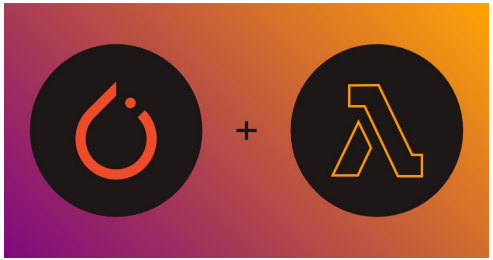
PyTorch

# Pytorch Tutorial

Ch 1 - Tensors



# Topics we will learn

1. What is Pytorch?
2. Pytorch vs Tensorflow
3. Tensors

# About Me

1. Currently a final year student at NSIT
2. Conducted AI research for over 2 years at IIITD and NSIT
3. Published works in AAAI, Elsevier, EMNLP, AACL-IJCNLP
4. Presented work in AAAI NYC Poster Session
5. Using pytorch for over 2 years for all my research projects
6. Awarded Pytorch Scholarship Challenge by Facebook and Udacity
7. Github - https://github.com/avinsit123
8. Portfolio - https://avinsit123.github.io/

# Prerequisites

1. Will to learn
2. Google Account
3. Working Network Connection
4. Latest version of Python and pip if you are doing this tutorial on local machine
5. Andrew Ng ML course(Better if you have done it!)

# What is Pytorch?

1. Open Source ML library designed to build and deploy machine learning models. Designed by research scientists at FAIR it is widely popular in both research and industry.
2. Very popular and in-demand. Must learn if you want to delve into deep learning.
3. Used by popular companies like Tesla and Facebook. ML Library of choice for many open source libraries
4. Other alternatives include Tensorflow, theano, scikit-learn, etc.


# Pytorch vs Tensorflow

1. Dynamic vs static graph - Eager Execution
2. Data Parallelism (torch.nn.DataParallel API for multiple GPUs)
3. Deployment for real-world applications(Tensorflow Serving)
4. Pythonic feel
5. Library vs Framework

# Tensors in Colab

# References


1. https://pytorch.org/tutorials/beginner/basics/tensorqs_tutorial.html
2. https://pytorch.org/tutorials/
3. https://pytorch.org/docs/stable/tensor_attributes.html
4. http://blog.ezyang.com/2019/05/pytorch-internals/
5. https://towardsdatascience.com/pytorch-vs-tensorflow-spotting-the-difference-25c75777377b?gi=30cf1bbc82b5