

DATA.STAT.770 Dimensionality Reduction and Visualization, Spring 2021, Exercise set 13

Part H: Graph Visualization

Problem H1: Graph Visualization Software

Familiarize yourself with at least one of the open source graph visualization softwares mentioned on Lecture 13. Explain what graph layout possibilities are provided by the software.

Show an example of a force-directed layout created by the software. Download the college football graph from <http://www.cise.ufl.edu/research/sparse/matrices/Newman/football.html> in one of the available formats. This graph depicts football games between American college teams in fall 2000. The download page also depicts an example visualization that is possible for this graph; try to achieve a visualization that is at least as informative-looking as the one on the page. Load the graph data set into the software (you may need to convert it to a slightly different file format, depending on what your chosen software supports), and create a force-directed layout for it; give the resulting plot in your report. Alternatively, choose a different graph data set found elsewhere (describe what it is and where it is available) and create a force-directed layout for that.