Anaconda & Spider Installation for windows:

1. Please click on the link below

https://www.anaconda.com/download/#windows



2. Click on **Download**, and then you have to check for compatibility of your Pc, after that it will start downloading.

| Anaconda Installers | | | | | |
|-------------------------------------|--|--|--|--|--|
| Windows 🕊 | MacOS 🗉 | Linux 👌 | | | |
| Python 3.8 | Python 3.8 | Python 3.8 | | | |
| 64-Bit Graphical Installer (466 MB) | 64-Bit Graphical Installer (462 MB) | 64-Bit (x86) Installer (550 MB) | | | |
| 32-Bit Graphical Installer (397 MB) | 64-Bit Command Line Installer (454 MB) | 64-Bit (Power8 and Power9) Installer (290 MB) | | | |

- 3. Double click the installer to launch.
- 4. Click Next.

| Anaconda3 2020.07 (64) | -bit) Setup | — | | \times |
|------------------------|--|--|--------------------------------|----------|
| đ | Welcome to Anaconda (64-bit) Setup | 13 202 | 20.07 | |
| Ĝ | Setup will guide you through the insta 2020.07 (64-bit). | allation of | Anaconda | 3 |
| CO | It is recommended that you close all before starting Setup. This will make relevant system files without having computer. | other appl it possible to reboot | lications to update your | • |
| NA | Click Next to continue. | | | |
| A | | | | |
| | | | | |
| | Ne | xt > | Cano | el |

5. Read the licensing terms and click "I Agree".

| Anaconda3 2020.07 (64- | bit) Setup | _ | | × |
|--|--|-------------------|------------|-----|
| O ANACONDA. | License Agreement Please review the license terms be 2020.07 (64-bit). | fore installing A | naconda3 | 1 |
| Press Page Down to see th | e rest of the agreement. | | | |
| End User License Agreeme | nt - Anaconda Individual Edition | | | ^ |
| Copyright 2015-2020, Ana | aconda, Inc. | | | |
| All rights reserved under t | he 3-dause BSD License: | | | |
| and Anaconda, Inc. ("Ana (which was formerly know | conda") and governs your use of Ana n as Anaconda Distribution). | conda Individua | al Edition | ~ |
| If you accept the terms of agreement to install Anaco | the agreement, click I Agree to contin nda3 2020.07 (64-bit). | nue. You must a | ccept the | |
| Anaconda, Inc | | | | |
| | < Back | I Agree | Can | cel |

6. Select an install for "Just Me" unless you're installing for all users (which require Windows Administrator privileges) and click Next.

| O Anaconda3 2020.07 (64- | bit) Setup | _ | | × |
|---|---|----------------|------------|---------|
| O ANACONDA. | Select Installation Type Please select the type of installation y Anaconda3 2020.07 (64-bit). | vou would like | e to perfo | orm for |
| Install for: Just Me (recommended) All Users (requires admi |) n privileges) | | | |
| Anaconda, Inc. ———— | < Back | Next > | Can | ncel |

7. Select a destination folder to install Anaconda and click the Next button.

| Anaconda3 2020.02 (64- | bit) Setup | | — | | \times |
|--|--|---|-----------------------------|-------------|----------|
| O ANACONDA. | Choose Install L Choose the folde | .ocation r in which to instal | l Anaconda3 20: | 20.02 (64- | bit). |
| Setup will install Anaconda: folder, click Browse and se | 3 2020.02 (64-bit) in ect another folder. | the following fold Click Next to conti | er. To install in a nue. | a different | |
| Destination Folder | onda3 | | Brow | se | |
| Space required: 3.0GB Space available: 18.2GB Anaconda, Inc. ————— | | | | | |
| | | < Back | Next > | Cance | el |

8. Choose whether to add Anaconda to your PATH environment variable. We recommend not adding Anaconda to the PATH environment variable, since this can interfere with other software.

Instead, use Anaconda software by opening Anaconda Navigator or the Anaconda Prompt from the Start Menu

NOTE: Choose whether to register Anaconda as your default Python. Unless you plan on installing and running multiple versions of Anaconda or multiple versions of Python, accept the default and leave this box checked.

9. Click the Install button. If you want to watch the packages Anaconda is installing, click Show Details

| O Anaconda3 2020.02 (64- | bit) Setup | _ | | \times |
|--|--|---------------------------------|------|----------|
| O ANACONDA. | Advanced Installation Options Customize how Anaconda integrates wi | th Windows | | |
| Advanced Options | o my PATH environment variable | | | |
| Not recommended. I menu and select "An Anaconda get found cause problems requ | nstead, open Anaconda3 with the Window aconda (64-bit)". This "add to PATH" optio before previously installed software, but r irring you to uninstall and reinstall Anacond | s Start n makes nay a. | | |
| Register Anacono This will allow other PyCharm, Wing IDE, detect Anaconda as | da3 as my default Python 3.7 programs, such as Python Tools for Visual S PyDev, and MSI binary packages, to auto the primary Python 3.7 on the system. | itudio matically | | |
| Anaconda, Inc. — | < Back Ir | nstall | Cano | cel |

10. Click the Next button.



11. And then click the Finish button.

| Anaconda3 2020.02 (64) | -bit) Setup — 🗆 🖂 |
|------------------------|---|
| .A. | Completing Anaconda3 2020.02 (64-bit) Setup |
| CONE | Here are some helpful tips and resources to get you started. We recommend you bookmark these links so you can refer back to them later. |
| ANA | 🗹 Learn More About Anaconda |
| 0 | |
| | < Back Finish Cancel |

- 12. After a successful installation you will see the "Thanks for installing Anaconda" dialog box:
- 13. To open Anaconda Navigator, just search it in the windows search. After opening, it will appear as follows. You will see various applications available on the base (root) environment.



Creating a new Tensorflow environment and installing other packages

1. Go to "Environmets" tab. Initially, you will only see the "base (root)" environment. To create a new environment, click on "Create" button.

| Home | Search Environments | ٩ | Installed | Channels Update index | Search Packages C |
|--------------------|---------------------|---|----------------------|---|-------------------|
| | base (root) | 0 | Name 👻 | T Description | Version |
| Environments | | _ | jpyw_ilab_nb_ex | O A configuration metapackage for enabling anaconda-bundled jupyter extensions | 0.1.0 |
| | | | elabester | O Configurable, python 2+3 compatible sphinx theme. | 0.7.12 |
| earning | | | anaconda | O Simplifies package management and deployment of anaconda | 2021.11 |
| | | | anaconda-client | O Anaconda cloud command line client library | 1.9.0 |
| ommunity | | | anaconda-project | O Tool for encapsulating, running, and reproducing data science projects | ⊅ 0.10.1 |
| | | | 🖬 anyio | O High level compatibility layer for multiple asynchronous event loop implementations on python | 2.2.0 |
| | | | appdirs | O A small python module for determining appropriate platform-specific dirs. | 1.4.4 |
| | | | 🖬 argh | O The natural cli. | 0.26.2 |
| | | | argon2-cffi | O The secure argon2 password hashing algorithm. | 20.1.0 |
| | | | arrow | O Better dates & times for python | A 0.13.1 |
| | | < | asn1crypto | Python asn.1 library with a focus on performance and a pythonic api | 1.4.0 |
| | | | astroid | Q A abstract syntax tree for python with inference support. | 7 2.6.6 |
| | | | stropy | O Community-developed python library for astronomy | 4.3.1 |
| | | | async-generator | • | 1,10 |
| NACONDA. | | | async_generator | O Async generators and context managers for python 3.5+ | 1.10 |
| k up your | | | atomicwrites | O Atomic file writes | 1.4.0 |
| leus for free | | | 🖬 attrs | O Attrs is the python package that will bring back the joy of writing classes by relieving you from the drudgery of implementing object protocols (aka dunder methods). | 21.2.0 |
| Join Now | | | autopep8 | A tool that automatically formats python code to conform to the pep 8 style guide | 1.5.7 |
| back up, port, and | | | 🖬 babel | O Utilities to internationalize and localize python applications | 2.9.1 |
| any environment | | | Deckcell | Ø Specifications for cellback functions passed in to an api | 0.2.0 |
| cumentation | | | beckports | 0 | 1.0 |
| aconda Blog | | | backports.functoo | • | 1.6.4 |
| | | | A backports function | Backnort of functions (nu carbs from outbon 3.3 as nublished at artivisestate | 164 |

2. Give a name for the new environment, for example "ML_env", select the python version 3.8.12 from the drop-down, and click on the "Create" button. It may take some time for creating it.

| Create new | environment | | × |
|------------|----------------------------|--------------------|------|
| Name: | ML_env | | |
| Location: | C:\Users\suraj\ana | conda3\envs\ML_env | |
| Packages: | Python | 3.8.12 | |
| | R | 3.6.1 | |
| | | Cancel | eate |

3. You will see a new environment created, namely "ML_env" here. You can see all the available packages in this environment by clicking on the drop-down and select "All" as shown below.

| Search Environments | ٩ | Installed | Channels Update index | Search Paci |
|--|----------|---|---|-------------|
| base (root) | | Name | Y T Description | V |
| onments | | ca-certificates | O Certificates for use with other packages. | |
| ML_env | | 🗹 certifi | O Python package for providing mozilla's ca bundle. | |
| ing | | openssl | O OpenssI is an open-source implementation of the ssI and tis protocols | |
| | | 🖬 pip | O Pypa recommended tool for installing python packages | |
| nunity | | g python | O General purpose programming language | ~ |
| | | setuptools | O Download, build, install, upgrade, and uninstall python packages | |
| | | 🖬 sqlite | O Implements a self-contained, zero-configuration, sql database engine | |
| | | Z tzdata | O The time zone database (called tz, tzdb or zoneinfo) | |
| | | 🖬 Vc | O A meta-package to impose mutual exclusivity among software built with different vs versions | |
| | | vs2015_runtime | O Msvc runtimes associated with cLexe version 19.27.29111 (vs 2019 update 5) | |
| | < | wheel | O A built-package format for python. | |
| | | wincertstore | O Python module to extract ca and crl certs from windows' cert store (ctypes based). | |
| nigator ANACONDA.NAVIGAT | OR | | | |
| nigator ANACONDA.NAVIGAT | OR | All | Channels Update Index. | (Search # |
| avigator ANACONDA.NAVIGAT | OR () | All Machines Not installed | Channels Update Index cription | (Search # |
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| erigiter ANACONDA.NAVIGAT Carrot Environments Imp Imp Imp Imp Imp Imp Imp Imp Imp Im | OR () | All Mathies Not installed Updatale Selected Jay Jaket Jay Jaket Jay Jaket Jay Jaket Jay Jaket Jay Jaket Jay Jaket Jay Jaket Jay Jaket | Image: Channels Update index. origitien origitien stiffes package: management and deployment of anaconds The poleng select package. Image: The poleng select package. A configuration metapackage for enabling anaconde bundled jurg/er extensions. Image: A static build of liber/thive containing only conde-related parts. Image: Conde-related parts. Image: Conde-related parts. Image: Conde-related parts. | (and r |
| envigeor ANACONDA.NAVIGAT certo Environments ing numity | OR | All estatutes Net installed Updatable Selected | | (sara) |
| evigent ANACONDA.NAVIGAT (search Environments ing numity | OR | All Het installed Updatable Selected Joyw_lab_rbc_re _lbarchwe_static _logw_pitab_rbc_re _lbarchwe_static _logw_pitab_rbc_re _low_priority mutex_manet py-sgloost-muto | | (sarch |

4. Now use "Search Packages" box to search the packages. For example, for installing Tensorflow packages, search it and select "tensorflow" and "tensorflow-base" and click on "Apply"

| All | Channels Update index | tensorflow | × |
|---|---|------------|-------|
| Name 🗸 | T Description | Version | 1 |
| keras | O Deep learning library for theano and tensorflow | 2.6. | 0 |
| keras-gpu | O Deep learning library for theano and tensorflow | 2.6. | o |
| opt_einsum | O Optimizing einsum functions in numpy, tensorflow, dask, and more with contraction order optimization. | 3.3. | 0 |
| r-tensorflow | 0 | 1.8 | |
| tensorboard | O Tensorflow's visualization toolkit | 2.6. | 0 |
| tensorflow tensorflow | D Tensorflow is a machine learning library. | 2.6. | o |
| tensorflow-base | D Tensorflow is a machine learning library, base package contains only tensorflow. | 2.6. | 0 |
| tensorflow-datasets | • Tensorflow/datasets is a library of datasets ready to use with tensorflow. | 1.2. | 0 |
| tensorflow-eigen | O Metapackage for selecting a tensorflow variant. | 2.5. | 0 |
| estimator | O Tensorflow estimator is a high-level tensorflow api that greatly simplifies machine learning programming. | 2.6. | o |
| tensorflow-gpu | O Metapackage for selecting a tensorflow variant. | 2.5. | 0 |
| base tensorflow-gpu- | O Tensorflow is a machine learning library, base gpu package, tensorflow only. | 1.8. | o |
| tensorflow-hub | O A library for transfer learning by reusing parts of tensorflow models. | 0.8. | 0 |
| tensorflow- metadata | O Library and standards for schema and statistics. | 0.14 | 1.0 |
| tensorflow-mkl | O Metapackage for selecting a tensorflow variant. | 2.5. | 0 |
| tensorflow-proba | O Tensorflow probability is a library for probabilistic reasoning and statistical analysis in tensorflow | 0.8. | 0 |
| | | | |
| 16 packages available ma | ching "tensorflow." 2 packages selected | Apply | Clear |

5. It will show you the list of packages, which will get modified/ installed. Then click on "Apply" and wait for installation to complete. Once it is over, you will see a check box appearing in front of the installed packages.

| | Name | Unlink | Link | Channel | Action | ^ | | | | |
|---|-------------------------|--------------|--------------|-----------|-----------|-----|---|--------------------------|---|--|
| | *zlib | - | 1.2.11 | pkgs/main | Installed | | | tensorboard | 0 | Tensorflow's visualization toolkit |
| | *zipp | - | 3.6.0 | pkgs/main | Installed | | | tensorflow | 0 | Tensorflow is a machine learning library. |
| | *yarl | - | 1.6.3 | pkgs/main | Installed | | H | | - | |
| | *wrapt | - | 1.13.3 | pkgs/main | Installed | | | tensorflow-base | 0 | Tensorflow is a machine learning library, base pack |
| | *win_inet_pton | - | 1.1.0 | pkgs/main | Installed | ~ | | tensorflow-datasets | 0 | Tensorflow/datasets is a library of datasets ready t |
| | | | | | | - 1 | | tensorflow-eigen | 0 | Metapackage for selecting a tensorflow variant. |
| d | icates the package is a | dependency o | F a selected | packages | | | | tensorflow- estimator | 0 | Tensorflow estimator is a high-level tensorflow ap |
| | | | Cance | | Apply | | | tensorflow-gpu | 0 | Metapackage for selecting a tensorflow variant. |

6. Further, in this environment, search and install "Keras" and "Keras-base". Also do the same for "Pandas", "Scikit-learn" and "Seaborn".

| All | • | Char | nnels | Jpdate ind | lex | | | | | | | | | |
|---------------------|------------|---|------------------|------------|-----------|-----------|-----------|---|--|--|--|--|--|--|
| Name 🗸 | T Descrip | tion | | | | | | | | | | | | |
| 🖳 keras | O Deep lea | arning | g library for th | neano and | tensorflo | w | | | | | | | | |
| keras-applications | O Applicat | Applications module of the keras deep learning library. | | | | | | | | | | | | |
| 🛛 keras-base | 0 | 0 | | | | | | | | | | | | |
| 🗖 keras-gpu | O Deep lea | Deep learning library for theano and tensorflow | | | | | | | | | | | | |
| keras-preprocessing | O Data pre | Data prey | | | | | | | | | | | | |
| 🗖 r-keras | 0 | 2 packages will be installed | | | | | | | | | | | | |
| 🗖 r-kerasr | 0 | 1. | Name | Unlink | Link | Channel | Action | - | | | | | | |
| | | | 1 keras-base | • | 2.6.0 | pkgs/main | Installed | | | | | | | |
| | | | 2 keras | - | 2.6.0 | pkgs/main | Installed | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | ancel | Apply | 1 | | | | | | |
| | | | | | - | ancet | Арріу | | | | | | | |

7. For installing Spyder IDE on this new environment, go to "Home" tab. In the created "ML_env", click on "Install" button for Spyder.

| A Home | Applications on ML_env | Channels | | | | | | | | | | | |
|--------------|---|---|---|--|---|---|--|--|--|--|--|--|--|
| Environments | • | * | ° ° | i î | ¢ lab | ¢ jupyter | | | | | | | |
| Learning | Datalore | IBM Watson Studio Cloud | CMD.exe Prompt 0.1.1 | Glueviz 1.0.0 | JupyterLab 3.2.1 | Notebook 6.4.6 | | | | | | | |
| 🕰 Community | Online Data Analysis Tool with smart coding assistance by JetBrains. Edit and run your Python notebooks in the cloud and share them with your team. | IBM Watson Studio Cloud provides you the tools to analyze and visualize data, to cleanse and shape data, to create and train machine learning models. Prepare data and build models, using open source data | Run a cmd.exe terminal with your current environment from Navigator activated | Multidimensional data visualization across files. Explore relationships within and among related datasets. | An extensible environment for interactive and reproducible computing, based on the Jupyter Notebook and Architecture. | Web-based, interactive computing notebook environment. Edit end run human-readable docs while describing the data analysis. | | | | | | | |
| | Launch | science tools or visual modeling. | Install | Install | Install | Install | | | | | | | |
| | * | | ° | ¢ IP(y): | R | * | | | | | | | |
| | Orange 3 | Powershell Prompt | PyCharm Professional | Qt Console | RStudio | Spyder | | | | | | | |
| | 3.26.0 Component based data mining framework. Data visualization and data analysis for novice and expert. Interactive workflows with a large toolbox. | 0.0.1 Run a Powershell terminal with your current environment from Navigator activated | A full-fledged IDE by JetBrains for both Scientific and Web Python development. Supports HTML, JS, and SQL. | 5.1.1 PyQt GUI that supports inline figures, proper multiline editing with syntax highlighting, graphical calltips, and more. | 1.1.456 A set of integrated tools designed to help you be more productive with R. Includes R essentials and notebooks. | 5.1.5 Scientific PYthon Development EnviRonment, Powerful Python IDE with advanced editing, interactive testing, debugging and introspection features | | | | | | | |
| | Install | Install | Install | Install | Install | Install | | | | | | | |

After successful installation of Spyder, a "Launch" button will appear to launch the Spyder IDE.



Spyder:

Spyder, the Scientific Python Development Environment, which is a free integrated development environment (IDE) that is included with Anaconda.

It includes:

- Editing,
- Interactive testing,
- Debugging,
- Introspection features.

Steps for Spyder setup and run a test code:

- 1. In Window search box, type Spyder and press Enter.
- 2. Spyder IDE opened and you can see a total of 3 area:
 - a. Editor
 - b. Console
 - c. Variable/help/file/plot space.



3. Let's write a test code in Editor and run the code by clicking on Run button:



4. You can see the variable, plot, files on right side of IDE by clicking appropriate tabs as highlighted with Red color below:



5. As a whole Spyder screen look like as below :

