# Tech Stack



## Programming Language: Python



# Why Python

- Most popular programming language for ML
- It is a high level language
- It is a general purpose language
- There is a large library of modules that can be used



# Python Drawbacks

- Speed issues
- Hard to reason about speed performance



### Please Learn the Basics of Python!

- If you've programmed before, Python is very easy to pick up
- For those who are beginner programmers, you have some catching up to do!
- Here's a good place to get started:
  - https://www.learnpython.org/
- For advanced Python tutorials:



https://realpython.com/

#### Common ML Modules

- NumPy (numerical computation)
- SciPy (statistics)
- Pandas (data analysis)
- Matplotlib (data visualization)
- Scikit-learn (machine learning)
- <u>TensorFlow</u> / <u>Pytorch</u> (deep learning)



#### Version Control: Git



## Using Git

- Introduction to Git
- Learning Git
- There are many tools that make Git even easier to learn
  - Github desktop
  - Some IDEs and text editors supports git



## Cloud Computing: AWS



# Why the Cloud

- Ease of sharing
- Shared environment
- Makes it easier to disseminate help



# Why AWS

- Most popular cloud by far
- Amazon has the best customer experiences

