Graph Spectra

How to run

The assignment is handled in as a Jupyter Notebook. In the data directory, some sample data is provided.

Run the code by sequentially executing each block of the code.

Code structure

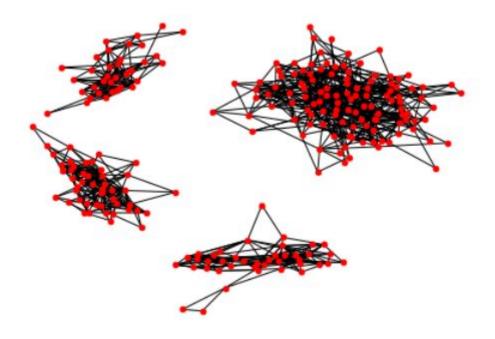
The code is structured in three functions that read the data, plot it, and apply the k-eigenvector algorithm on it.

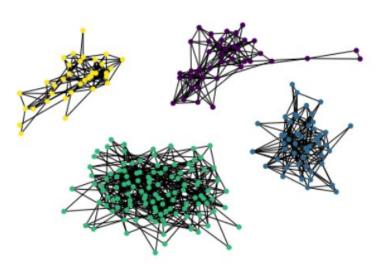
These functions are first used on on a real data set prepared by Ron Burt. He dug out the 1966 data collected by Coleman, Katz and Menzel on medical innovation, which contains data from physicians in four towns in Illinois: Peoria, Bloomington, Quincy and Galesburg.

The second data set is synthetic.

Results

Dataset 1:





Dataset 2:

