

List is chronological (better start with 3. and continue with Thomas Kipf slides)

1. DeepWalk: Online Learning of Social Representations, Bryan Perozzi, Rami Al-Rfou, Steven Skiena, <https://arxiv.org/abs/1403.6652>

Steven Skiena talk <https://www.youtube.com/watch?v=aZNtHJwflVg>

Bryan Perozzi talk <https://www.youtube.com/watch?v=n12HS-24CtA> (original KDD presentation)

Highly influential, simple word2vec inspired approach.

2. Current graph neural nets SOTA (convolutions)

SEMI-SUPERVISED CLASSIFICATION WITH GRAPH CONVOLUTIONAL NETWORKS,
Thomas Kipf, Max Welling <https://arxiv.org/pdf/1609.02907.pdf>

Thomas Kipf presentation slides <http://tkipf.github.io/misc/SlidesCambridge.pdf>

Max Welling presentation video https://www.youtube.com/watch?v=0_O8PdZBc5s

ICLR2017 reviews <https://openreview.net/forum?id=SJU4ayYgl>

Simple idea, original paper explained how it could be derived from spectral graph theory point of view.

3. Jure Leskovec tutorial on graph embeddings and graph convolutions
<http://snap.stanford.edu/proj/embeddings-www/> (Good start point)

4. Inductive Representation Learning on Large Graphs, William L. Hamilton, Rex Yin, Jure Leskovec, GraphSage <https://arxiv.org/pdf/1706.02216.pdf>

This to the best of my knowledge the latest paper on scalable graph convolutions, multiple applications, efficient realisation. This will be our last subject. Lectures on 19th and 26th will be for projects defence.