Tools

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Outline

- Optional useful tools
- Anaconda
- Virtual Environments
- Jupyter Lab
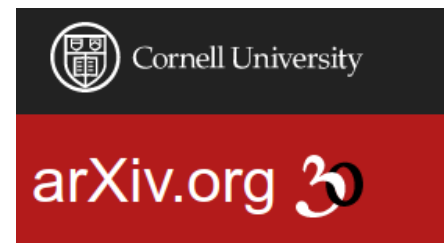
Useful tools

Optional Content - Useful for keeping track of things your interested in

arxiv-sanity-lite

A much lighter-weight arxiv-sanity from-scratch re-write. Periodically polls arxiv API for new papers. Then allows users to tag papers of interest, and recommends new papers for each tag based on SVMs over tfidf features of paper abstracts. Allows one to search, rank, sort, slice and dice these results in a pretty web UI. Lastly, arxiv-sanity-lite can send you daily emails with recommendations of new papers based on your tags. Curate your tags, track recent papers in your area, and don't miss out!

I am running a live version of this code on arxiv-sanity-lite.com.

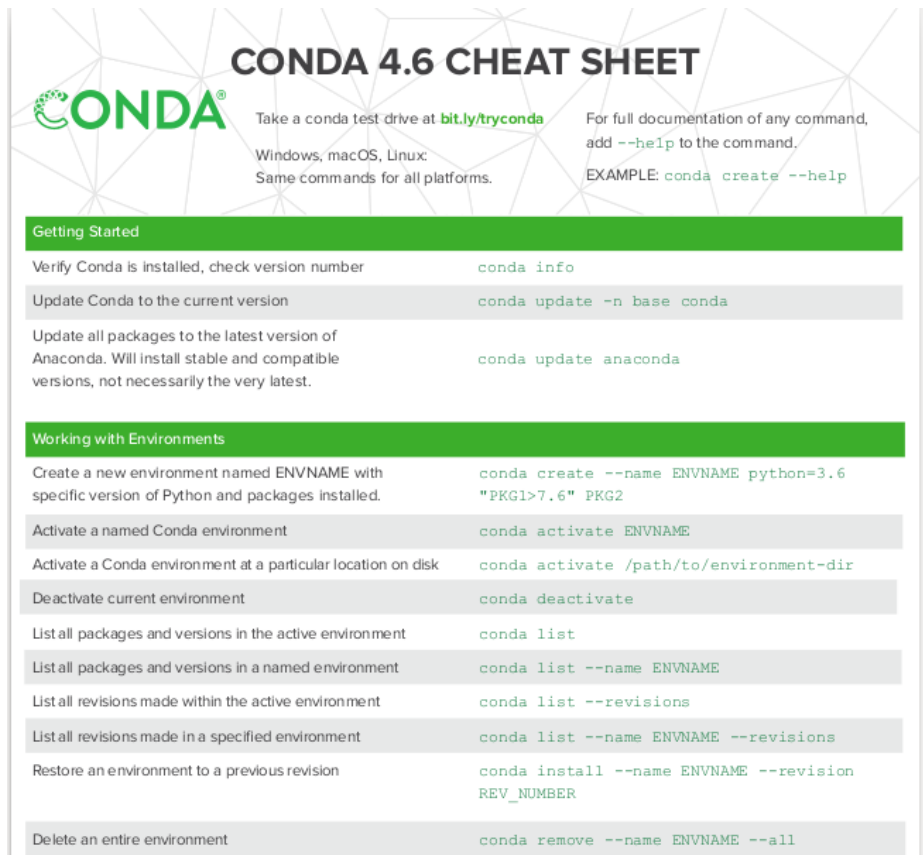# Anaconda

https://docs.anaconda.com/anaconda/install/index.html

See the installation section for your OS

Anaconda- helpful bits

Go to anaconda cheatsheet on course website - gives helpful commandline utilities

Anaconda- virtual environments

"A named, isolated, working copy of Python that that maintains its own files, directories, and paths so that you can work with specific versions of libraries or Python itself without affecting other Python projects.
Virtual environmets make it easy to cleanly separate different projects and avoid problems with different dependencies and version requiremetns across components."*
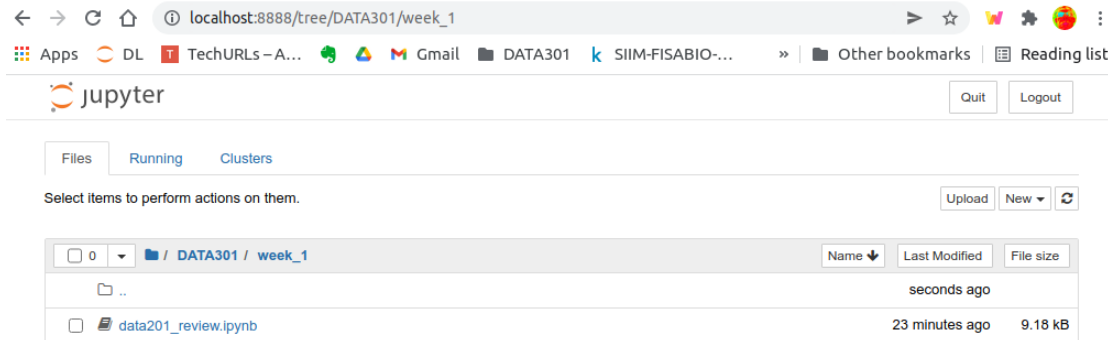
```
#run these at a command line
conda update -n base conda                    #update anaconda
conda create -n data301 python=3.9 anaconda   #create a new environment
conda activate data301                        #switch to it

#when done with this environment you can exit with
#conda deactivate
```

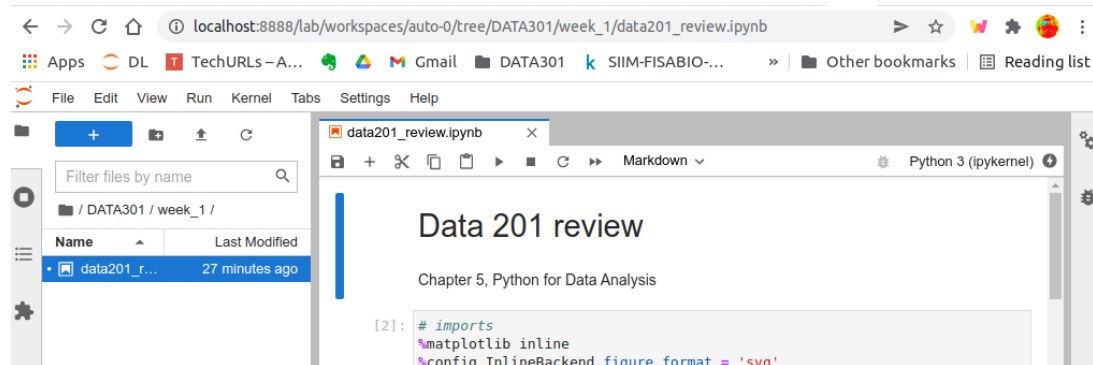They also come in handy when you want to share your configuration with others (see "Sharing an Environment" at https://docs.conda.io/)

* https://uoa-eresearch.github.io/eresearch-cookbook/recipe/2014/11/20/conda/

Jupyter Lab

Jupyter Notebook: The old way, launch from commandline, Automatically starts in browser

Jupyter Lab: The new way, launch from commandline, Automatically starts in browser

Can show multiple files at a time
Lots of extensions (careful they are not reviewed)
Seems to be the way Jupyter is going

But..
Debugging is primitive (ipykernel – uses default python,
Or python in virtual environment that we launched
Jupyter lab from)