# Homework 3: Clustering Analysis for Complex Networks

**Code and Report Submission Due: November 29 2016 11:59PM**
Please clearly state the UB Person numbers and UB IT names for all the group members on the cover of the report. We do NOT collect hard copy reports for this homework.

Problem: You are required to implement the Markov Clustering Algorithm (MCL) and apply the algorithm to the provided three datasets, *AT&T Web network*, *physics collaboration network*, and *yeast metabolic network* (See below). Implement the MCL algorithm, and visualize your clustering results using Pajek (http://vlado.fmf.uni-lj.si/pub/networks/pajek/).
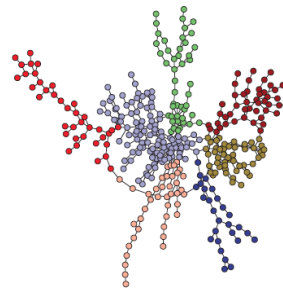
Datasets: Datasets can be found on Piazza. Please refer to README for more details.
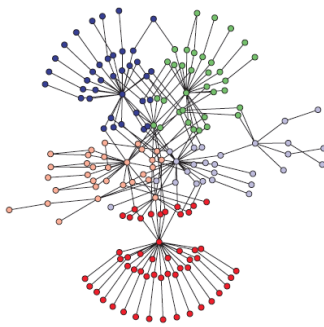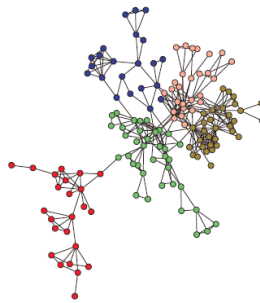
AT&T Web network   physics collaboration network   yeast metabolic network

Submitting Materials: Your final submission should be a zip file named as Homework3.zip. In the zip file, you should include:
- A folder "Code", which contains all the codes used in this homework. Inside the folder, please have a file "README" which describes how to run your code.
- Report: A pdf file named as Homework3.pdf. The report should at least consist of the following parts: 1) your own understanding and implementation of MCL algorithm; 2) clustering visualization results for each dataset.

Log in any CSE department server and submit your zip file as follows:
submit_cse601 Homework3.zip

Please refer to Piazza for late submission policy. We will take the submission time recorded by the server as the time of your submission.

This homework must be done independently. Running your submitted code should be able to reproduce the results in the report. Note that copying code/results/report from another group or source is not allowed and may result in an F in the grades of all the team members. Academic integrity policy can be found at http://www.cse.buffalo.edu/shared/policies/academic.php