DEEP LEARNING LIBRARY

FREE ONLINE BOOKS

- 1. Deep Learning by Yoshua Bengio, Ian Goodfellow and Aaron Courville
- 2. Neural Networks and Deep Learning by Michael Nielsen
- 3. Deep Learning by Microsoft Research
- 4. Deep Learning Tutorial by LISA lab, University of Montreal

COURSES

- 1. Machine Learning by Andrew Ng in Coursera
- 2. Neural Networks for Machine Learning by Geoffrey Hinton in Coursera
- 3. Neural networks class by Hugo Larochelle from Université de Sherbrooke
- 4. Deep Learning Course by CILVR lab @ NYU
- 5. CS231n: Convolutional Neural Networks for Visual Recognition On-Going
- 6. Probabilistic Graphical Model by Daphne Koller in Coursera
- 7. Kevin Duh Class for Deep Net Deep Learning and Neural Network

VIDEO AND LECTURES

- 1. How To Create A Mind By Ray Kurzweil Is a inspiring talk
- Deep Learning, Self-Taught Learning and Unsupervised Feature Learning By Andrew Ng
- 3. Recent Developments in Deep Learning By Geoff Hinton
- 4. The Unreasonable Effectiveness of Deep Learning by Yann LeCun
- 5. Deep Learning of Representations by Yoshua bengio
- 6. Principles of Hierarchical Temporal Memory by Jeff Hawkins
- Machine Learning Discussion Group Deep Learning w/ Stanford AI Lab by Adam Coates
- 8. Making Sense of the World with Deep Learning By Adam Coates
- 9. Demystifying Unsupervised Feature Learning By Adam Coates
- 10. Visual Perception with Deep Learning By Yann LeCun

PAPERS

- 1. ImageNet Classification with Deep Convolutional Neural Networks
- 2. Using Very Deep Autoencoders for Content Based Image Retrieval
- 3. Learning Deep Architectures for AI
- 4. CMU's list of papers

TUTORIALS

- 1. UFLDL Tutorial 1
- 2. UFLDL Tutorial 2
- 3. Deep Learning for NLP (without Magic)
- 4. A Deep Learning Tutorial: From Perceptrons to Deep Networks

WEBSITES

- 1. deeplearning.net
- 2. deeplearning.stanford.edu
- 3. deeplearning.cs.toronto.edu

DATASETS

- 1. MNIST Handwritten digits
- 2. Google House Numbers from street view
- 3. CIFAR-10 and CIFAR-100
- 4. IMAGENET
- 5. Tiny Images 80 Million tiny images
- 6. Flickr Data 100 Million Yahoo dataset
- 7. Berkeley Segmentation Dataset 500

FRAMEWORKS

- 1. Caffe
- 2. Torch7
- 3. Theano
- 4. cuda-convnet

- 5. Ccv
- 6. NuPIC
- 7. DeepLearning4J

MISCELLANEOUS

- 1. Google Plus Deep Learning Community
- 2. Caffe Webinar
- 3. 100 Best Github Resources in Github for DL
- 4. Word2Vec
- 5. Caffe DockerFile
- 6. TorontoDeepLEarning convnet
- 7. Vision data sets
- 8. Fantastic Torch Tutorial My personal favourite. Also check out gfx.js
- 9. Torch7 Cheat sheet

OTHER LINK

- 1. https://ift6266h13.wordpress.com/home/resources/
- 2. http://www.dmi.usherb.ca/~larocheh/projects_classrbm.html
- 3. http://www.slideshare.net/hammawan/deep-neural-networks
- 4. http://www.iro.umontreal.ca/~bengioy/talks/mlss-austin.pdf
- 5. http://techtalks.tv/talks/lab/59461/
- https://www.evernote.com/shard/s433/sh/52b77d5f-a2cf-46f5-9b4c-68620f1682be/73527274007c5fa123cd6cc0d8bb10df
- 7. http://cl.naist.jp/~kevinduh/a/deep2014/140116-ResearchSeminar.pdf