

COMM 645, LAB 9: DUE NOVEMBER 07, 2012

Please e-mail your lab to comm645@ognyanova.net before 2pm on Wednesday.

This lab will test your ability to visualize network data using Gephi.

Your assignment consists of the following:

- 1) Select a small network dataset that includes at least one node attribute. Feel free to use one of the datasets we have examined in class or worked with in previous assignments.
- 2) Import the data in Gephi and visualize the network. Use node attributes and network/node metrics to change the color and size of the node symbols.
For example, you can assign node colors based on the actor attribute in your data. You can set the node size to be proportional to a node measure (e.g. degree, betweenness, or closeness centrality, etc.).
- 3) Save your visualization to a PDF file.
- 4) In addition to that PDF file, submit a written report including:
 - a. A brief description of the data you used.
 - b. A brief description of the way you visualized your network. Explain what different node colors and sizes represent. Do this for any other visual properties (edge width, label size, etc.) that you have used to convey information.
 - c. What graph layout algorithm did you use? In a few sentences, summarize the main idea behind that algorithm. For a brief overview, take a look at the Gephi layouts tutorial (www.gephi.org/users/tutorial-layouts).
 - d. Did your visualization reveal any interesting patterns that you could further test with network analytical tools? What were those patterns?