

Data^X

Data-X: Setup and prerequisites installation for Windows

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Install Anaconda with Python 3.x for Windows (in order to run TensorFlow)

www.continuum.io/downloads

Create Virtual Environment for Data-X & Install Jupyter Notebook

Windows

- Open Terminal
- Run the command:
`conda create -n data-x`

To activate Virtual environment:

`activate data-x`

To deactivate Virtual environment:

`deactivate`

Always Run Virtual Environment

For Windows, run `activate data-x`

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Install Data-X package dependencies

List of packages

- ✓ jupyter
- ✓ numpy
- ✓ pandas
- ✓ matplotlib
- ✓ scipy
- ✓ scikit-learn
- ✓ scikit-image
- ✓ sqlalchemy
- ✓ nltk
- ✓ seaborn

Anaconda comes with many packages pre-installed, but if you want to install additional packages (or update existing ones you can run):

Install package by running:

```
conda install [package name]
```

Install packages by running:

```
conda install [pkg1] [pkg2] [pkg3]
```

```
[(data-x) ~ >>> conda install numpy
```

Install Correct version of OpenCV

Run

```
conda install -c https://conda.binstar.org/menpo opencv
```

```
[(data-x) ~ >>> conda install -c https://conda.binstar.org/menpo opencv
```

Data X

Install TensorFlow, BeautifulSoup, Keras & Graphlab-Create

To install TensorFlow for Windows:

https://www.tensorflow.org/get_started/os_setup#pip_installation_on_windows

Also run:

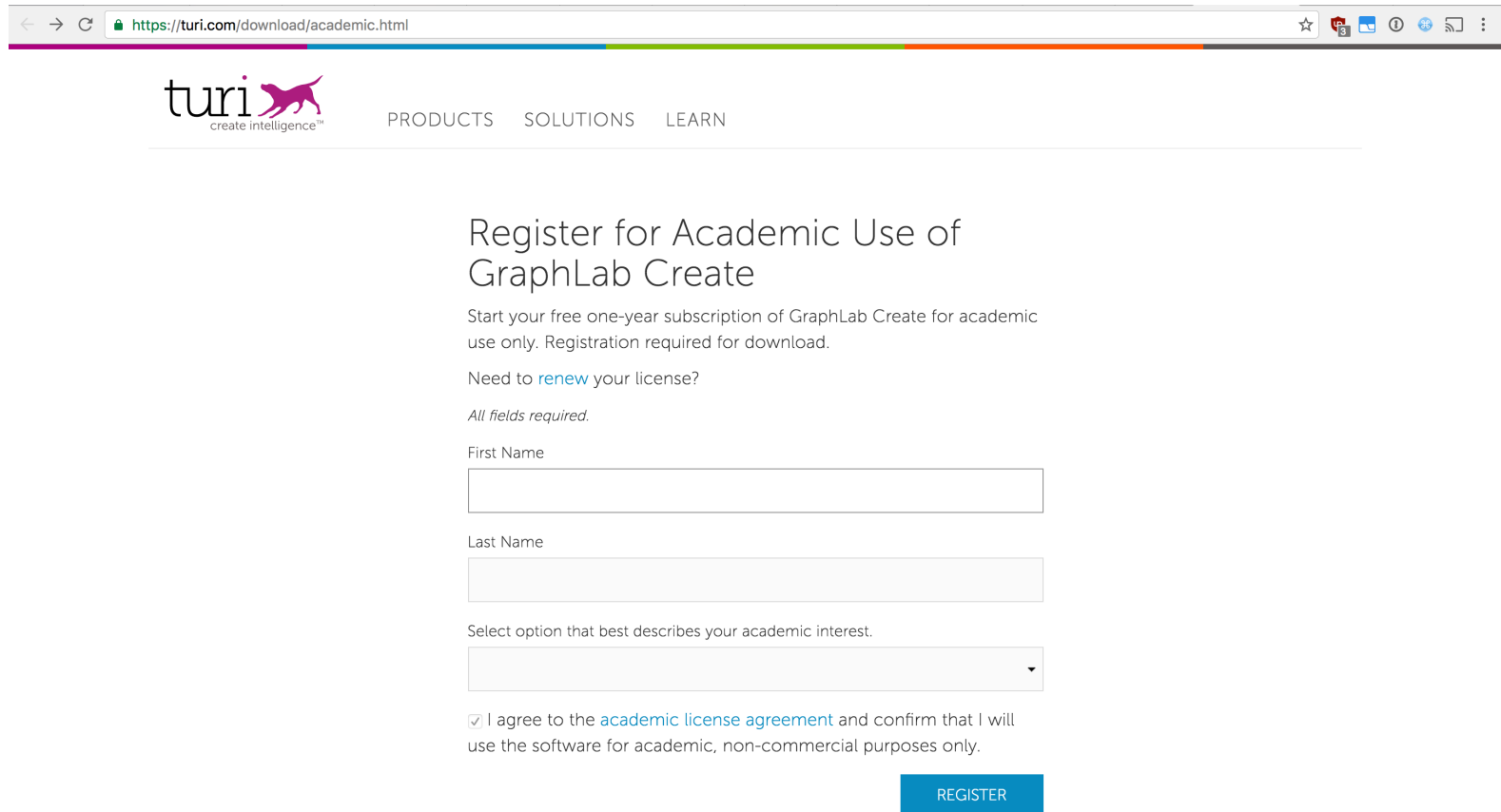
conda install -c anaconda beautifulsoup4=4.5.3

conda install h5py

conda install -c conda-forge Keras

Install Graphlab-Create

<https://turi.com/download/academic.html>



The screenshot shows a web browser window with the URL <https://turi.com/download/academic.html>. The page features the Turi logo (a pink dog) and the tagline "create intelligence™". Navigation links for "PRODUCTS", "SOLUTIONS", and "LEARN" are present. The main heading is "Register for Academic Use of GraphLab Create". Below this, a paragraph states: "Start your free one-year subscription of GraphLab Create for academic use only. Registration required for download." A link to "renew" the license is provided. A note says "All fields required." The registration form includes input fields for "First Name" and "Last Name", a dropdown menu for "Select option that best describes your academic interest.", and a checkbox for "I agree to the academic license agreement and confirm that I will use the software for academic, non-commercial purposes only." A blue "REGISTER" button is at the bottom right.

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REGISTER

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Install Graphlab-Create

When you have registered your information press "View Instructions" under Install with pip. Go to step three and in your terminal run (with your specific **[email address]** and **[license code]**):

```
pip install --upgrade --no-cache-dir
https://get.graphlab.com/GraphLab-Create/2.1/
[email address]/[license code]/GraphLab-Create-
License.tar.gz
```

run if Kernel crashes:

```
conda install -c conda-forge
backports.shutil_get_terminal_size
```

Install Python 3 as a Virtual Environment

If you want to run Python 3 and Python 2 from the same Anaconda installation, then simply create a Virtual Environment for Python 3

- **In the Terminal, run the command:**

```
conda create -n data-x_py3 python=3 ipykernel  
activate data-x_py3  
python -m ipykernel install --user
```

To activate Python 3 Virtual environment:

```
activate data-x_py3
```

To deactivate Python 3 Virtual environment:

```
deactivate
```

Note: If you have installed Anaconda with Python 3, then change all 3's in the code above to 2 in order to install a Python 2 kernel.

Please note, many functions, modules and libraries differ between the two versions of Python. However, any issue can usually be solved quite easily by googling the error message and at the top of your script running:

```
from __future__ import absolute_import, division, print_function
```

End of Section

