

The introduction to Python

Parallel session of UCSAS 2020

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Installation

anaconda.com/products/individual

Anaconda Installers

Windows

Python 3.8

64-Bit Graphical Installer (466 MB)

32-Bit Graphical Installer (397 MB)

MacOS

Python 3.8

64-Bit Graphical Installer (462 MB)

64-Bit Command Line Installer (454 MB)

Linux

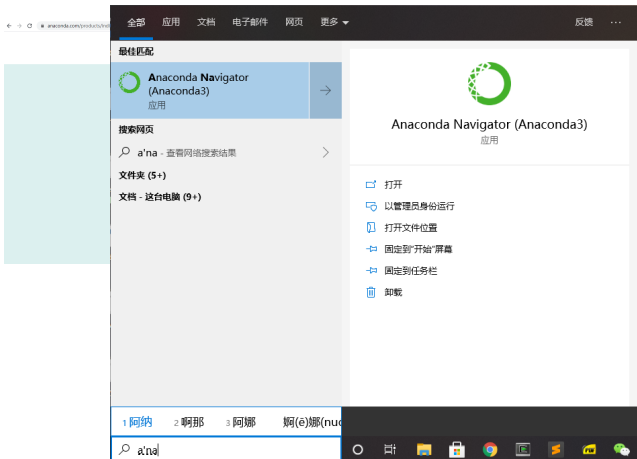
Python 3.8

64-Bit (x86) Installer (550 MB)

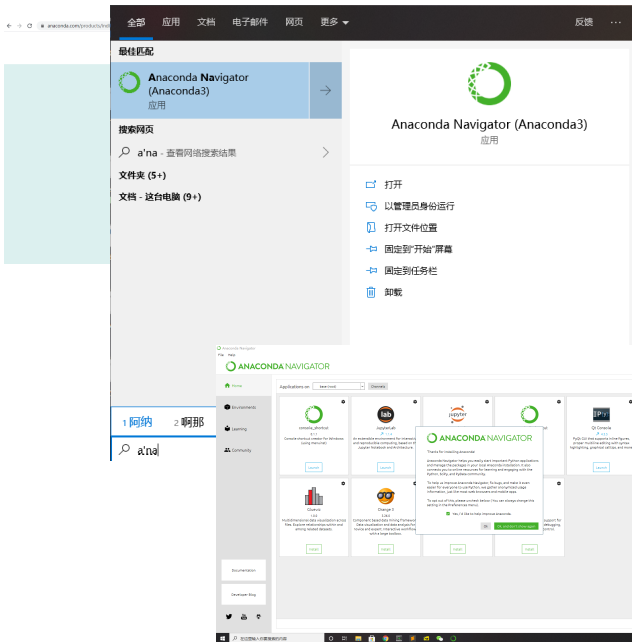
64-Bit (Power8 and Power9) Installer (290 MB)



Installation



Installation



Packages management

ANACONDA NAVIGATOR

Home Environments Channels update index... Search Packages

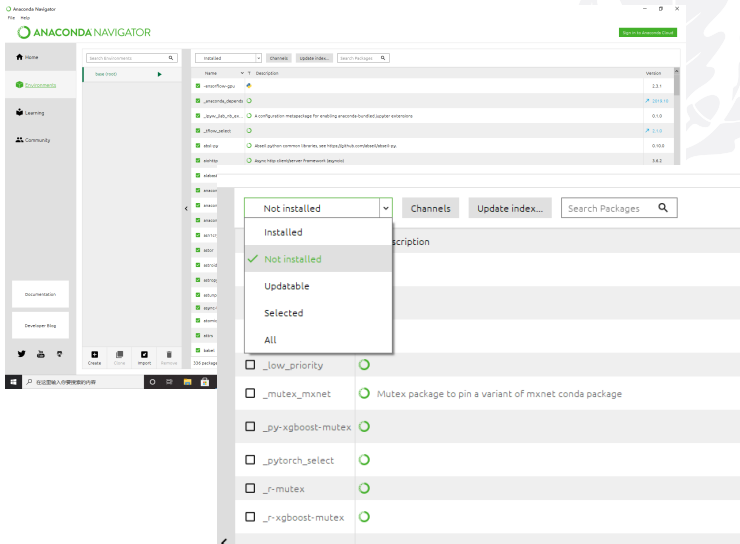
base (root)

Name	Description	Version
anaconda-gpu		2.3.1
anaconda/conda		2019.10
anaconda/conda	A configuration metapackage for enabling anaconda/conda/conda extensions	0.1.0
anaconda/conda		2.1.0
anaconda/conda	Abstr. python common libraries, see https://github.com/conda/anaconda/	0.10.0
anaconda/conda	Abstr. http client/server framework (requests)	3.6.2
anaconda/conda	Configurable python 2-3 compiled libraries theme	0.7.12
anaconda	Simplifies package management and deployment of anaconda	1.0.0
anaconda-client	anaconda.org command line client library	1.7.2
anaconda-project	Tool for encapsulating, running, and reproducing data science projects	0.8.2
anaconda/conda	Python web 1.1 library with a focus on performance and a pythonic api	1.2.1
anaconda/conda	Read, rewrite, and write python code locally	0.8.1
anaconda/conda	A abstract syntax tree for python with inference support	2.3.1
anaconda/conda	Community-developed python library for astronomy	3.2.1
anaconda/conda		1.8.3
anaconda/conda	Timeout context manager for async programs	3.6.1
anaconda/conda	Abstr. file system	1.3.0
anaconda/conda	Abstr. the python package that will bring back the joy of writing clients by relieving you from the drudgery of implementing request protocols (aka client method)	18.0.0
anaconda/conda	Utilities for internationalization and localization python applications	2.7.0

330 packages available

15:51 2020/10/18

Packages management



The screenshot displays the Anaconda Navigator application window. On the left is a sidebar with navigation links: Home, Environments, Learning, and Community. The main area is titled 'Environments' and shows a list of installed packages for a specific environment. A dropdown menu is open over the 'Not installed' filter, showing options: Not installed (selected), Installed, Not installed (with a green checkmark), Updatable, Selected, and All. The background shows a list of packages including _low_priority, _mutex_mxnet, _py-xgboost-mutex, _pytorch_select, _r-mutex, and _r-xgboost-mutex.

ANACONDA NAVIGATOR

Search Environments

base (root)

Installed

Channels

Update index...

Search Packages

Name

Description

Version

Name	Description	Version
anaconda-gpu		2.3.1
anaconda-libs		2019.10
anaconda-libs	A configuration metapackage for enabling anaconda-bundled-libs extensions	0.1.0
_low_priority		2.1.0
all		0.10.0
all	Alias for all (server framework) packages	3.6.2

Not installed

Installed

Not installed

Updatable

Selected

All

_low_priority

_mutex_mxnet

_py-xgboost-mutex

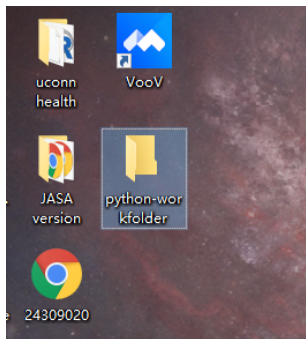
_pytorch_select

_r-mutex

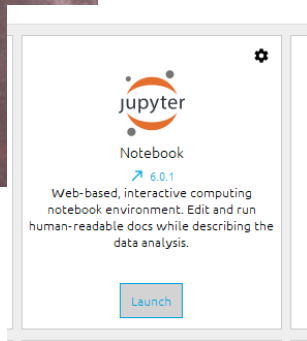
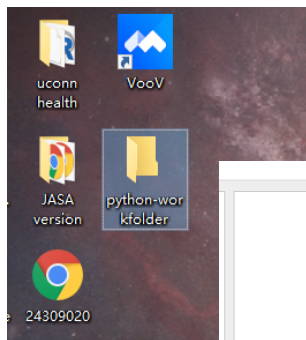
_r-xgboost-mutex

Mutex package to pin a variant of mxnet conda package

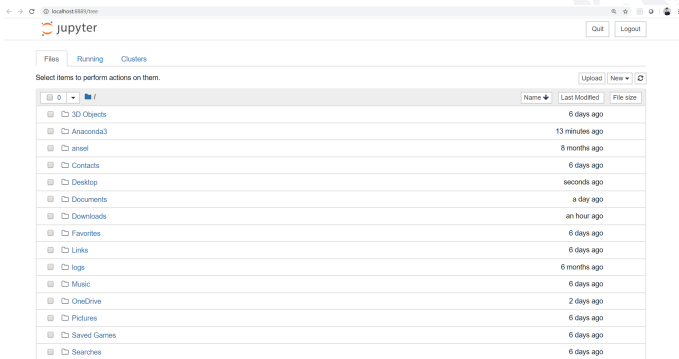
Workspace and launch jupyter



Workspace and launch jupyter



Folders tree in jupyter notebook



The screenshot shows the Jupyter Notebook interface in a web browser. The address bar indicates the local host is running on port 8888. The Jupyter logo is visible in the top left, and 'Quit' and 'Logout' buttons are in the top right. Below the navigation tabs (Files, Running, Clusters), there is a prompt to 'Select items to perform actions on them.' and buttons for 'Upload', 'New', and a refresh icon. The main area displays a file tree for the root directory '/'. The tree lists various system folders with their last modified times.

Name	Last Modified	File size
3D Objects	6 days ago	
Anaconda3	13 minutes ago	
ansei	8 months ago	
Contacts	6 days ago	
Desktop	seconds ago	
Documents	a day ago	
Downloads	an hour ago	
Favorites	6 days ago	
Links	6 days ago	
logs	6 months ago	
Music	6 days ago	
OneDrive	2 days ago	
Pictures	6 days ago	
Saved Games	6 days ago	
Searches	6 days ago	

Folders tree in jupyter notebook

The image displays two screenshots of the Jupyter web interface, illustrating the file explorer.

Top Screenshot: The browser address bar shows `localhost:8888/tree`. The Jupyter logo is visible. The interface has tabs for **Files**, **Running**, and **Clusters**. Below the tabs, it says "Select items to perform actions on them." There are buttons for **Upload**, **New**, and a refresh icon. The file explorer shows the root directory `/` with a table of files and folders:

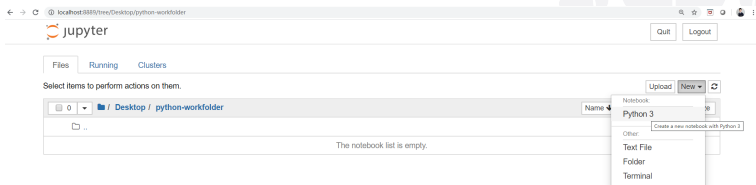
Name	Last Modified	File size
3D Objects	6 days ago	
Anaconda3	13 minutes ago	
ansel	8 months ago	
Contacts	6 days ago	
Desktop	seconds ago	
Documents	a day ago	
Downloads	an hour ago	
Favorites	6 days ago	
Links	6 days ago	
logs	6 months ago	
Music	6 days ago	
OneDrive	2 days ago	
Pictures	6 days ago	
Saved Games		
Searches		

Bottom Screenshot: The browser address bar shows `localhost:8888/tree/Desktop/python-workfolder`. The Jupyter logo is visible. The interface has tabs for **Files**, **Running**, and **Clusters**. Below the tabs, it says "Select items to perform actions on them." There are buttons for **Upload**, **New**, and a refresh icon. The file explorer shows the directory `Desktop / python-workfolder` with a table of files:

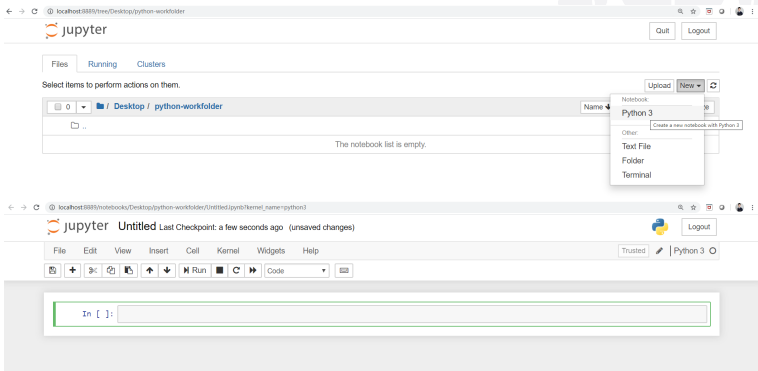
Name	Last Modified	File size
..	seconds ago	

The notebook list is empty.

Create the first python script



Create the first python script



Useful info

The material of this session is in [Session Material](#).

Our department website is [Department of Statistics](#).

Our website for statistical data science lab at Uconn is [Data Science Lab](#).

