Supplementary Tutorial

Conda,Miniconda & Anaconda

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What is Conda?

Conda is an open-source, cross-platform (Win, macOS, Linux), language-independent (Python, R, Java, C, ...) package manager and environment management system.

It was originally developed to solve package management challenges faced by Python data scientists, and today is a popular package manager for Python and R.

What is Conda?

As a package manager, Conda allows users to install different versions of software packages and their required software dependencies.

Conda also let users create such a set of software packages in isolation from the rest of the computing platform, in what Conda calls an environment. This allows the user to create various sets of software packages for different projects

Conda Environment

NLP Projects

NLP Environment

Hazm
NLTK
Gensim
SpaCy
KerasNLP
TextBlob
Python 3.9.x

Computer Vision Projects

CV Environment

OpenCV
Pillow
SimpleCV
Scikit-image
KerasCV
Python 3.10.x

What is Miniconda?

Miniconda is a free minimal installer for conda that includes only conda, Python, the packages they both depend on, and a small number of other useful packages (like pip, zlib, and a few others).

If you need more packages, use the *conda install [package name]* command to install any packages you want.

Miniconda vs Anaconda

Miniconda is a minimal version of Anaconda.

While Miniconda only has conda, python, pip and few pre-installed packages, Anaconda has Miniconda packages plus hundreds of different pre-installed packages.

Miniconda is light and needs less disk space but Anaconda is heavy and needs more disk space to install.

Miniconda Installation

Miniconda and Anaconda installation instructions are the same

1- Download the installer file

2- Run and execute the installer

3- Follow the installation process

4- Create new conda environment to install packages