1. **Install anaconda using the installer**
2. **Set up path**
   1. C:\Users\davehanzhang\OneDrive\python
   2. C:\Users\davehanzhang\Anaconda3
   3. C:\Users\davehanzhang\Anaconda3\Scripts
   4. C:\Users\davehanzhang\Anaconda3\lib
   5. C:\Users\davehanzhang\Anaconda3\Library
   6. C:\Users\davehanzhang\Anaconda3\Library\bin
   7. %USERPROFILE%\AppData\Local\Microsoft\WindowsApps
   8. C:\blp\DAPI
   9. C:\blp\DAPI\DDE
3. **Set up proxy**
   1. CS way (pip)
      1. Copy the pip.ini file to C:\Users\hyin1\AppData\pip\
      2. Set system path variable - PIP\_CONFIG\_FILE: C:\Users\hyin1\AppData\pip\pip.ini
      3. Think about pip with proxy (do some google, upgrade pip, pass proxy as parameter, set up system environment variable etc)
   2. DB way (.condarc with proxy, the CS way for .condarc is not working well but can be an alternative if needed)
4. **Upgrade spyder (Can cause problem if done after all the pip run so maybe try to do this at the beginning)**
   1. if can’t use conda:
      1. conda remove wrapt --force
      2. conda remove qtconsole --force
      3. conda remove spyder –force
      4. python –m pip install --upgrade pip
      5. pip install spyder==5.1.5
      6. pip install spyder==4.2.5 (a hacky solution)
   2. Else just use conda to update spyder to either 5 or 4
      1. conda update conda (run this first?) or run conda install anaconda (extremely slow?)
      2. conda install spyder=4.2.5
      3. conda install paramiko=2.4

(<https://stackoverflow.com/questions/63734508/stuck-at-solving-environment-on-anaconda> try conda config --set channel\_priority strict if it stuck at solving environment)

1. **Installing package (some with specified version)**
   1. python –m pip install --upgrade pip
   2. blpapi (local, copy the 4 files from this folder (for\_blpapi, originally from WAPI folder) to this folder (\anaconda3\Lib\site-packages\blpapi)
   3. datatable (local)
   4. plotly (will be updated by interpret anyway)
   5. pyfinance==1.2.7
   6. PyPDF2==1.26.0
   7. feather-format==0.4.1
   8. jieba==0.42.1
   9. baidu-aip==2.2.18.0
   10. pyvis==0.1.9
   11. pykalman==0.9.5
   12. dtw-python==1.1.6
   13. interpret==0.1.20 (better try the latest)
   14. interpret-core==0.1.20 (better try the latest, should come with interpret automatically)
2. **Install pyportfolioopt**
   1. Get the pre-compiled packages: <https://www.lfd.uci.edu/~gohlke/pythonlibs/>

(Warning: for this to work, need to get the same numpy+mkl version as shown in the website, currently the relevant packs are downloaded already here for\_pyportfolioopt)

* + 1. numpy-1.21.2+mkl-cp37-cp37m-win\_amd64.whl
    2. cvxopt-1.2.6-cp37-cp37m-win\_amd64.whl
    3. scs-2.1.4-cp37-cp37m-win\_amd64.whl
    4. ecos-2.0.7.post1-cp37-cp37m-win\_amd64.whl
    5. osqp-0.6.2.post0-cp37-cp37m-win\_amd64.whl
    6. cvxpy-1.1.15-cp37-cp37m-win\_amd64.whl
  1. then run pip install pyportfolioopt
  2. Due to numpy 1.2+, we need to adjust the below packages
     1. pip install statsmodels -U
     2. pip install pandas==1.0.5 –U
     3. pip install scikit-learn –U

1. **For the FactSet data loader script to work you need to set the calendar to Fiveday in FactSet workstation.**
2. **Customize Jupyter Notebook display (Monokai style & full width)**
   1. Set the default browser and beginning path: <https://stackoverflow.com/questions/47772157/how-to-change-the-default-browser-used-by-jupyter-notebook-in-windows>
   2. Dark style:
      1. pip install jupyterthemes
      2. (my preferred setting) jt -t monokai -T -N -kl -cellw 95% -f roboto -fs 115

<https://www.zhihu.com/question/40012144>

* + 1. Some useful tips:

<https://towardsdatascience.com/10-practical-tips-you-need-to-know-to-personalize-jupyter-notebook-fbd202777e20>

for changing output cell color:

.output {

background-color: white;

}