List of Deep Learning and NLP Resources

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* Introduction
http://iamtrask.github.io/2015/07/12/basic-python-network/
https://www.analyticsvidhya.com/blog/2016/08/deep-learning-path/
http://neuralnetworksanddeeplearning.com/index.html
https://github.com/adeshpande3/NLP-Stuff

* Statistics
https://github.com/rouseguy/intro2stats

* Linear Algebra

* Dimensionality Reduction
http://bl.ocks.org/ktaneishi/9499896#pca.js
http://www.cs.cmu.edu/~christos/TALKS/09-KDD-tutorial
http://cs.stanford.edu/people/karpathy/tsnejs/

* Logistic Regression

https://triangleinequality.wordpress.com/2013/12/02/logistic-regression/
http://deeplearning.net/software/theano/tutorial/examples.html#a-real-example-logistic-regression
http://deeplearning.net/tutorial/logreg.html
https://florianhartl.com/logistic-regression-geometric-intuition.html

* sk-learn

http://peekaboo-vision.blogspot.cz/2013/01/machine-learning-cheat-sheet-for-scikit.html
https://github.com/aigamedev/scikit-neuralnetwork
https://github.com/mmmayo13/scikit-learn-classifiers
https://pythonprogramming.net/flat-clustering-machine-learning-python-scikit-learn/
http://www.markhneedham.com/blog/2015/02/15/pythonscikit-learn-calculating-tfidf-on-how-i-met-your-mother-transcripts/
https://github.com/GaelVaroquaux/scikit-learn-tutorial
https://github.com/justmarkham/scikit-learn-videos
https://pythonprogramming.net/machine-learning-python-sklearn-intro/

* Theano
https://github.com/goodfeli/theano_exercises
http://deeplearning.net/tutorial/
http://deeplearning.net/tutorial/reading-list
http://deeplearning.net/tutorial/dA.html
http://deeplearning.net/tutorial/deeplearning.pdf - Just tutorials from the source above
http://deeplearning.net/software/theano/ - Scientific computing framework in Python
https://pypi.python.org/pypi/theanets
http://deeplearning.net/software/theano/tutorial/gradients.html
http://deeplearning.net/tutorial/logreg.html#logreg
http://deeplearning.net/software/theano/tutorial/
https://github.com/goodfeli/theano_exercises
https://github.com/Newmu/Theano-Tutorials
http://outlace.com/Beginner-Tutorial-Theano/
http://www.marekrei.com/blog/theano-tutorial/

* Keras
https://github.com/fchollet/keras - Extension of Theano, meant specifically for ANN work
https://keras.io/
https://github.com/fchollet/keras
https://blog.keras.io/introducing-keras-10.html
https://blog.keras.io/keras-as-a-simplified-interface-to-tensorflow-tutorial.html
* Perceptrons
+ https://datasciencelab.wordpress.com/2014/01/10/machine-learning-classics-the-perceptron/
+ https://triangleinequality.wordpress.com/2014/02/24/enter-the-perceptron/

* word2vec/embeddings
+ http://radimrehurek.com/gensim/models/word2vec.html - Gensim implementation of Word2Vec
https://radimrehurek.com/gensim/tut1.html
https://radimrehurek.com/gensim/tutorial.html
https://code.google.com/p/word2vec/ - Google implementation of word2vec
+ http://alexminnaar.com/word2vec-tutorial-part-i-the-skip-gram-model.html - Word2Vec
http://rare-technologies.com/word2vec-tutorial/ - Gensim Word2Vec tutorial (training, loading, using, etc.)
https://rare-technologies.com/making-sense-of-word2vec/
https://rare-technologies.com/fasttext-and-gensim-word-embeddings/
https://research.facebook.com/blog/fasttext/
https://www.kaggle.com/c/word2vec-nlp-tutorial
http://www-personal.umich.edu/~ronxin/pdf/w2vexp.pdf - Detailed write-up explaining Word2Vec
https://code.google.com/p/word2vec/
https://code.google.com/p/word2vec/source/browse/trunk/
http://u.cs.biu.ac.il/~nlp/resources/downloads/word2parvec/
http://deeplearning4j.org/word2vec.html
+ http://www.johnwittenauer.net/language-exploration-using-vector-space-models/
https://radimrehurek.com/gensim/models/doc2vec.html

* LSTM
+ https://iamtrask.github.io/2015/11/15/anyone-can-code-lstm/
+ http://colah.github.io/posts/2015-08-Understanding-LSTMs/
http://www.cs.toronto.edu/~graves/handwriting.html
https://github.com/HendrikStrobelt/lstmvis
https://github.com/wojzaremba/lstm
http://lstm.seas.harvard.edu/
https://github.com/stanfordnlp/treelstm
https://github.com/microth/PathLSTM
https://github.com/XingxingZhang/td-treelstm
+ http://deeplearning.net/tutorial/lstm.html#lstm
https://apaszke.github.io/lstm-explained.html
https://deeplearning4j.org/lstm.html
https://github.com/dennybritz/rnn-tutorial-gru-lstm
http://deeplearning.net/tutorial/lstm.html#lstm

* Embeddings
+ http://ronxin.github.io/wevi/
https://github.com/ronxin/wevi
wevi (from Rong Xin)
https://levyomer.wordpress.com/2014/04/25/dependency-based-word-embeddings/
Dependency-based word embeddings
https://github.com/stanfordnlp/GloVe
http://nlp.stanford.edu/projects/glove
https://github.com/maciejkula/glove-python
http://lebret.ch/words/
word embeddings from Remi Lebret (+ a tool for generating embeddings)
http://metaoptimize.com/projects/wordreprs/
embeddings and tools for basic NLP tasks
http://wordvectors.org/suite.php
word similarity data sets
http://wordvectors.org/suite.php
http://deeplearning4j.org/eigenvector
http://wordvectors.org/
https://github.com/semanticvectors/semanticvectors/wiki
http://clic.cimec.unitn.it/composes/semantic-vectors.html
+ https://blog.acolyer.org/2016/04/21/the-amazing-power-of-word-vectors/
+ https://www.kaggle.com/c/word2vec-nlp-tutorial/details/part-1-for-beginners-bag-of-words
+ https://www.kaggle.com/c/word2vec-nlp-tutorial/details/part-2-word-vectors
+ https://www.kaggle.com/c/word2vec-nlp-tutorial/details/part-3-more-fun-with-word-vectors
http://ronan.collobert.com/senna/
Code and embeddings from SENNA.
http://colinmorris.github.io/blog/1b-words-char-embeddings
http://www.cis.upenn.edu/~ungar/eigenwords/
http://www.offconvex.org/2016/07/10/embeddingspolysemy/
http://www.tensorflow.org/tutorials/word2vec/index.md
https://www.tensorflow.org/versions/r0.11/tutorials/word2vec/index.html
http://ronxin.github.io/lamvi/dist/#model=word2vec&backend=browser&query_in=good&query_out=G_bennet,B_circumstances
https://deeplearning4j.org/word2vec.html
+ http://mccormickml.com/2016/04/12/googles-pretrained-word2vec-model-in-python/

* Autoencoders
http://cs.stanford.edu/people/karpathy/convnetjs/demo/autoencoder.html
http://ufldl.stanford.edu/tutorial/unsupervised/Autoencoders/
https://triangleinequality.wordpress.com/2014/08/12/theano-autoencoders-and-mnist/
* Introductions


http://cl.naist.jp/~kevinduh/a/deep2014/

Kevin Duh lectures

http://www.deeplearningbook.org/

Deep Learning Book

http://ciml.info/

Hal Daume's book

http://nlp.stanford.edu/courses/NAACL2013/

Deep Learning for NLP Without Magic

http://info.usherbrooke.ca/hlarochelle/neural_networks/content.html

http://www.deeplearning.net/

Tutorials, software packages, datasets, and readings (in Theano)

http://web.stanford.edu/~jurafsky/slp3/

Jurafsky - chapter 19 (?) about word2vec and related methods

http://u.cs.biu.ac.il/~yogo/nnlp.pdf

Yoav Goldberg - Primer on Neural Network Models for NLP

http://neuralnetworksanddeeplearning.com/

http://neuralnetworksanddeeplearning.com/chap1.html

http://neuralnetworksanddeeplearning.com/chap2.html


http://neuralnetworksanddeeplearning.com/chap5.html


+ https://github.com/neubig/nlptutorial

http://deeplearning.net/reading-list/

* Summarization

https://github.com/gregdurrett/berkeley-doc-summarizer
http://nlp.cs.berkeley.edu/projects/summarizer.shtml
https://research.googleblog.com/2016/08/text-summarization-with-tensorflow.html?m=1
http://rare-technologies.com/text-summarization-with-gensim/
https://github.com/tensorflow/models/tree/master/textsum
https://github.com/harvardnlp/NAMAS
https://github.com/carpedm20/neural-summary-tensorflow

* Neural Machine Translation
http://lisa.iro.umontreal.ca/mt-demo
https://github.com/mila-udem/blocks-examples/tree/master/machine_translation
https://github.com/nyu-dl/dl4mt-tutorial
dl4mt
https://github.com/lmthang/nmt.matlab
https://github.com/neubig/nmt-tips
https://github.com/jonsafari/nmt-list
https://sites.google.com/site/acl16nmt/

* Natural Language Generation
https://github.com/simplenlg
https://github.com/nltk/nltk_contrib/tree/master/nltk_contrib/fuf

* Question Answering
https://github.com/jcoreyes/NLQA
https://github.com/jcoreyes/NLQA/tree/master/qanta
https://rajpurkar.github.io/SQuAD
https://github.com/fh295/DefGen2
http://www.visualqa.org/
http://cs.nyu.edu/~kcho/DMQA/

* NLP General
http://blog.mashape.com/list-of-25-natural-language-processing-apis/

25 NLP APIs
http://www.denizyuret.com/2015/03/parallelizing-parser.html
http://memkite.com/deep-learning-bibliography/#natural_language_processing
https://blog.monkeylearn.com/the-definitive-guide-to-natural-language-processing/

* NLTK
http://www.nltk.org/book/ch01.html

NLTK Book
https://pythonprogramming.net/tokenizing-words-sentences-nltk-tutorial/
https://www.youtube.com/watch?v=FLZvOKSCkxY&list=PLQVvva0QuDf2JswnfIgkliBlnZnlC4HL
http://textminingonline.com/dive-into-nltk-part-i-getting-started-with-nltk
Tokenizing words and sentences

* Image Processing
https://pythonprogramming.net/image-recognition-python/

* Support Vector Machines
https://pythonprogramming.net/linear-svc-example-scikit-learn-svm-python/
http://tullo.ch/articles/svm-py/
https://github.com/ajtulloch/svmpy
https://github.com/mesnilgr/nbsvm
https://www.csie.ntu.edu.tw/~cjlin/libsvm/

* Conditional Random Fields
http://sourceforge.net/projects/crfpp/files/crfpp/0.54/
http://blog.echen.me/2012/01/03/introduction-to-conditional-random-fields/

* Convolutional NN
+ http://www.wildml.com/2015/12/implementing-a-cnn-for-text-classification-in-tensorflow/
http://cs231n.github.io/
+ http://karpathy.github.io/2015/05/21/rnn-effectiveness/
https://github.com/karpathy/char-rnn
http://www.kdnuggets.com/2016/05/intro-recurrent-networks-tensorflow.html
http://www.rnnlm.org/
http://distill.pub/2016/augmented-rns/
https://github.com/distillpub/post-augmented-rns
https://github.com/dennybritz/tf-rnn
https://github.com/dennybritz/rnn-tutorial-rnnlm
https://github.com/shawnwun/RNNLG
https://github.com/isi-nlp/Zoph_RNN
https://github.com/facebook/Stack-RNN
https://github.com/kjw0612/awesome-rnn

* Sequence to sequence
* k-means
  https://datasciencelab.wordpress.com/2013/12/12/clustering-with-k-means-in-python/
  https://codesachin.wordpress.com/2015/11/14/k-means-clustering-with-tensorflow/
  http://stanford.edu/class/ee103/visualizations/kmeans/kmeans.html

* k-nearest neighbors
  http://glowingpython.blogspot.com/2012/04/k-nearest-neighbour-classifier.html
  http://glowingpython.blogspot.com/2012/04/k-nearest-neighbor-search.html

* Recursive NN

* Network Analysis
  http://snap.stanford.edu/node2vec/
  http://glowingpython.blogspot.com/2013/02/betweenness-centrality.html
  https://snap.stanford.edu/data/
  https://pypi.python.org/pypi/python-graph
  http://glowingpython.blogspot.com/2011/05/four-ways-to-compute-google-pagerank.html

* Parsing
https://spacy.io/blog/parsing-english-in-python
Parsing English in Python
https://pypi.python.org/pypi/bllipparser/
https://github.com/BLLIP/bllip-parser
http://nlp.stanford.edu/software/lex-parser.shtml
http://demo.ark.cs.cmu.edu/parse
+
https://github.com/tensorflow/models/tree/master/syntaxnet/syntaxnet/models/parsey_mcparseface
+ https://github.com/tensorflow/models/tree/master/syntaxnet
https://github.com/tensorflow/models/blob/master/syntaxnet/universal.md
+ https://research.googleblog.com/2016/05/announcing-syntaxnet-worlds-most.html
https://research.googleblog.com/2011/03/building-resources-to-syntactically.html
http://universaldependencies.org/
https://github.com/tensorflow/models/tree/master/syntaxnet

* Semantic Parsing
https://github.com/wcmac/sippycup
Assignment from Stanford
http://nbviewer.jupyter.org/github/wcmac/sippycup/blob/master/sippycup-unit-0.ipynb
http://nbviewer.jupyter.org/github/wcmac/sippycup/blob/master/sippycup-unit-1.ipynb
http://nbviewer.jupyter.org/github/wcmac/sippycup/blob/master/sippycup-unit-2.ipynb
http://nbviewer.jupyter.org/github/cgpotts/cs224u/blob/master/semparse_homework.ipynb
Semafor - semantic parser (Das and Smith 2011)
AMR
http://amr.isi.edu/research.html
https://github.com/c-amr/camr
http://www.isi.edu/natural-language/software/amrparser.tar.gz
http://www.isi.edu/natural-language/software/amr2eng.zip

Transforming Dependency Structures to Logical Forms for Semantic Parsing

https://github.com/sivareddyg/deplambda
http://www-nlp.stanford.edu/software/sempre/
https://github.com/percyliang/semпре
http://nlp.stanford.edu/projects/snli/

The Stanford Natural Language Inference (SNLI) Corpus

* CCG

https://github.com/mikelewis0/easyccg
http://openccg.sourceforge.net/
https://github.com/OpenCCG/openccg
http://openccg.sourceforge.net/

* Linear Regression

http://glowingpython.blogspot.com/2012/03/linear-regression-with-numpy.html

* numpy

http://glowingpython.blogspot.com/2012/01/monte-carlo-estimate-for-pi-with-numpy.html

* Neural Attention Models
+ http://www.kdnuggets.com/2016/01/attention-memory-deep-learning-nlp.html
https://github.com/facebook/NAMAS
http://groups.inf.ed.ac.uk/cup/codeattention/

* Topic Modeling
http://www.cs.columbia.edu/~blei/topicmodeling_software.html
http://blog.echen.me/2011/08/22/introduction-to-latent-dirichlet-allocation/

* Dialogue Systems

* Videos of presentations
https://www.youtube.com/watch?v=qSA9v7ZkC7Q&feature=youtu.be
Lecture by Chris Potts on Distributed word representations: dimensionality reduction
https://www.youtube.com/watch?v=JSNZA8jVcm4
Schmidhuber
https://www.youtube.com/watch?v=HrMU1GgyxL8
LeCun
https://www.youtube.com/watch?v=DLItuVVKJOw
Duh (part 1 of 4)

* Skip-thoughts
https://github.com/ryankiros/skip-thoughts
https://github.com/kyunghyuncho/skip-thoughts
https://gab41.lab41.org/lab41-reading-group-skip-thought-vectors-fec68c05aa92
http://deeplearning4j.org/thoughtvectors
http://gabgoh.github.io/ThoughtVectors/

* Sentiment
http://sentiment christopherpotts.net/ - Tutorial on deep sentiment analysis
http://sentiment christopherpotts.net/lexicons.html
http://nlp.stanford.edu/sentiment/ - dataset (and code) for Richard Socher’s sentiment system
http://sentiment140.com

* Bibliographies
http://clair.si.umich.edu/homepage/bib2html/dl.pdf
Deep Learning and NLP bib (made by UMich)
http://clair.si.umich.edu/homepage/bib2html/dl.bib
bibtex file for the above PDF
http://clair.si.umich.edu/clair/homepage/bib2html/misc-bib.html
Misc. bib (compiled by UMich)

* Courses
http://cs224d.stanford.edu/syllabus.html
Deep Learning for NLP @ Stanford
http://ace.cs.ohiou.edu/~razvan/courses/dl6890/index.html
https://www.youtube.com/playlist?list=PL6Xpj9I5qXYEcOhn7TqghAJ6NAPrNmUBH
Neural networks class - Universitй de Sherbrooke
http://web.stanford.edu/class/cs224w/
Social and Information Network Analysis - Jure Leskovec
http://rll.berkeley.edu/deeprlcourse/
Deep RL at Berkeley
https://github.com/thejakeboy/umich-eecs545-lectures

Jake Abernethy’s 545 at Michigan
https://github.com/lmarti/machine-learning
https://classroom.udacity.com/courses/ud730

Vincent Vanhoucke

Winson @MIT (AI)
https://www.youtube.com/playlist?list=PLehuLRPyt1Hyi78UOkMPWCGRxGcA9NVOE

STAT 946: Deep Learning, Ali Ghodsi

* Quora links

* Tutorials

Percy Liang Tutorial

* Backpropagation
http://colah.github.io/posts/2015-08-Backprop/

* Visualization
http://glowingpython.blogspot.com/2012/10/visualizing-correlation-matrices.html
http://bl.ocks.org/ktaneishi/9265946
dendrogram
http://www.graphviz.org/Download.php

* Python
https://github.com/thejakeyboy/Python-Lectures

* Language Modeling
https://github.com/turian/neural-language-model
http://www.foldl.me/2014/kneser-ney-smoothing/
http://beyondexpectations.quora.com/An-Intuitive-Explanation-of-Good-Turing-Smoothing
https://github.com/turian/neural-language-model - Code for various neural language models
http://statmt.org/ngrams/

* TensorFlow (731)
http://www.kdnuggets.com/2016/01/deep-learning-spark-tensorflow.html
http://playground.tensorflow.org
https://github.com/tensorflow/models
https://www.tensorflow.org/versions/r0.10/tutorials/image_recognition/index.html
https://github.com/tensorflow/models/tree/master/lm_1b
https://github.com/tensorflow/models/tree/master/im2txt
https://github.com/nlintz/TensorFlow-Tutorials
https://github.com/aymericdamien/TensorFlow-Examples
https://github.com/tensorflow/skflow
https://github.com/jtoy/awesome-tensorflow
https://github.com/pkmital/tensorflow_tutorials
https://github.com/nlintz/TensorFlow-Tutorials

* Information Extraction (232)
http://knowitall.cs.washington.edu/paralex/
http://openie.allenai.org/
http://reverb.cs.washington.edu/
https://github.com/dmorrgoogle/relation-extraction-corporus
http://www.chokkan.org/software/crfsuite/
http://mallet.cs.umass.edu/

* Reinforcement Learning
http://www.wildml.com/2016/10/learning-reinforcement-learning/

* Graph-based learning
https://blog.insightdatascience.com/graph-based-machine-learning-6e2bd8926a0
https://blog.insightdatascience.com/graph-based-machine-learning-part-2-f7096c801bec
https://research.googleblog.com/2016/10/graph-powered-machine-learning-at-google.html
https://bitbucket.org/taynaud/python-louvain

* Mega lists
http://blog.christianperone.com/
https://github.com/ChristosChristofidis/awesome-deep-learning
https://github.com/gutfeeling/beginner_nlp
https://github.com/andrewt3000/dl4nlp
https://github.com/ujjwalkarn/DataSciencePython
https://github.com/bulutyazilim/awesome-datascience
https://github.com/owainlewis/awesome-artificial-intelligence/blob/master/README.md
http://deeplearning.net/software_links/
https://github.com/edobashira/speech-language-processing
http://www.johnwittenauer.net/a-compendium-of-machine-learning-resources/
http://www.jeremydjiangonphd.com/category/deep-learning/
http://meta-guide.com/software-meta-guide/100-best-github-deep-learning

* Speech
http://kaldi-asr.org/
https://github.com/claritylab/lucida
http://speechkitchen.org/home/experiments/
http://www.speech.cs.cmu.edu/SLM/toolkit.html
https://sourceforge.net/projects/kaldi/

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https://github.com/dennybritz/nn-from-scratch
https://github.com/dennybritz/deeplearning-papernotes
https://github.com/lisa-lab/pylearn2

http://www.scipy-lectures.org/
https://www.coursera.org/learn/machine-learning
http://www.kdnuggets.com/2015/10/top-arxiv-deep-learning-papers-explained.html


http://nbviewer.jupyter.org/gist/yoavg/d76121dfde26184222139

https://sites.google.com/site/shahriarinia/home/ai/machine-learning

https://github.com/udibr/headlines

https://sites.google.com/a/colorado.edu/2016-naacl-ws-human-computer-qa/shared-task

http://www.clips.ua.ac.be/pages/pattern

https://github.com/predictors/iris_flower_classifier_demo


http://www.autonlab.org/tutorials/
http://www.autonlab.org/tutorials/list.html

https://github.com/NNBlocks/NNBlocks/tree/master/nnb
https://github.com/zer0n/deepframeworks

http://www.isi.edu/view_our_work/open-source軟件

http://jeffhuang.com/search_query_logs.html

http://jsoup.org/

http://www.cs.cmu.edu/~mfaruqui/soft.html - list of datasets and tools maintained by Manaal Faruqui

http://flowingdata.com/2015/07/21/download-data-for-1-7-billion-reddit-comments/
http://www.hlt.utdallas.edu/~sajib/multi-clusterings.html
https://www.trustpilot.com/

liblinear


http://deeplearning.net/reading-list/

http://www.youtube.com/playlist?list=PL5-da3qGB5iCeMbQuqbbCOQWcS6OYBr5A

http://www.iro.umontreal.ca/~lisa/twiki/bin/view.cgi/Public/PublicDatasets
http://www.iro.umontreal.ca/~lisa/twiki/bin/view.cgi/Public/WebHome
http://www.iro.umontreal.ca/~lisa/twiki/bin/view.cgi/Public/ListDatasets

http://www.denizyuret.com/2015/03/alec-radfords-animations-for.html
http://www.denizyuret.com/2015/02/beginning-deep-learning-with-500-lines.html
http://www.denizyuret.com/2014/05/how-to-learn-about-deep-learning.html


http://deeplearning.net/tutorial/deeplearning.pdf

https://github.com/terryum/awesome-deep-learning-papers

http://www.holehouse.org/mlclass/

https://www.tastehit.com/blog/google-deepmind-alphago-how-it-works/
http://www.nature.com/nature/journal/v529/n7587/pdf/nature16961.pdf
https://gogameguru.com/i/2016/03/deepmind-mastering-go.pdf
AlphaGo

https://github.com/cgpotts/annualreview-complearning

https://github.com/cgpotts/cs224u

http://www.kdnuggets.com/2016/06/review-deep-learning-models.html
http://www.kdnuggets.com/2016/06/intro-scientific-python-matplotlib.html
http://www.kdnuggets.com/2016/05/machine-learning-key-terms-explained.html
http://karpathy.github.io/2015/10/25/selfie/

https://pypi.python.org/pypi/polyglot
Polyglot

http://stanford.edu/~lmthang/bivec/
bivec

http://www.cntk.ai/
cntk

https://devblogs.nvidia.com/parallelforall/deep-learning-nutshell-core-concepts/


pyfst


http://www.scipy-lectures.org/

https://docs.google.com/spreadsheets/d/1rO3cYZrrIKNMH9poTQEGhKUSOoS3zML0AjDltoGWzOQ/edit#gid=0

https://github.com/jakevdp/PythonDataScienceHandbook
http://scott.fortmann-roe.com/docs/BiasVariance.html

https://snap.stanford.edu/data/

https://research.googleblog.com/2015/06/a-multilingual-corpus-of-automatically.html

http://www.cs.cmu.edu/~ark/personas/


http://spacy.io/

https://www.wordnik.com/
http://onlinebooks.library.upenn.edu/webbin/gutbook/lookup?num=3202
https://github.com/davidjurgens/crown
http://takelab.fer.hr/sts/
http://cllic.cimec.unitn.it/composes/toolkit/
http://babelnet.org/

http://cllic.cimec.unitn.it/dm/
https://github.com/dkpro/dkpro-similarity

http://leon.bottou.org/projects/sgd

+ https://rawgit.com/dpressel/Meetups/master/nlp-meetup-2016-02-25/presentation.html
https://github.com/dpressel/baseline
ai.stanford.edu/~ajoulin/code/nn.zip
https://github.com/facebookresearch/fastText
http://metaoptimize.com/projects/wordreps/
http://rs.io/100-interesting-data-sets-for-statistics/
http://deeplearning.net/software/pylearn2/
https://github.com/lisa-groundhog/GroundHog
https://github.com/fh295/GroundHog
https://ift6266h15.wordpress.com/category/lectures/page/3/
http://cogcomp.cs.illinois.edu/page/resource_view/49
http://deeplearning.net/software_links/
http://www-lium.univ-lemans.fr/cslm/
https://pypi.python.org/pypi/textteaser/0.3
https://pypi.python.org/pypi/boilerpipe
https://pypi.python.org/pypi/goose-extractor/
https://pypi.python.org/pypi/nameparser/0.3.9
https://wit3.fbk.eu/
Freebase
Freebase relations corpus

http://bamos.github.io/2016/08/09/deep-completion/


https://www.cs.ox.ac.uk/people/nando.defreitas/machinelearning/

https://techcrunch.com/2016/08/18/facebooks-artificial-intelligence-research-lab-releases-open-source-fasttext-on-github/
https://github.com/facebookresearch/fastText

http://www.thespermwhale.com/jaseweston/icml2016/

http://www.paddlepaddle.org/

https://www.cntk.ai/

https://github.com/swiseman/nn_coref

https://github.com/wojciechz/learning_to_execute

http://www.jflap.org/

https://oaqa.github.io/

https://pypi.python.org/pypi/quepy/
http://pyke.sourceforge.net/

https://bitbucket.org/yoavartzi/spf

http://www.openfst.org/twiki/bin/view/FST/WebHome

https://en.wikipedia.org/wiki/Forward%E2%80%93backward_algorithm

https://github.com/neubig/nlptutorial


https://github.com/saffsd/langid.py

https://bitbucket.org/richardpenman/sitescraper/

http://www1.icsi.berkeley.edu/~demelo/etymwn/

https://github.com/thinkzhou/PCFG

https://github.com/percyliang/brown-cluster
https://github.com/mheilman/tan-clustering

http://christos-c.com/bible/

http://www.eat.rl.ac.uk/
http://w3.usf.edu/FreeAssociation/

http://www.gavagai.se/distributional_semantics.php

https://github.com/jakevdp/PythonDataScienceHandbook

+ https://medium.com/@philjama/how-tensors-advance-human-technology-3831bff0906#.x1pg63new


http://www.kdnuggets.com/2016/05/implement-machine-learning-algorithms-scratch.html


http://www.kdnuggets.com/2016/08/seven-steps-understanding-computer-vision.html

http://nlp.stanford.edu/projects/histwords/

https://github.com/ipod825/keraflow

http://videolectures.net/deeplearning2016_cho_language_understanding/

http://www.kdnuggets.com/2013/12/top-datasets-on-reddit.html

https://github.com/baidu/paddle

http://veredshwartz.blogspot.co.il/2016/08/crowdsourcing-for-nlp.html

https://github.com/codalab/codalab-worksheets/wiki
https://github.com/kbalog/russir2016-el

http://arkitus.com/patterns-for-research-in-machine-learning/

https://www.reddit.com/r/MachineLearning/comments/515dus/kdd_panel_is_deep_learning_the_new_42/

https://www.linkedin.com/pulse/google-nli-kill-market-linguistic-apis-review-yuri-kitin

http://michal.sustr.sk/blog/outlier-analysis/

https://research.googleblog.com/2016/08/tf-slim-high-level-library-to-define.html

https://research.googleblog.com/2016/03/train-your-own-image-classifier-with.html

https://radimrehurek.com/gensim/models/phrases.html

http://alt.qcri.org/semeval2017/

http://swoogle.umbc.edu/SimService/index.html

https://github.com/dlwh/epic

https://github.com/dlwh/breeze

https://github.com/jacobandreas/pragma

https://github.com/jacobandreas/nmn2
https://github.com/uclmr/acl2015tutorial

http://phrasesinenglish.org/#

http://www.natcorp.ox.ac.uk/


https://colinmorris.github.io/blog/dreaming-rbms

https://colinmorris.github.io/blog/rbm-sampling

https://iamtrask.github.io/2015/07/28/dropout/

http://press.liacs.nl/mirflickr/

http://www.mcmchandbook.net/HandbookSampleChapters.html

https://www.reddit.com/r/MachineLearning/comments/54bpsb/yann_lecun_deep_learning_and_the_future_of_ai/

https://github.com/ryankiros/neural-storyteller

https://github.com/andreasvc/seekaywhy

http://text-processing.com/demo/

http://odur.let.rug.nl/~vannoord/Fsa/
https://github.com/sinantie/Generator

http://nlpado.de/~sebastian/software/dv.shtml

https://www.linkedin.com/pulse/google-nli-kill-market-linguistic-apis-review-yuri-kitin

https://github.com/dlwh/puck/

http://www.scalanlp.org/

http://scott.fortmann-roe.com/docs/BiasVariance.html

http://blog.webkid.io/datasets-for-machine-learning/

https://github.com/mlbright/edmonds


https://www.analyticsvidhya.com/blog/2016/05/19-data-science-tools-for-people-dont-understand-coding/


https://www.analyticsvidhya.com/blog/2016/01/12-pandas-techniques-python-data-manipulation/
https://github.com/deepmind/rc-data/

http://textblob.readthedocs.io/en/dev/

https://github.com/proycon/pynlpl

https://github.com/proycon/python-ucto

https://github.com/explosion/spaCy

https://github.com/dasmith/stanford-corenlp-python

https://pypi.python.org/pypi/editdistance

https://github.com/Lasagne/Lasagne

https://github.com/ContinuumIO/topik

https://github.com/pybrain/pybrain

https://github.com/echen/restricted-boltzmann-machines

https://github.com/jmschrei/yahmm/

https://github.com/andersbl/deeppy

https://github.com/dmlc/mxnet
http://ufldl.stanford.edu/tutorial/supervised/MultiLayerNeuralNetworks/

http://deeplearning.net/tutorial/mlp.html#mlp

https://deeplearning4j.org/restrictedboltzmannmachine.html

https://deeplearning4j.org/deepautoencoder.html

http://deeplearning.net/tutorial/dA.html

https://github.com/aikorea/awesome-rl

http://stackoverflow.com/questions/1859554/what-is-entropy-and-information-gain

https://github.com/kjw0612/awesome-random-forest

https://github.com/dpressel/baseline

https://github.com/karpathy/neuraltalk

https://github.com/Microsoft/DMTK

https://github.com/PaddlePaddle/Paddle

https://sourceforge.net/p/rnnl/wiki/Home/

https://github.com/mast-group/convolutional-attention

http://www.ling.ohio-state.edu/~elsner.14/resources/chat-manual.html

https://github.com/hiroki13/response-ranking

https://github.com/sleepinyourhat/vector-entailment/releases/

https://code.google.com/archive/p/clml/

http://deeplearning.net/tutorial/rnnslu.html

https://pypi.python.org/pypi/TheanoLM

http://www.kyunghyuncho.me/home/code

http://deeplearning.net/demos/

https://github.com/sq6ra/encoder-decoder-model-with-sequence-learning-with-RNN-LSTM-

https://devblogs.nvidia.com/parallelforall/deep-learning-nutshell-core-concepts/


https://github.com/karlmoritz/bicvm


https://github.com/phanein/deepwalk
http://tflearn.org/


http://clic.cimec.unitn.it/~georgiana.dinu/down/

https://github.com/ageron/handson-ml

https://github.com/NickShahML/tensorflow_with_latest_papers


https://github.com/amueller/introduction_to_ml_with_python

http://pystruct.github.io/

https://github.com/amueller/word_cloud

https://github.com/ipython-books/cookbook-code

https://github.com/ipython-books/minibook-2nd-code

https://github.com/kelvinxu/arctic-captions

http://videolectures.net/deeplearning2016_montreal/
https://sites.google.com/site/deeplearningsummerschool2016/speakers

http://allenai.org/data.html


https://github.com/lium-lst/nmtpy

https://github.com/tensorflow/fold

http://thenewstack.io/reinforcement-learning-ready-real-world/

https://github.com/stanfordnlp/spinn

https://github.com/yogarshi/bispars

https://vision.ece.vt.edu/clipart/

http://allenai.org/data.htmlallenai.org

https://github.com/deepmind/lab
https://github.com/facebookresearch/fastText/blob/master/pretrained-vectors.md
https://jaan.io/what-is-variational-autoencoder-vae-tutorial/
https://code.google.com/archive/p/morphisto/
https://github.com/mesnilgr/nbsvm
https://bitbucket.org/melsner/
https://github.com/fchollet/keras/blob/master/examples/imdb_lstm.py
https://github.com/ciprian-chelba/1-billion-word-language-modeling-benchmark
https://metamind.io/research/the-wikitext-long-term-dependency-language-modeling-dataset
https://github.com/nyu-dl/Intro_to_ML_Lecture_Note
https://github.com/nyu-dl/NLP_DL_Lecture_Note
https://github.com/clab/dynet
http://www.mmds.org/
https://github.com/facebook/MemNN/tree/master/DBLL
https://github.com/jiweil/Neural-Dialogue-Generation
https://github.com/tkipf/gcn
https://github.com/deepmind/rc-data/