# Instructions for Python setup

For the course we will be using **Python 2.7** version via the data science platform **Anaconda**. However, we will not install the full version on Anaconda, since it contains over 720+ packages that can eat up a lot of space. Instead, we will install Miniconda, which is the minimal installer for obtaining the conda platform, Python and a few other essential packages. As need arises we will install additional packages through the command line utility `conda install`

Please follow the instructions below to install Python and conda. Note, these are based on a Windows installer and so phrases and options may differ. If you are stuck, please message on Piazza to resolve this.

1. If you already have an existing python installation, do not worry. Conda installation will create its own Python installation and refer to it.
2. Download the installer from Miniconda Download page. Select the 64-bit installer if you have 64-bit machine.
3. Launch the installer and follow the instructions.
   a. You may want to select Install for "All Users", since most likely your computer isn't shared with multiple users.
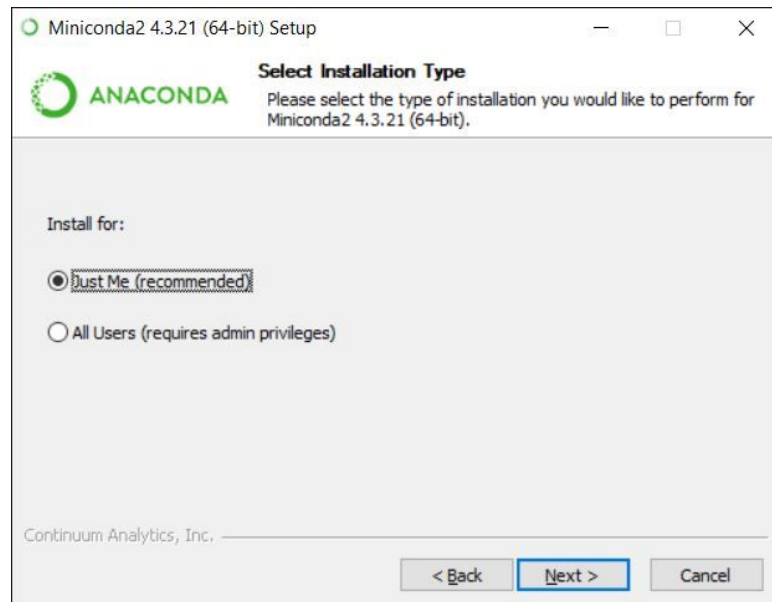
   b. Select an appropriate installation directory
   c. If you do not have an existing Python installation, check the "Register Anaconda as my default Python 2.7" box. If you have an existing installation of Python 2.7, but you do not care for the older installation (dependencies for other projects you may have used it for), then I would recommend checking this box.

Do not check the "Add Anaconda to my PATH environment variable" box
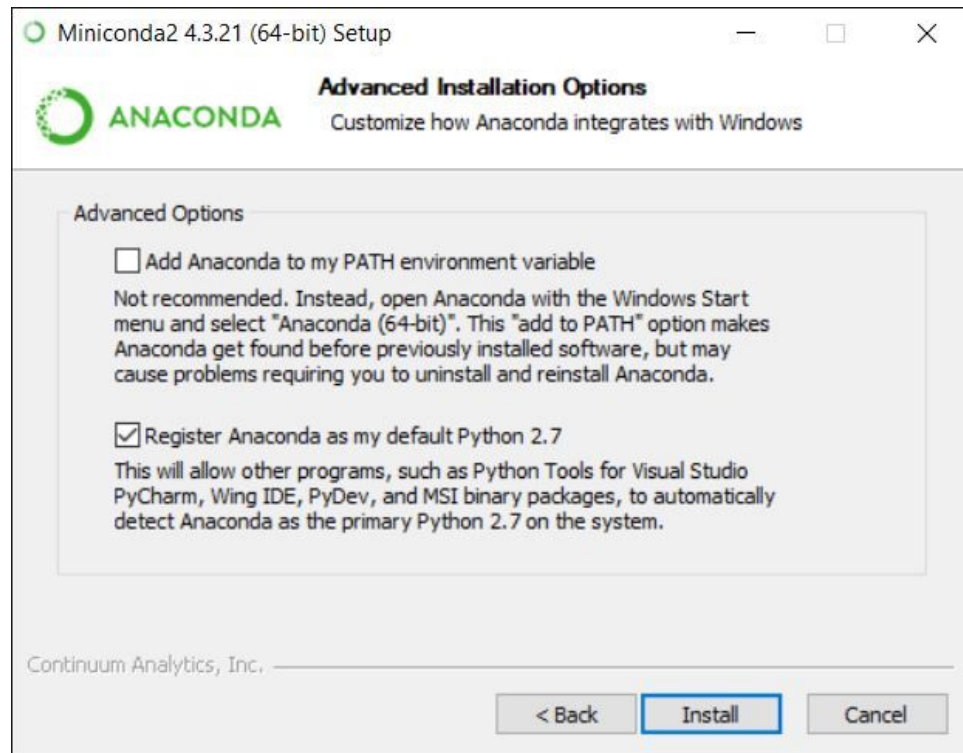
d. Select the following options and the installation should be complete in 5 minutes or so.

4. Test whether conda is installed by opening a Terminal (MacOS, Linux) or command prompt (Windows) and typing `conda --version` You should see something like `conda 4.3.21`.

    In case you chose not to add conda to your PATH or likewise, change directory in Terminal or Command Prompt to Scripts/. Then, launch activate.sh or activate.bat or activate by typing `activate` and hit Enter.

Next, we will install a couple of packages that will be useful for future classes. Make sure to have these installed before Week 2 lecture. First launch the Terminal or Command Prompt.

1. NumPy

    a. `conda install numpy` and hit Enter

    b. It will ask for confirmation. Press 'y'

2. SciPy

    a. `conda install scipy`

3. Matplotlib

    a. `conda install matplotlib`

    b. It will ask for confirmation to install a bunch of other packages. Press 'y'