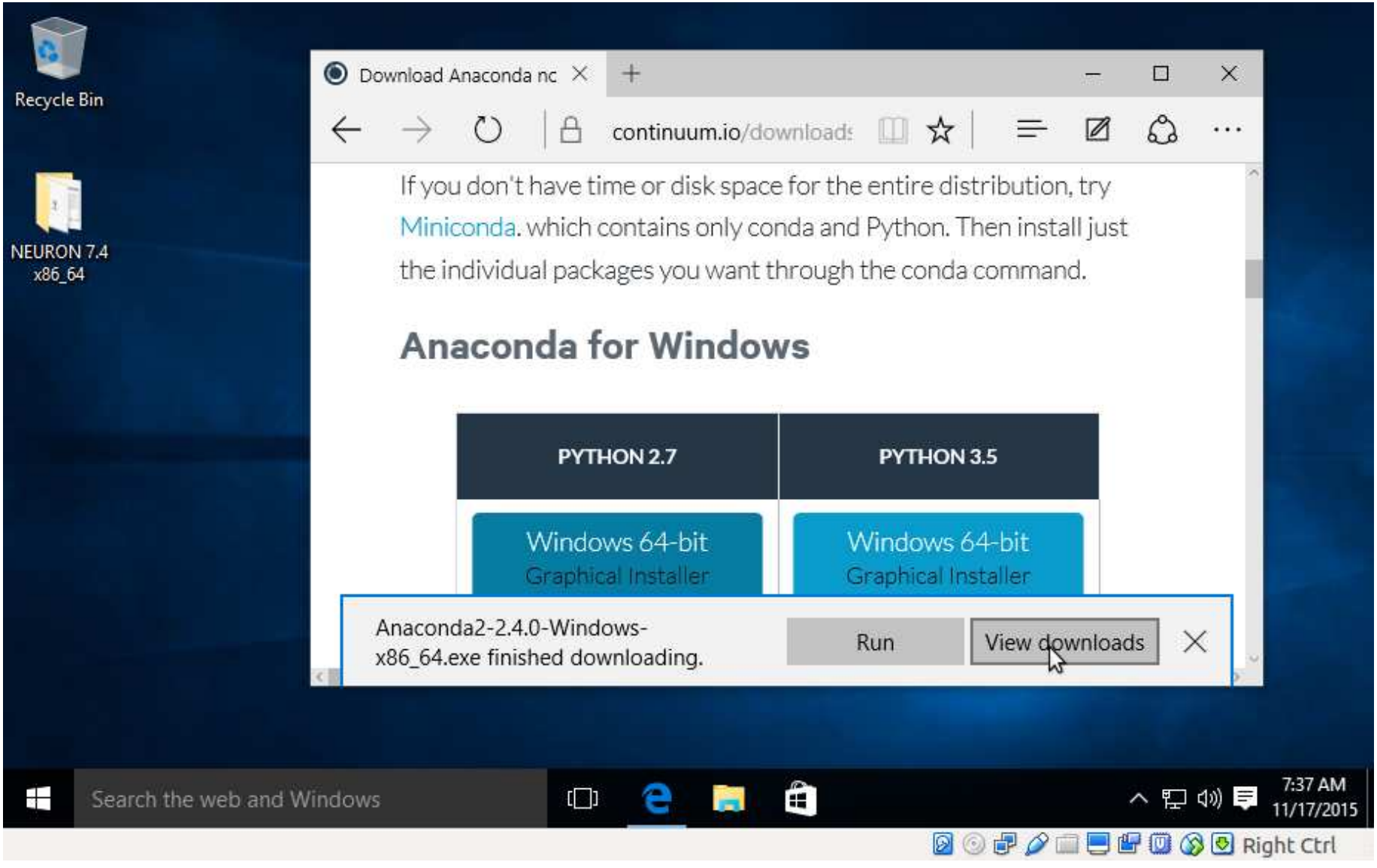
NEURON assumes Python 2.7



It is a large distribution

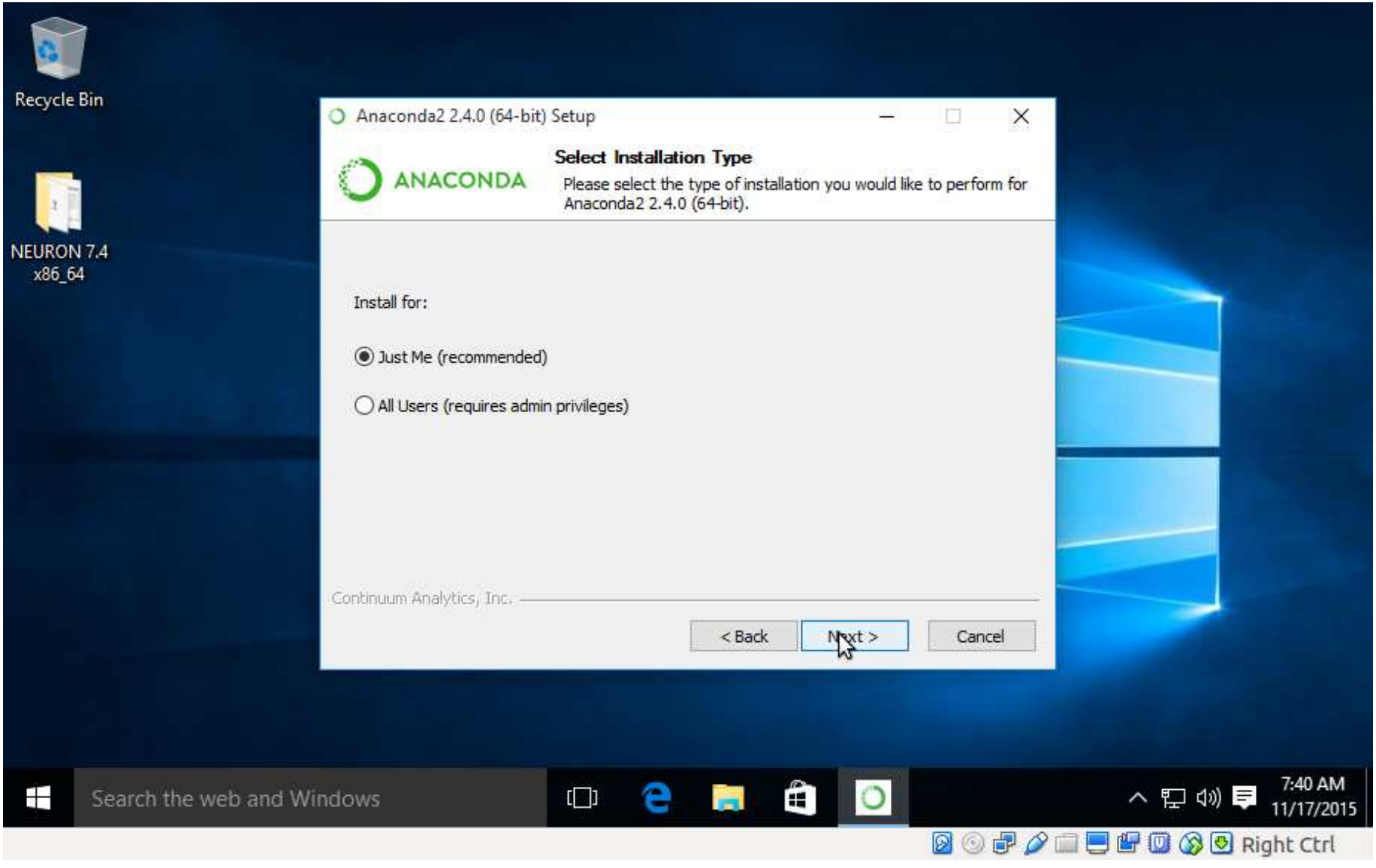


Run.. No need to View

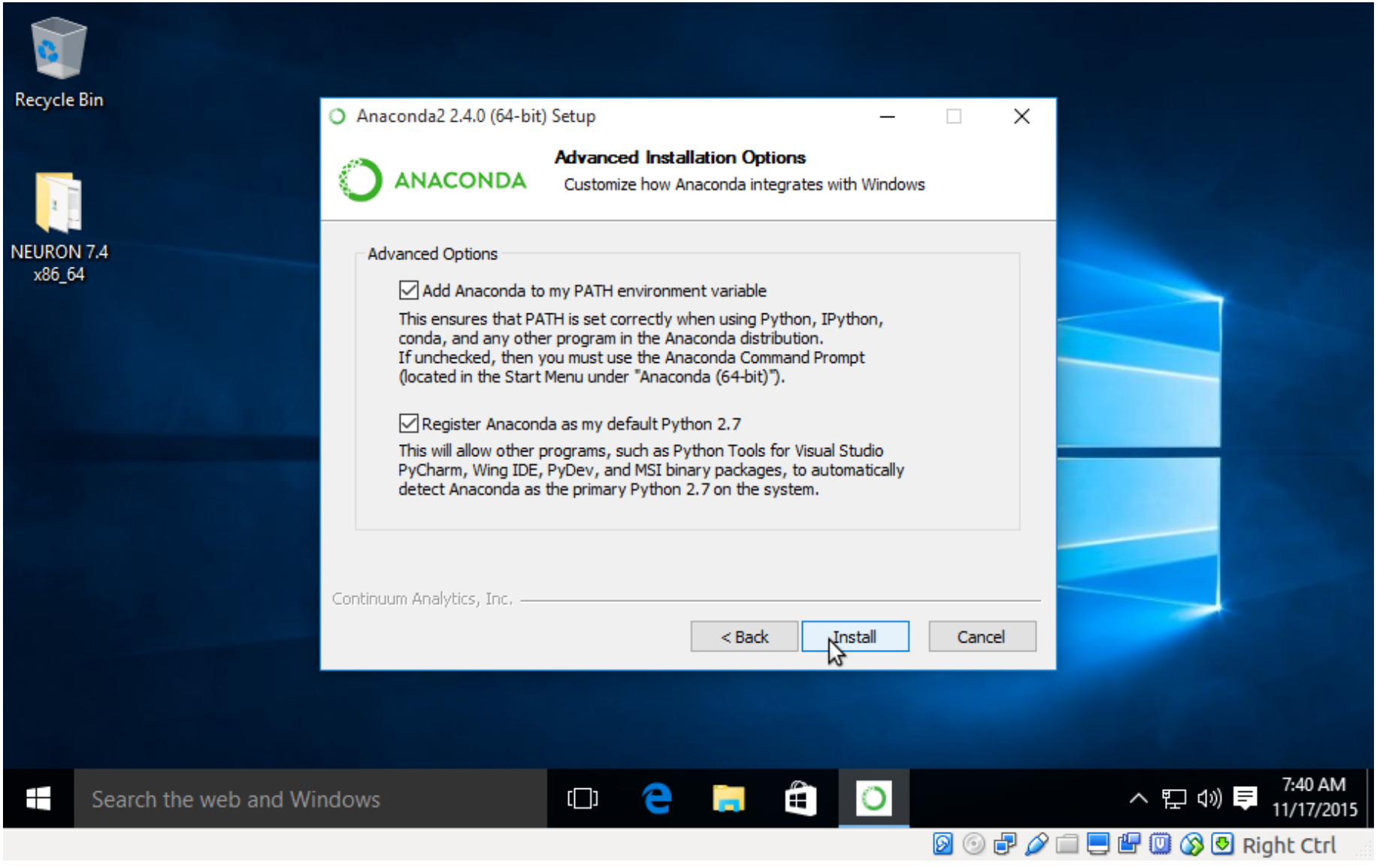


Looks good. Select ’Next’

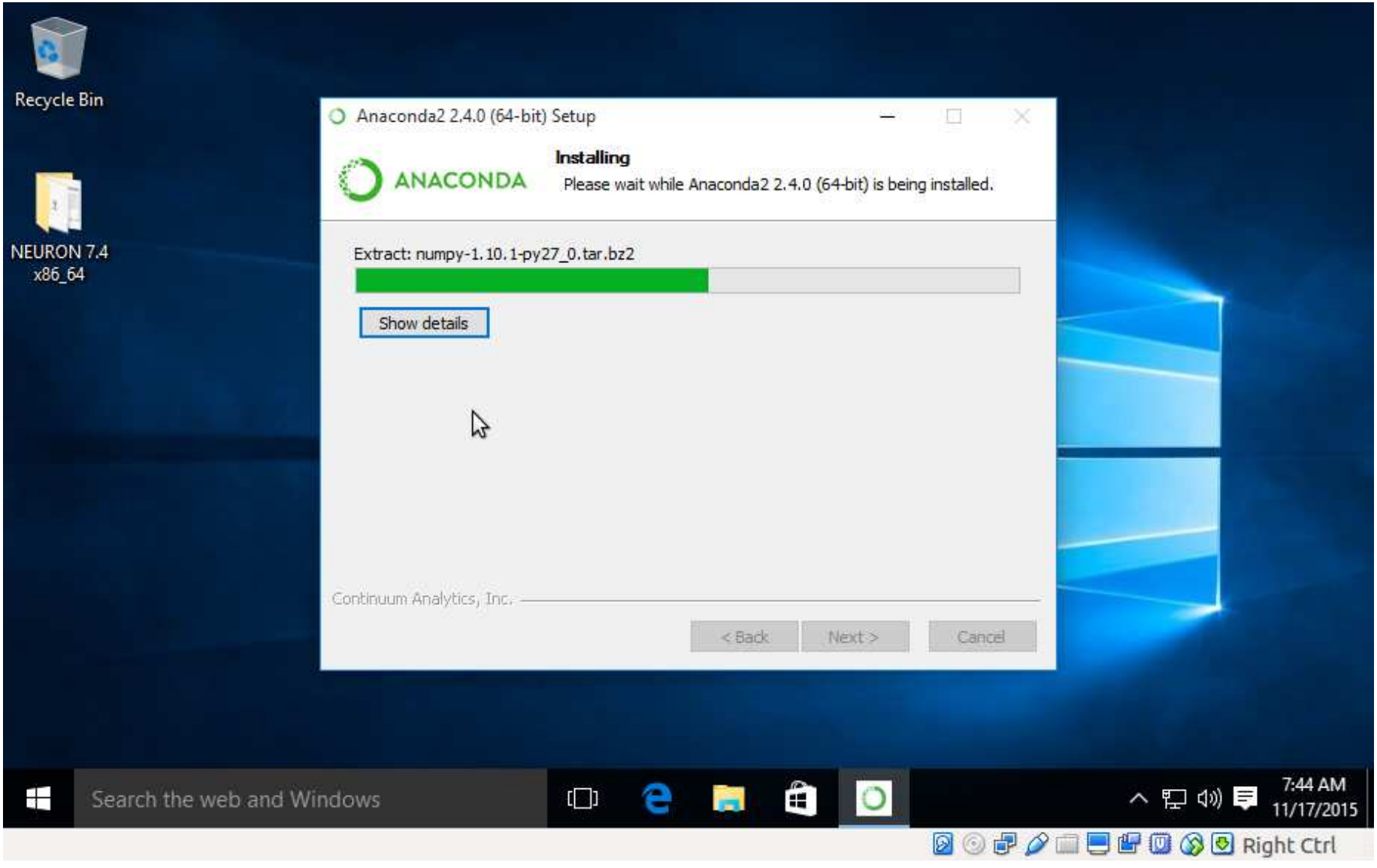
’Just me’ is fine



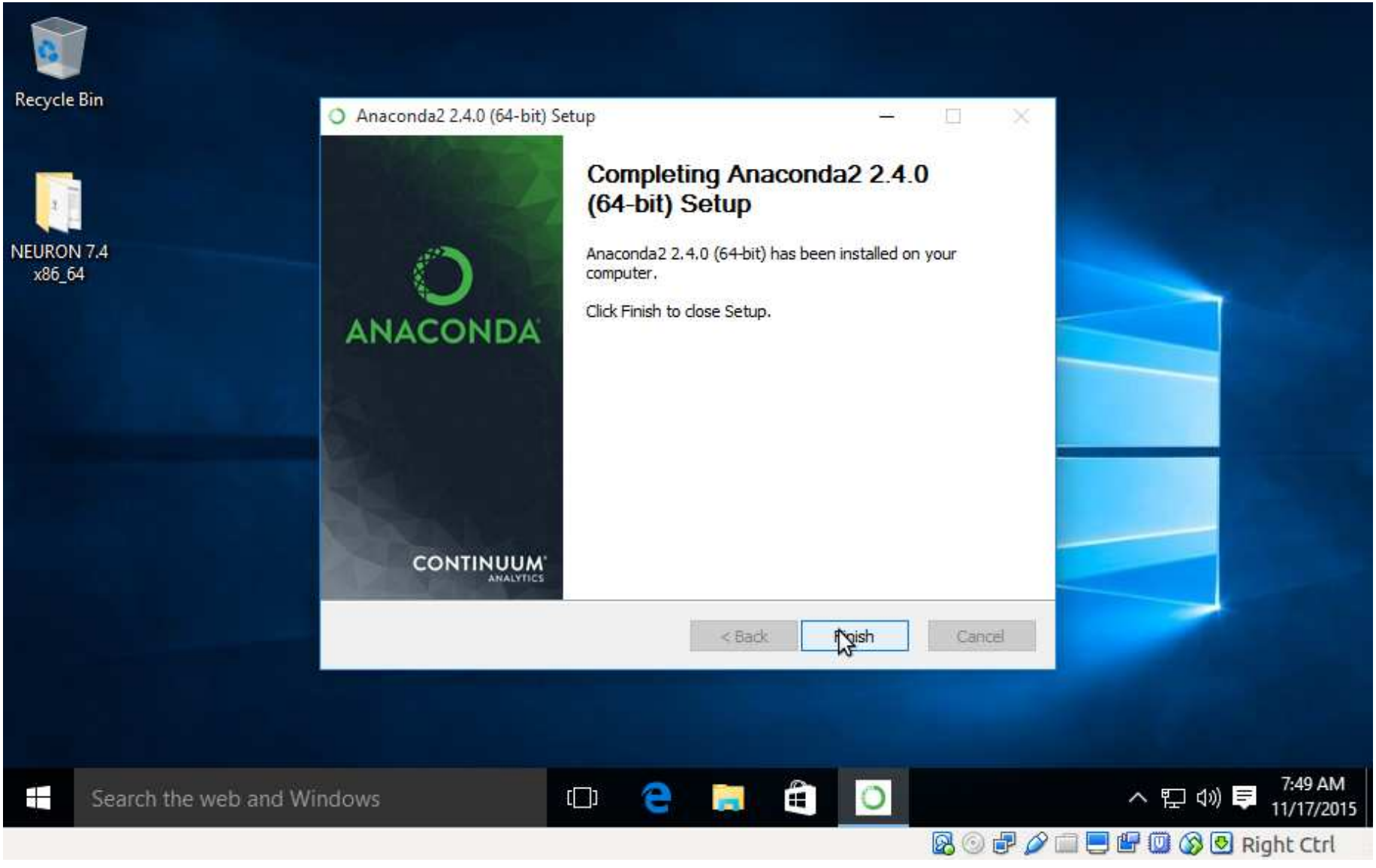
I accepted the defaults.



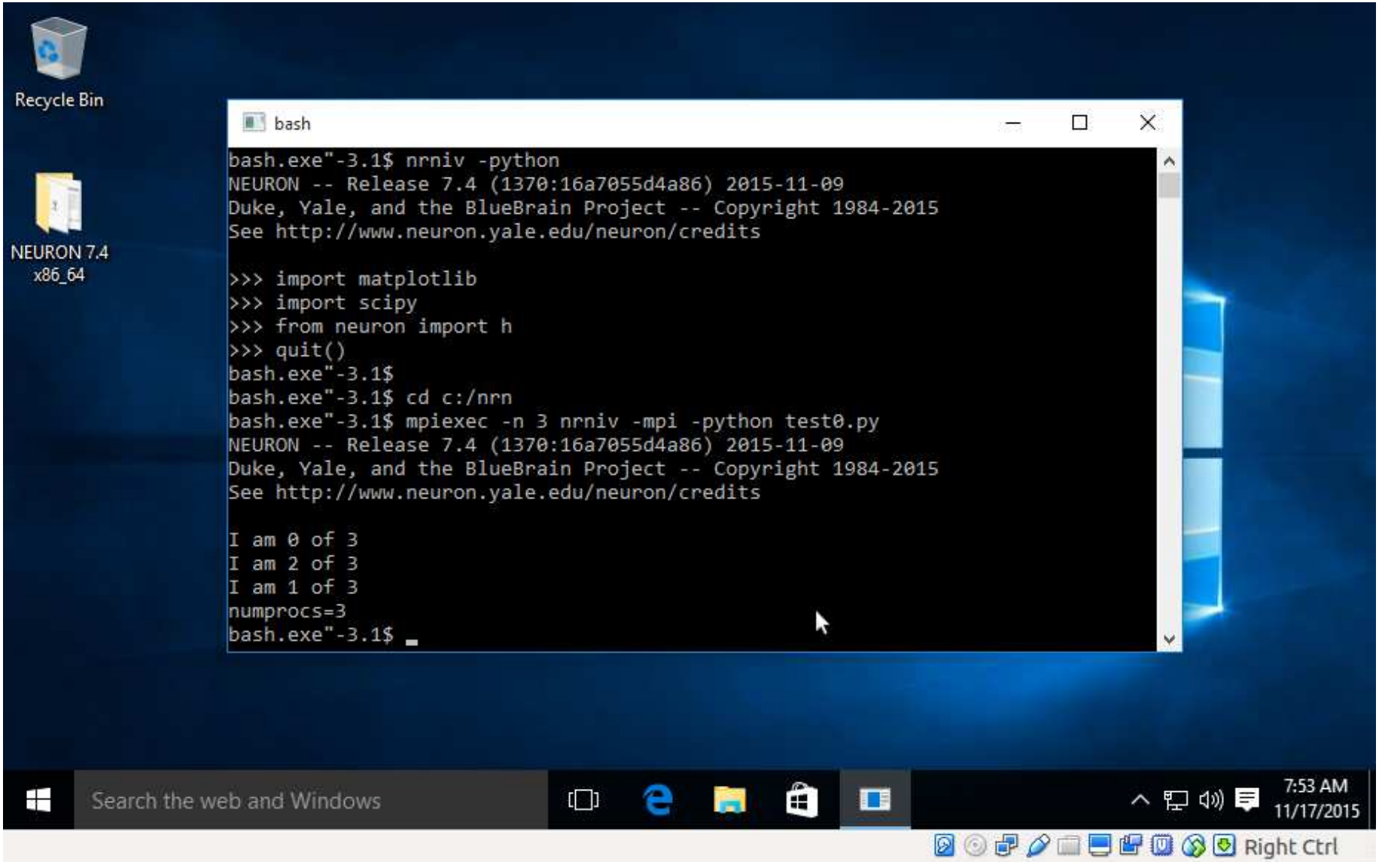
Takes a fair amount of time to install...



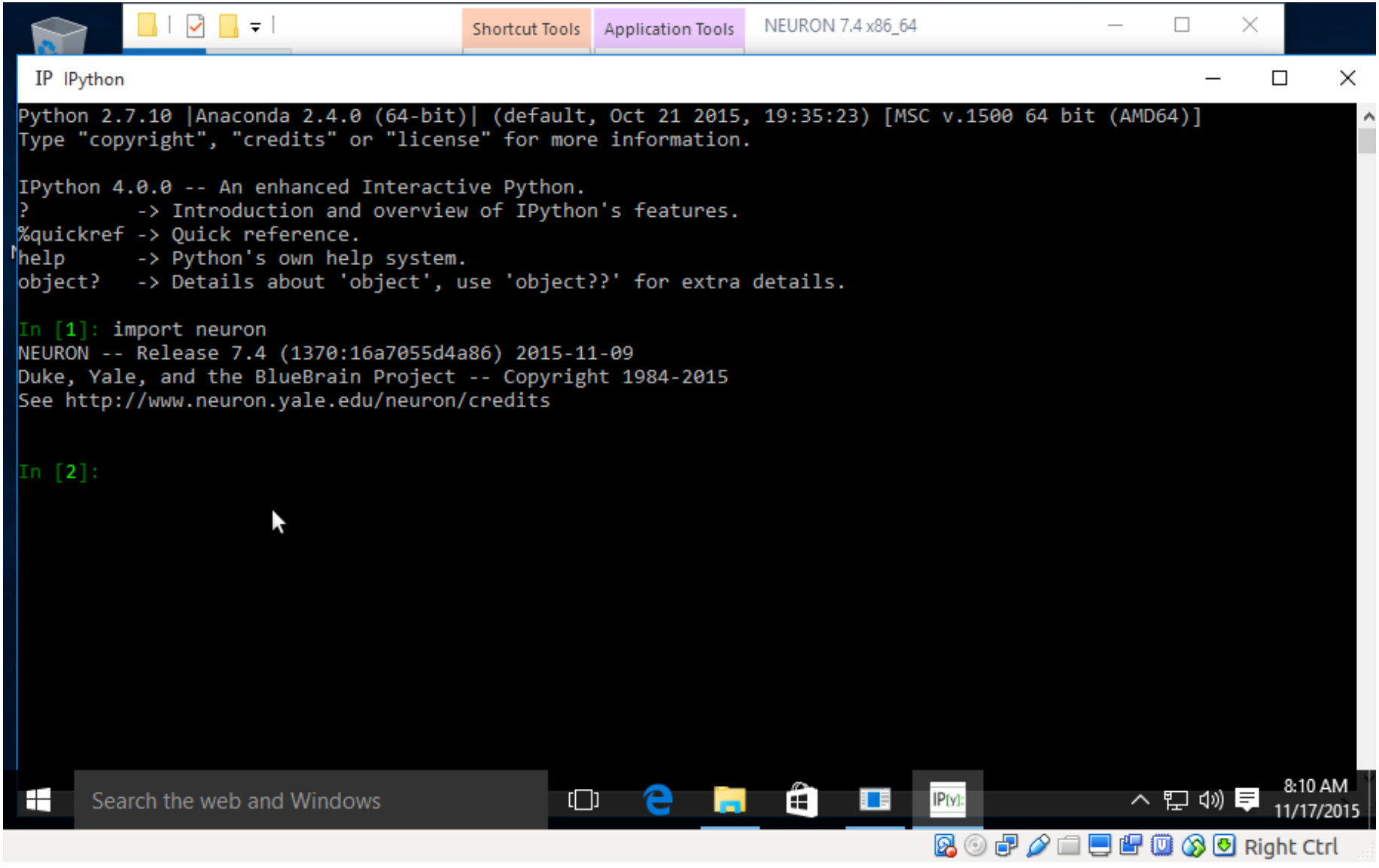
Anaconda installed



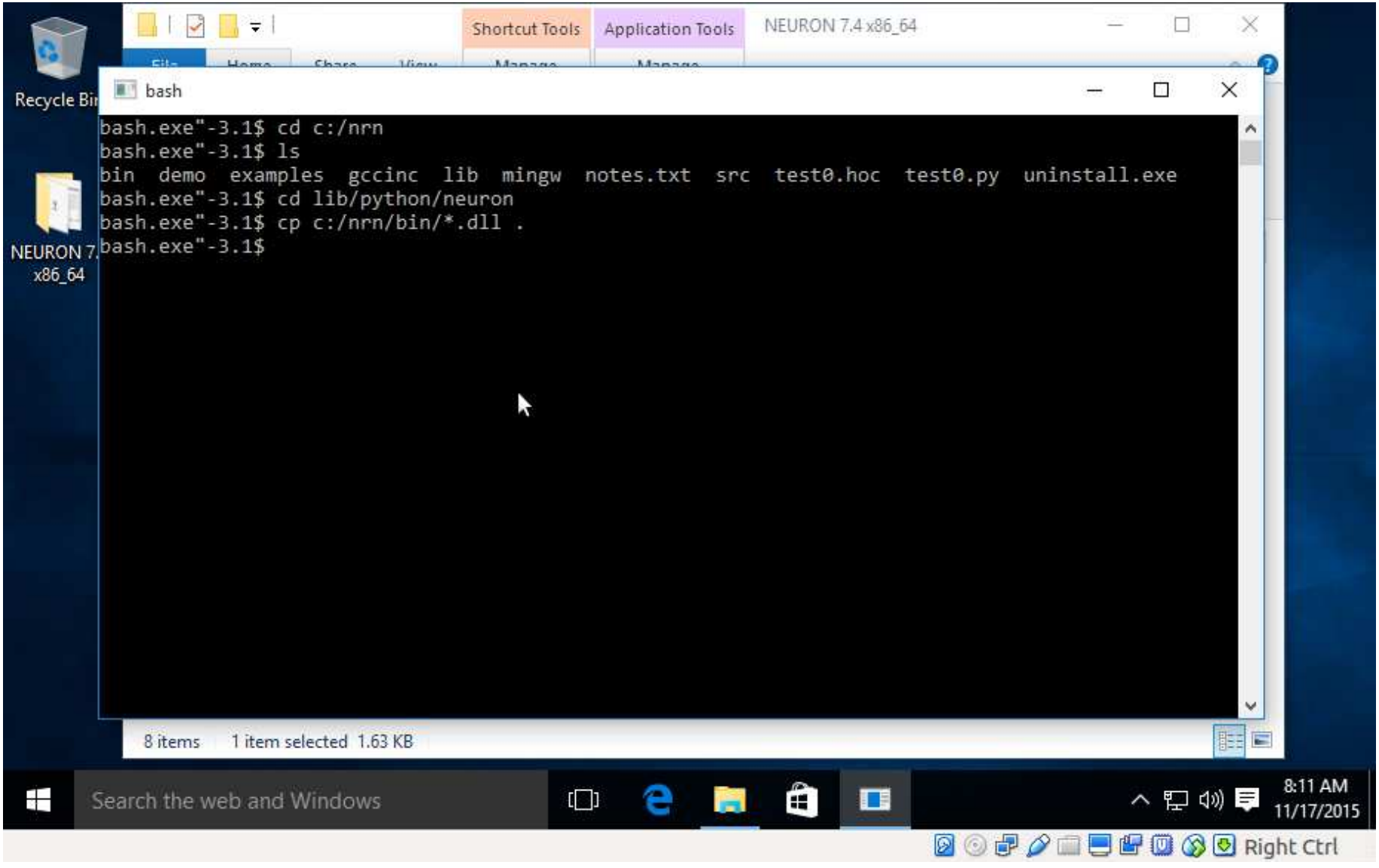
NEURON works with Python and MPI



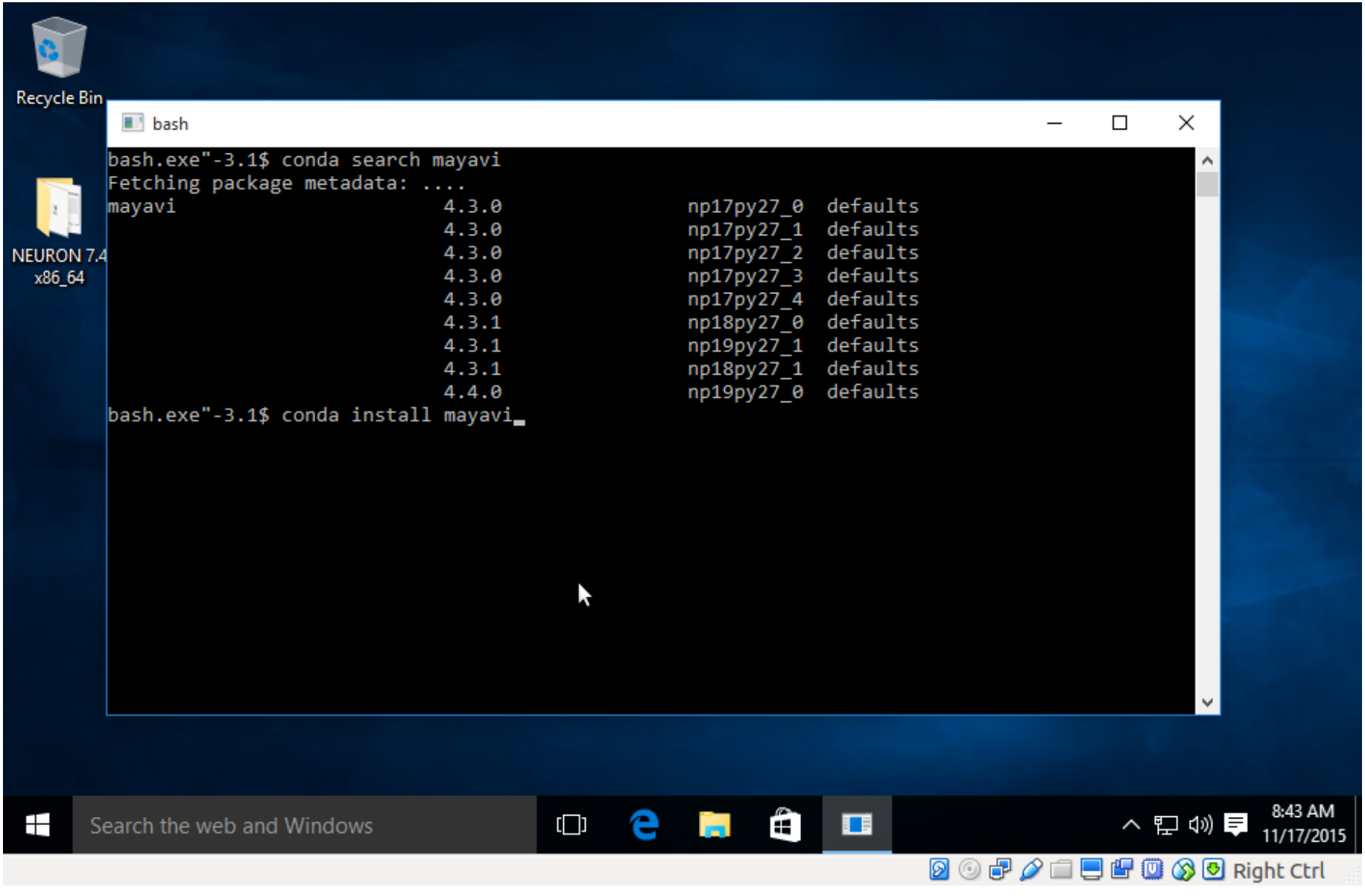
IPython can import neuron ...but..



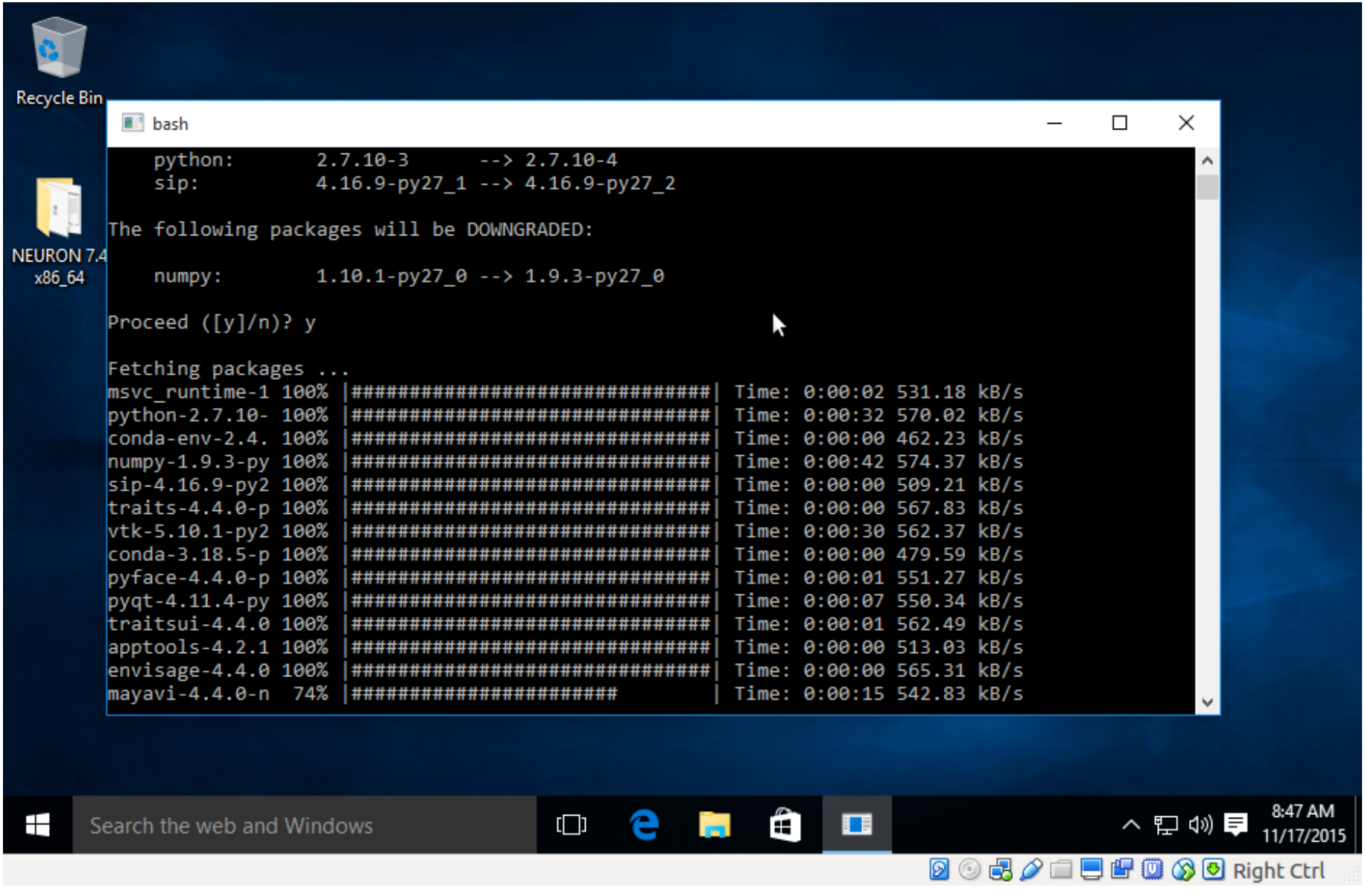
you might first need to copy all the dlls.



Conda can install many other packages.



Mayavi is useful for 3−D graphics.



from mayavi ... ; barchart(density)