NPS Computational Methods for Data Analysis

Anaconda/Jupyter Guide

The course material is presented as a series of python notebooks. You will need a local python distribution to view and run these notebooks. We recommend using the Anaconda distribution, <https://www.anaconda.com/download/>. The Anaconda Distribution comes with a bunch of useful things:

* Python 3 (the language)
* IPython (interactive console)
* Jupyter Interface (both Jupyter Notebooks and Jupyter Lab)
* Spyder (an editor and simple development environment)
* May also include VSCode, which is gaining popularity among data science practitioners since it works with many different coding languages
* plus a whole bunch of other things

In particular, we will utilize the Jupyter interface. These interactive jupyter notebooks have become one of the most useful tools in modern data science due to the fact that it allows the analyst to use the full power of the browser to directly explore the results of their coding and analysis.

Jupyter Lab is intended to be the next generation interface that integrates the web-based notebooks within a more modern Interactive Development Environment (IDE). Either Jupyter Notebook or Jupyter Lab will work well for this course, but we will present the material through Jupyter Lab to take advantage of additional tools such as the built-in table of contents. You can launch a Jupyter lab (or Jupyter notebook) session from the Anaconda Navigator GUI:

A screenshot of a computer

Description automatically generated with medium confidence

Alternatively, you can launch a jupyter lab session by running “juptyer lab” from the Anaconda Prompt (which provides a Windows command line interface) or Anaconda Powershell Prompt (which provides a linux command line interface). Both Anaconda prompt tools are include with the Anaconda installation. This also gives the advantage of enabling you to navigate to the desired folder and launching the Jupyter session from there:

A screen shot of a computer

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Jupyter lab will then launch within your system’s default browser.

A screenshot of a computer

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