- We will use the Anaconda Distribution
 - simple to install
 - comprehensive
 - package and environment management
 - No more pip install followed by dependency chasing

Set up a ML environment

Several choices

- Anaconda on your own machine
- Anaconda on AWS (or Azure, Google)
- Turn-key, cloud solution: Floydhub
- Turn-key, cloud solution: Paperspace

Anaconda on your own machine

- Pro: cheapest
- Con: potential limited by memory and power of your machine

- Link: <u>Download Anaconda (https://www.anaconda.com/download/#linux)</u> and run installer
 - if no browser available
 - save link, e.g., https://repo.continuum.io/archive/Anaconda3-2018
 Linux-x86_64.sh (https://repo.continuum.io/archive/Anaconda3-2018
 2018.12-Linux-x86_64.sh)
 - use wget on the link:

```
wget
https://repo.continuum.io/archive/Anaconda3
2018.12-Linux-x86_64.sh
```

- run the downloaded file: bash Anaconda3-2018.12-Linuxx86 64.sh
- accept defaults
 - allow your .bashrc to be updated:
 - or can do it later yourself: source .bashrc

Anaconda on AWS

- Same setup as Anaconda on your own machine ONCE you have knowledge of how to create machines on AWS
- Pro:
- high potential: you can rent machines with increased power, memory and GPU!
- knowing how to use a cloud services (AWS, Azure, Google) is a valuable skill!
- Con: Free-tier machine good to start but need to rent resouces (i.e., money)

Links

- Grant McKinnon (http://www.grant-mckinnon.com/)
 - <u>Setting up AWS for Kaggle (http://www.grant-mckinnon.com/?</u>
 <u>p=6%E2%80%8B)</u>

Floydhub

- Pro:
- Turn-key and cloud-based. No installation to start
- Con:
- Best as a Jupyter notebook server, not as a full-service machine
 - You WILL want a text editor at some point, particularly as you develop Python Classes/Modules

Paperspace

- Pro:
- Notebook server is Turn-key and cloud-based. No installation to start
- "ML in a box": Full featured machine (like AWS)
 - o BUT only advanced frameworks (e.g., TensorFlow) not sklearn!

- Con:
- Cost to rent is much higher than AWS
 - n.b., some providers use AWS as a back-end; you pay for convenience