Hints on the installation of Python, Numpy, Scipy, Matplotlib

Windows

Note there may be more recent versions now. Also note the SLAM code snippets do not use Python 3.0. Thanks to Malte Schulze, who wrote the original document.

1. Installation of Python 2.7.5 32bit, get installer:
   http://www.python.org/download/
   File: http://www.python.org/ftp/python/2.7.5/python-2.7.5.msi
   Installation for all users, to directory: C:\python27
   Check installation by starting IDLE.
   There is an alternate 64bit installer, but check if it is compatible with Numpy and Scipy.
2. Download Numpy and Scipy from
   http://numpy.scipy.org/
   Download of official binary releases from Sourceforge
   Numpy: http://sourceforge.net/projects/numpy/files/NumPy/
   E.g. use **numpy-1.7.1-win32-superpack-python2.7.exe**

   Scipy: http://sourceforge.net/projects/scipy/files/scipy/
   E.g. use **scipy-0.12.0-win32-superpack-python2.7.exe**

   Installation: First install Numpy, then Scipy. The installers should detect your installed Python automatically, else there is something wrong with your Python installation.

3. Download Matplotlib from
   http://matplotlib.org/
   Matplotlib 1.1.1:
   http://sourceforge.net/projects/matplotlib/files/matplotlib/matplotlib-1.3.0/
   E.g. use: **matplotlib-1.3.0.win32-py2.7.exe**
   Installation: Again, the installer should detect your Python.
4. Check installation.
   You may want to quickly check your installation using the following lines, which will show a histogram of normal distributed random numbers:

```
from numpy.random import *
from matplotlib.pyplot import *
x = randn(10000)
y = hist(x, 100)
show(y)
```

5. For the interactive demos of Unit H, you will also need PIL, the Python Imaging Library. For windows, you can get this from here: http://pythonware.com/products/pil/ . After installation, `import Image` and `import ImageTK` should work.

Apple Macintosh

On the Mac, we used EPD free (also available for windows and linux), which installs all of the above: http://www.enthought.com/products/epd_free.php .