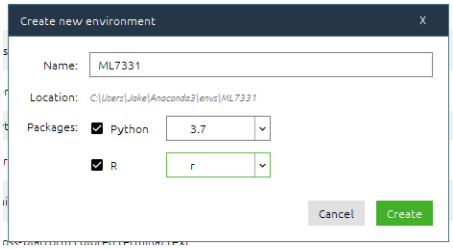
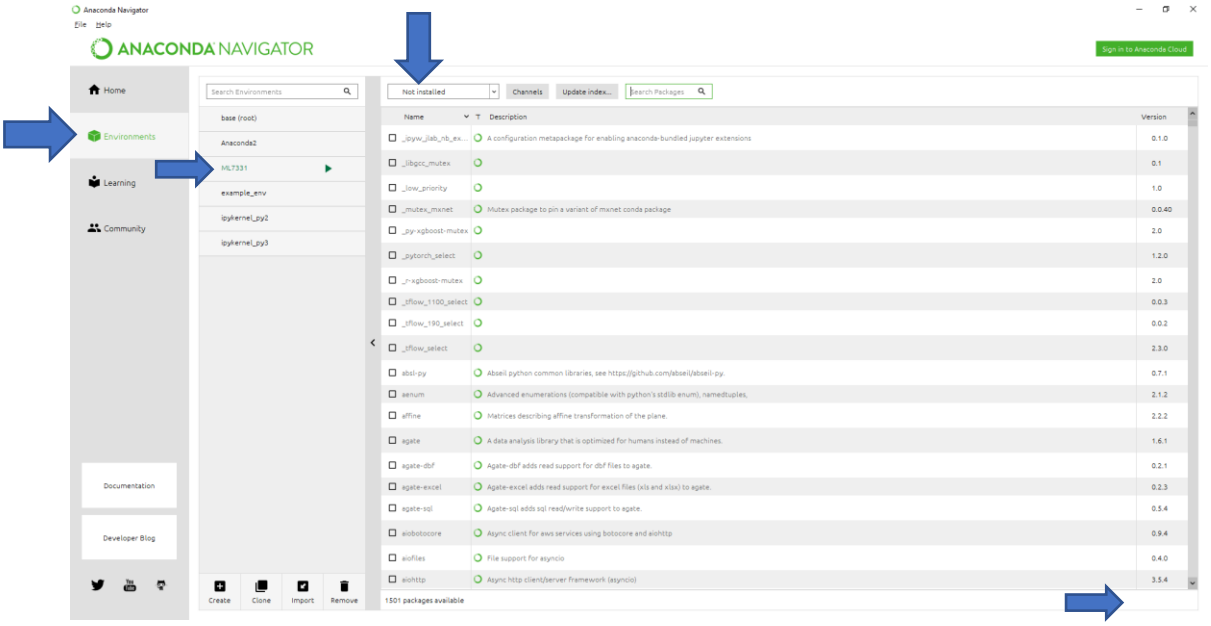
# MSDS 7331 Machine Learning I Installation Instructions

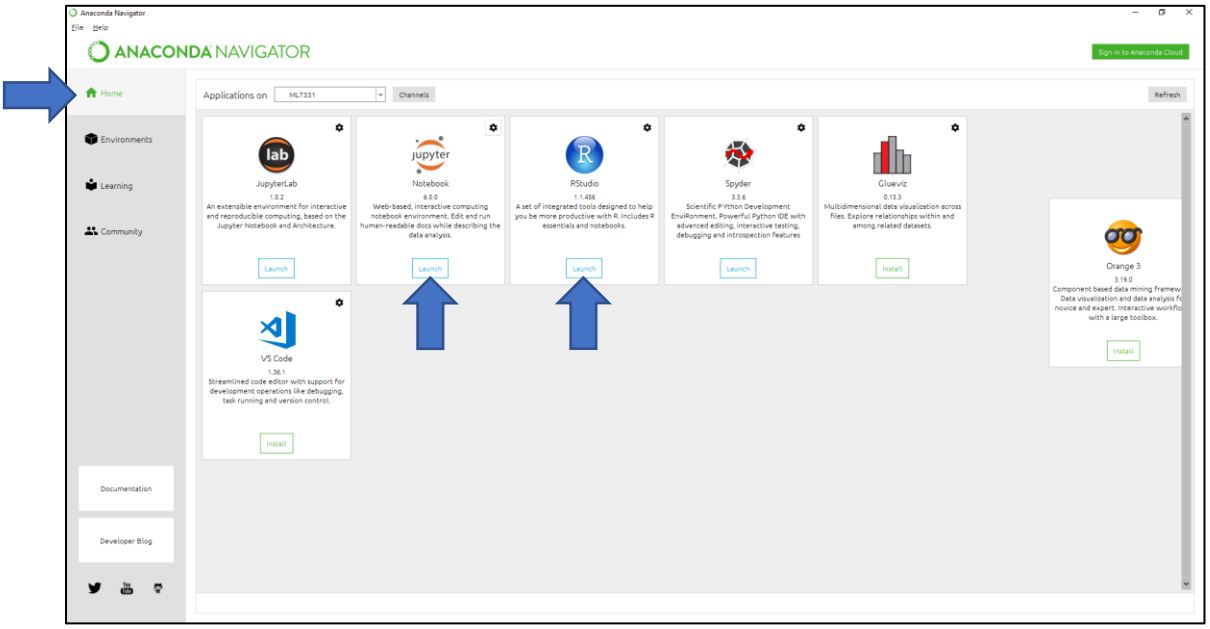
- Download the latest Python 3.x Version of Anaconda.
  - https://www.anaconda.com/distribution/#download-section
  - Make sure to click on the proper operating system and 32 or 64-bit graphical installer link.
- Open: Anaconda Navigator (Anaconda 3)
  - This will take a few minutes of setups on the first try, just wait.
- In Anaconda Navigator, create a new environment using the latest versions of Python and R.
  - Once you click create, this step will take quite a while.

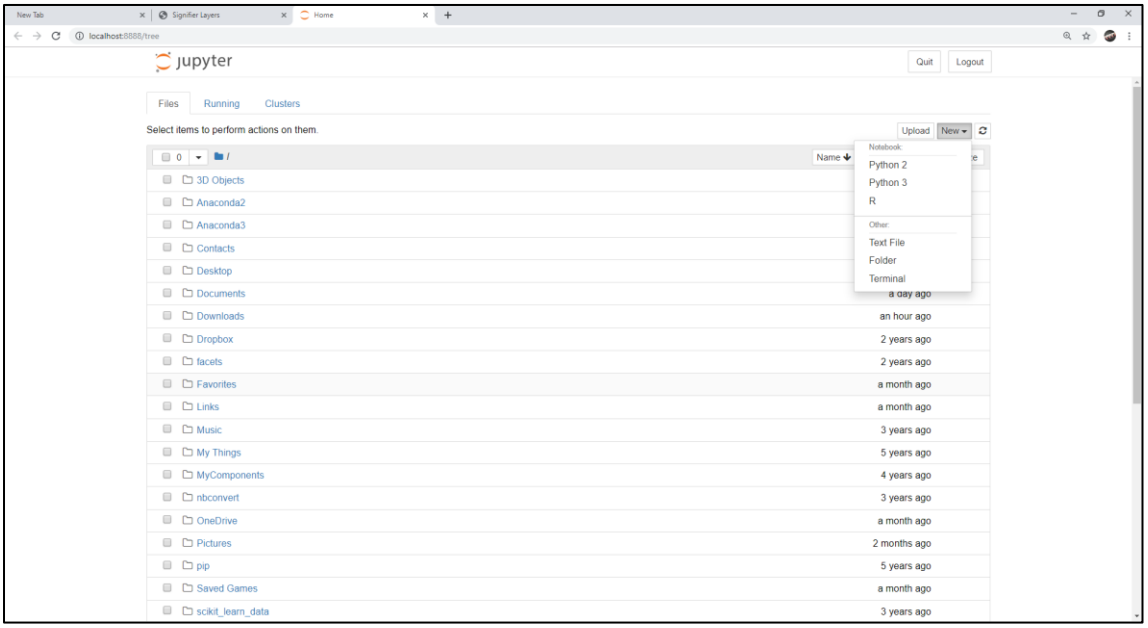



- Go to the "Environments" tab and select the new environment you just created.
- Change the packages dropdown box to "Not Installed". Search and select:
  - anaconda
  - rpy2
  - tzlocal
  - plotly
  - pillow
- Click the "Apply" button that appears in the bottom right corner once the packages are selected.



- Go to the “Home” tab
    - Install Jupyter Notebook, if needed
    - Install RStudio, if needed
- Launch Jupyter Notebook and select “New” R notebook. Run the following code:
    - install.packages('arules')
    - install.packages('arulesViz')
    - install.packages('mlbench')
- You may also run the install.packages code from RStudio to install the required packages. However, you must install and launch RStudio from the Anaconda Navigator.




- Press Ctrl+Enter or the play button to execute each highlighted cell.

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The install below is only required to run if you want to run the Graphlab example notebooks.

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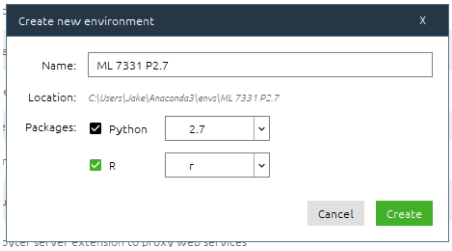
## GraphLab Installation Instructions

As of 08/10/2019, Graphlab Create is still not supported on Python 3. This means that if you want to run any of the Graphlab notebook examples, you will need to set up a Python 2.7 environment within Anaconda 3.

- In Anaconda Navigator, create a new environment using Python 2.7 and R.
  - Once you click create, this step will take quite a while.




- Go to the "Environments" tab and select the new environment you just created.
- Change the packages dropdown box to "Not Installed". Search and select:
  - anaconda
  - rpy2
  - tzlocal
  - plotly
  - pillow
- Open a terminal window in the new environment and type the following command:
  - `pip install tornado==4.5.3`
  - This will downgrade tornado to a version that works with graphlab
- Go to: https://turi.com/download/academic.html
  - Register for a free Graphlab Create license
  - From the terminal use the following pip install command to install Graphlab Create:
    - pip install --upgrade --no-cache-dir https://get.graphlab.com/GraphLab-Create/2.1/**YOUR_EMAIL/YOUR_LICENSE_KEY**/GraphLab-Create-License.tar.gz

- From the ML 7331 P2.7 terminal type:
    - ipython notebook
- Create a new Python 2 notebook
- import graphlab as gl and run the gl.get_dependencies() command.

```
[3]: import graphlab as gl
     gl.get_dependencies()

     By running this function, you agree to the following licenses.

     * libstdc++: https://gcc.gnu.org/onlinedocs/libstdc++/manual/license.html
     * xz: http://git.tukaani.org/?p=xz.git;a=blob;f=COPYING

     Downloading xz.
     Extracting xz.
     Downloading gcc-libs.
     Extracting gcc-libs.
     Copying gcc-libs into the installation directory.
```