Frontiers of Network Science 6250/4250, Fall 2024
Assignment 1, Network Selection due at 11:59 pm on October 8th

Select two different real-world networks for analysis in this assignment. One network can be from your repository. Another network (or both if you do not have access to some repository) should be taken from one of the following repositories:

- SNAP repository (http://snap.stanford.edu/)
- Koblenz set (KS) (http://konect.uni-koblenz.de/)
- Network Repository (NR) (http://www.networkrepository.com/)
- Pajek datasets (http://vlado.fmf.uni-lj.si/pub/networks/data/)
- Mark Newman's Collection (http://www-personal.umich.edu/~mejn/netdata/)
- DIMACS Challenge Graphs (http://www.dis.uniroma1.it/challenge9/download.shtml)
- UF Sparse Matrix Collection (http://www.cise.ufl.edu/research/sparse/matrices/index.html)
- Laboratory for Web Algorithms (http://law.di.unimi.it/datasets.php)
- Colorado Index of Complex Networks (ICON) - A large collection of networks described and indexed by the research group of Aaron Clauset.
- Network Datasets by Eric D. Kolaczyk
- Linton Freeman's Network Data - Over 300 datasets are in UCINET format.
- • Network Science B—Network Datasets—Network data sets from Albert-László Barabási, Network Science book. This includes data on IMDB actors, arXiv scientific collaboration, a network of routers, the US power grid, protein-protein interactions, cell phone users, citation networks, metabolic reactions, and e-mail networks.
- Nexus - Repository of network datasets in GraphML and igraph formats.
- Pajek Datasets.
- Siena Datasets.
- UCI Network Data Repository.

The network must have at least 500 nodes, and the number of edges must be at least 2,000. Given your choice of tools, we encourage you to select the networks that your computer can process, so no larger than 10,000 nodes and 30,000 edges. You can also use any network from a repository not listed here, but you need to provide me with the link to the source and select networks with the sizes described above.

Email your list of two networks for approval to the TA, specifying where you obtained the networks (please provide a URL) and their sizes to ensure all students work on different networks. If it turns out that another student has already chosen any of the networks you wish to analyze, we will ask you to select another network. Hence, the earlier you send us your selection, the better your chances of getting the networks you want. Do not start working on the networks until you receive an OK from us. The deadline for choosing the networks is before Lecture 11 on October 8th,