

IS4303 Week 2

Anaconda and Python

Agenda

- Install Anaconda
- Install Python Packages in Anaconda
- Jupyter Notebook

Anaconda

- The Most Popular Python Data Science Platform
- Install Anaconda from
 - <https://www.anaconda.com/download/>
- Select the version that matches your operation system
- Get Started with Anaconda:
 - <http://docs.anaconda.com/anaconda/user-guide/getting-started/>
 - <https://conda.io/docs/user-guide/tasks/manage-environments.html>

Anaconda

Anaconda Navigator

Help



Sign in

Home

Environments

Learning

Community

Documentation

Developer Blog



Applications on base (root)

Channels



JupyterLab

0.32.1

An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture.

Launch



Notebook

5.5.0

Web-based, interactive computing notebook environment. Edit and run human-readable docs while describing the data analysis.

Launch



Qt Console

4.3.1

PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more.

Launch



Spyder

3.2.6

Scientific PYTHON Development Environment. Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features

Launch



Glueviz

0.13.3

Multidimensional data visualization across files. Explore relationships within and among related datasets.

Install



Orange 3

3.17.0

Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox.

Install



RStudio

1.1.456

A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks.

Install



VS Code

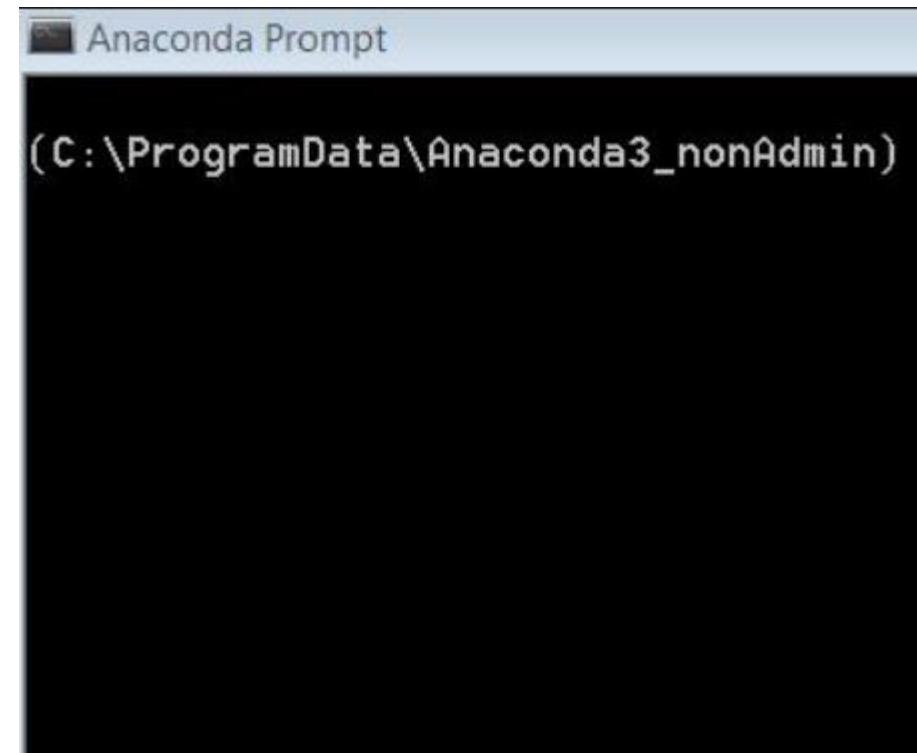
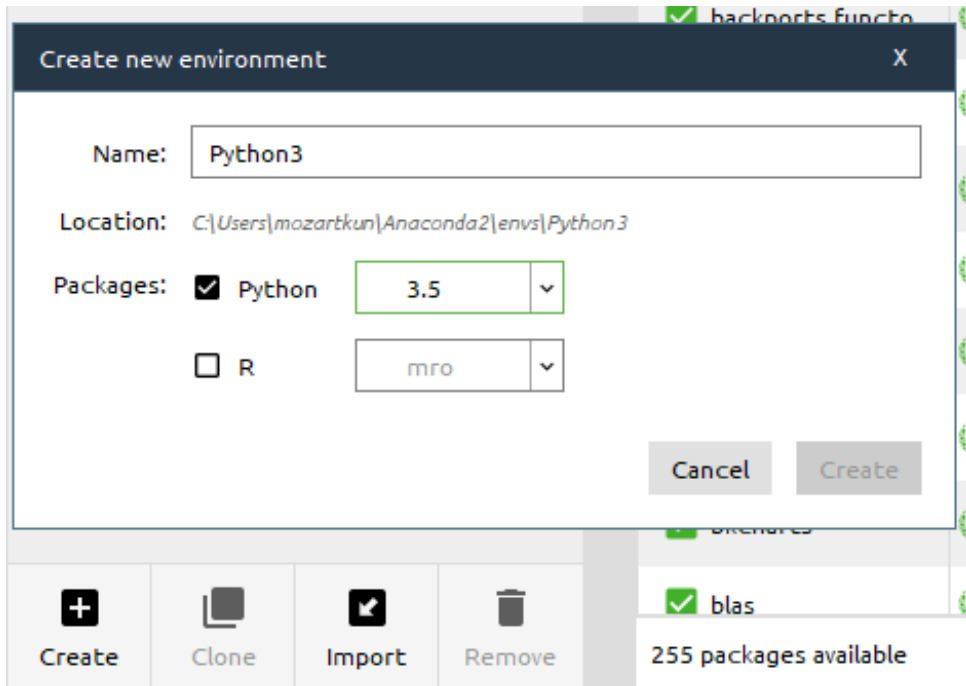
1.30.2

Streamlined code editor with support for development operations like debugging, task running and version control.

Install

Anaconda

- Suppose you want to create a virtual environment named “Python3” with Python version 3.5
- Open Anaconda Navigator
- Environments -> Create ->
- Open Anaconda Prompt
- Type “conda create -n Python3 python=3.5”



Install Python Packages



Home

Environments

Learning

Community

Search Environments

base (root)

python3

Installed

Channels

Update index...

Search Packages

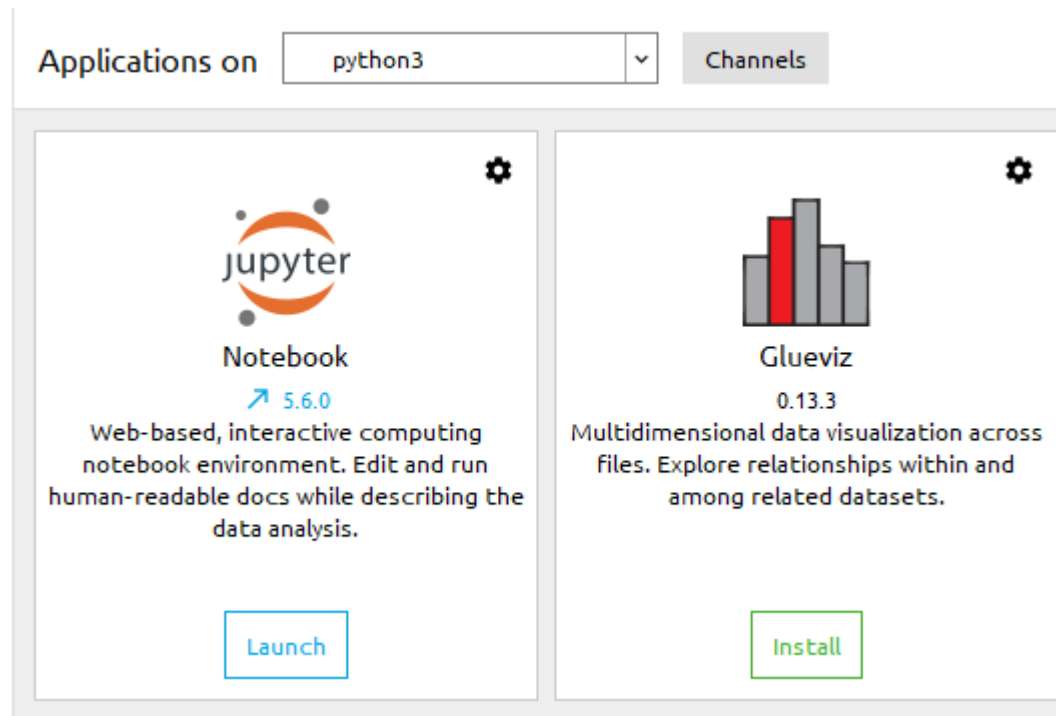
| Name | T | Description |
|--|---|---|
| <input checked="" type="checkbox"/> _py-xgboost-mutex | | |
| <input checked="" type="checkbox"/> _tflow_1100_select | | |
| <input checked="" type="checkbox"/> absl-py | | Abseil python common libraries, see https://github.com/abseil/abseil-py . |
| <input checked="" type="checkbox"/> appdirs | | A small python module for determining appropriate platform-specific dirs |
| <input checked="" type="checkbox"/> asn1crypto | | Python asn.1 library with a focus on performance and a pythonic api |
| <input checked="" type="checkbox"/> astor | | Read, rewrite, and write python asts nicely |
| <input checked="" type="checkbox"/> attrs | | Attrs is the python package that will bring back the joy of writing classes |
| <input checked="" type="checkbox"/> automat | | Self-service finite-state machines for the programmer on the go |
| <input checked="" type="checkbox"/> backcall | | Specifications for callback functions passed in to an api |

Install Python Packages

- In the Anaconda Prompt, Type:
 - “pip install ***” OR
 - “conda install ***”
- References:
 - <https://conda.io/docs/user-guide/tasks/manage-environments.html#using-pip-in-an-environment>
 - <https://conda.io/docs/user-guide/tasks/manage-python.html>

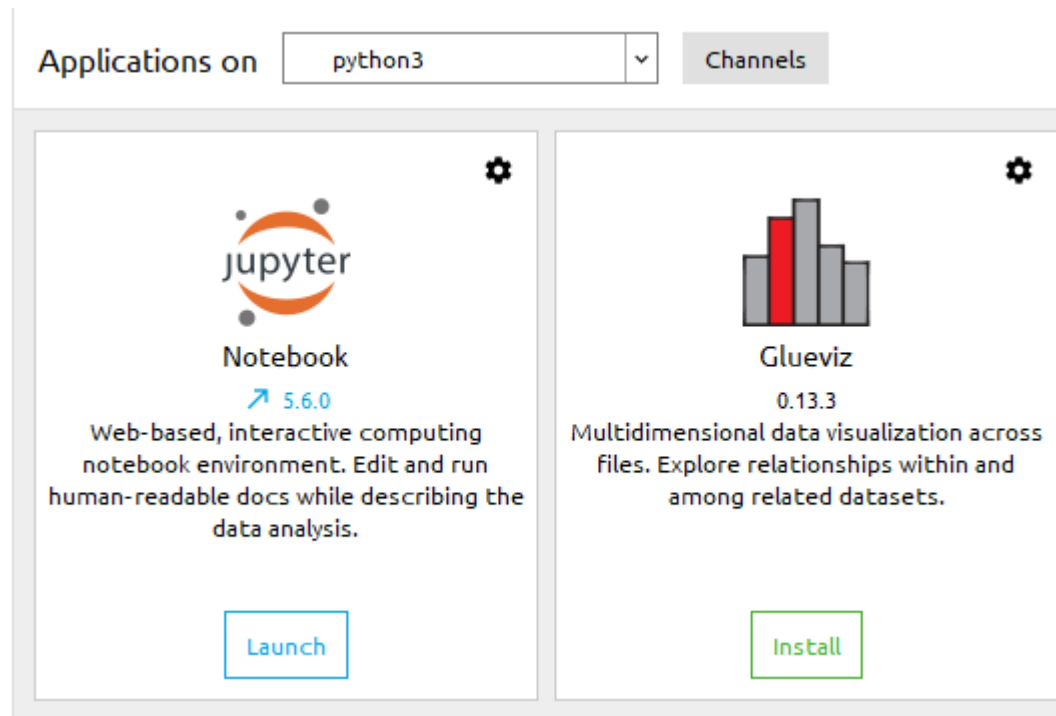
Jupyter Notebook

- First, you have to install “Jupyter notebook” in the environment your have created:



Jupyter Notebook

- Once finished, click “Launch” and you will open Jupyter notebook



Jupyter Notebook

jupyter IS4303 Tutorial Week3 Last Checkpoint: an hour ago (autosaved)

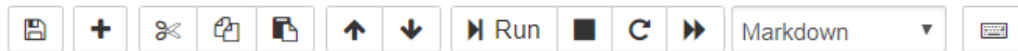


Logout

File Edit View Insert Cell Kernel Help

Not Trusted

Python 3



IS4303 IT-MEDIATED FINANCIAL SOLUTIONS AND PLATFORMS

Week 3 - Numpy, Pandas and Linear Algebra in Python

Sections:

Linear Algebra Review

References

0. Goal

1. Install Packages

2. Numpy

3. Pandas

How To Use Jupyter Notebook

- References:
 - <https://media.readthedocs.org/pdf/jupyter-notebook/latest/jupyter-notebook.pdf>
 - <https://youtu.be/jZ952vChhuI>

Thank you!