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
2. 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
7. 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/
6. https://www.evernote.com/shard/s433/sh/52b77d5f-a2cf-46f5-9b4c-68620f1682be/73527274007c5fa123cd6cc0d8bb10df
7. http://cl.naist.jp/~kevinduh/a/deep2014/140116-ResearchSeminar.pdf