**Platform:**

Any major OS is fine (Linux, Mac or Windows). We will not rely on GPU resources and the test datasets are fairly small. You should not run into performance problems if your laptop (PC) is relatively new, i.e., if they are already sufficient for daily tasks.

However, you may want a package manager to make your lives easier. If you are fairly new to this concept, it is recommended to use Anaconda (<https://www.anaconda.com/>), as it works across all platforms. For Linux users, the required libraries should be available via pip, dnf, yum….

For Windows users, you probably need pycharm or VS code.

**Required SW libraries:**

Interface:

jupyter: https://jupyter.org/

Data Processing:

uproot: https://uproot.readthedocs.io/en/latest/basic.html

pandas: https://pandas.pydata.org/

numpy: https://numpy.org/

awkward: https://awkward-array.org/doc/main/index.html

vector: https://github.com/scikit-hep/vector

ML Libraries:

torch: https://pytorch.org/

torchvision: https://pytorch.org/vision/stable/index.html

xgboost: https://xgboost.readthedocs.io/en/latest/index.html

sklearn: https://scikit-learn.org/stable/index.html

Plotting:

matplotlib: https://matplotlib.org/

seaborn: https://seaborn.pydata.org/

MISC:

tqdm: <https://tqdm.github.io/>

**Confirmation:**

Open a jupyter notebook borwser prompt and add the following lines in a code cell:

import numpy as np

import pandas as pd

from math import \*

from tqdm import tqdm

import uproot as r

import awkward as ak

import vector import matplotlib.pyplot as plt

from sklearn import datasets, linear\_model

import seaborn as sns

import xgboost as xgb

import torch

from torch import nn

from torch.utils.data import DataLoader

from torchvision.transforms import ToTensor

import torch.optim as optim

If the above libraries are successfully imported, you are good to go.