March 3, 2020

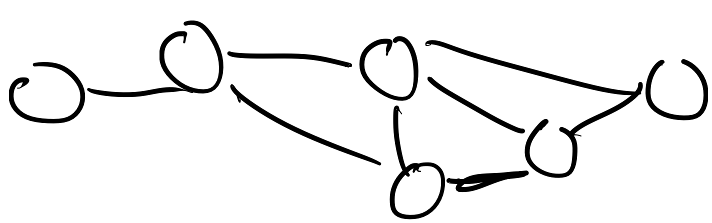
Class so far:

1. least squares → objective functions
   subroutine
2. optimization → SGD
3. dimensionality redux / matrix fact.
   PCA ⟷ spectral clustering
   latent factors ⟷ node representation learning

Next: "network science"

methods for graph data

Graph: set of nodes and edges



Example: FB social network

$i \overset{\text{undir.}}{\text{———}} j$ $\qquad$ $i \xrightarrow{\text{dir.}} j$

also network

network	node	edge	undir/dir
FB	users	friendship	undir
FB	users	message	dir
Cora	papers	citation	dir
Email	email addresses	sent email	dir
Coauthorship	scientists	coauthored paper	undir
Co-purchasing			
Co-viewing			