1. Jupyter

An open-source platform that allows users to create and share documents including live code, data visualization, equation, etc. Besides this, it offers rapid prototyping, and works with different kernels, and supports almost 40 languages. Jupyter contains modules for both coding and presentational elements (such as images or calculations).

Read this article to know more about this: <u>How To Use Jupyter Notebook –</u>

An Ultimate Guide

Reason to Pick Jupyter

Below are some of the major highlights to justify the same:

- It offers immediate output to users and working on this tool is highly flexible for developers
- Jupyter is the best pick in IDE for machine learning for data cleaning and transformation, scientific calculation, statistical modeling, and much more.
- It is backed by programming languages such as Julia, Python, and R, and offers a highly interactive environment that allows developers to combine code, images, plots, etc.

2. Spyder

This one is voted among the best IDEs preferred by Data Scientists for performing analysis and generating desired outputs. It was introduced by Pierre Raybaut and with continuous improvements and implementations, many fascinating changes have been made to date. Currently, it offers a

highly great user interface and developers also get the choice to change the layout as per their convenience. But that's not all, now we will discuss the top 3 reasons to choose this IDE for machine learning.

Reason to Pick Spyder

Below are some of the major highlights to justify the same:

- You can easily include a multi-language editor along with the real-time code analysis and this becomes the primary reason to pick
 Spyder IDE for machine learning.
- This IDE provides easy navigation through cells, blocks, etc (and this can be achieved through the outline explorer)
- It allows developers to perform run lines, files, cells, etc. in a highly interactive way.

3. PyCharm

It is one of the most popular python IDE that is used across multiple platforms (such as Mac, Linux, Windows, etc.) and it holds the capability of performing several tasks such as analysis, debugging, testing, etc.

Besides this, it can be tailored as per project requirements and was introduced first by Jet Brains and came into the market for public usage in 2010. Ever since it has evolved over time and its current version is 2022.2.2 which was released in September 2022.

Reason to Pick PyCharm

Below are some of the major highlights to justify the same:

- Easy Navigation: This function is very handy for developers, and those who want to save time and effort can easily navigate projects by just searching for symbols and codes (not file names). Being a developer, all you need is just think of the code and redirect it to the class or function that you want to access.
- Instant Access Files: Toggling from one file to another is like a
 game while using this environment. All you need to do is type
 Cmd+E (macOS) or Ctrl+E (Linux/Win) and choose the file where
 you want to go.
- Remove Clutter: This environment provides accessibility to disable tools that are not required. However, you can access that section in the toolbar section.

4. R Studio

This is one free, open-source environment that is suitable for R programming. The interface has been designed in such a manner that a user can easily view graphs, data tables, along with output simultaneously. Besides this, it also offers developers the to work on different file extensions such as CSV, Excel, SAS, SPSS, etc., and that too without writing codes every time.

Reason to Pick R Studio

Below are some of the major highlights to justify the same:

- It eases developers for highlighting syntax, and code completion,
 and a developer can easily execute codes directly from the source editor.
- A developer can also manage multiple directories using projects and that too by offering intensive support in debugging for fixing minor/major bugs.
- One of the most extensive features of using this IDE is "Job
 Launcher" (available in the Pro version) provides high-performance
 computing while working.

5. VS Code

This extension offers a great experience for scientists and by using this you can enable the DVC view which can be a perfect fit for any ML project.

Besides this, you can even perform multiple tasks at the same time, such as running experiments, managing parameters, managing parameters, etc. for different models.

Reason to Pick VS Code

Below are some of the major highlights to justify the same:

- It offers multiple language support to their users
- By using VS code, you can work on highly extensive and interactive plots.
- Add-on features such as Live Tracking, extension support (.py & .ipynb)

• It allows developers to easily perform mergers with GIT.