

CS490/590 Complex Networks

Grading for final project, out of 35 total points.

Item	Points
Substantial amount of work collecting and translating custom data	5
Homework-Style Data	
Detailed description of network	1
Global properties and averages	1
Identify important nodes (betweenness cent. or hub) with analysis	1
Degree distribution visualization and analysis	1
Shortest path distribution visualization and analysis	1
Clustering coefficient distribution visualization and analysis	1
Betweenness centrality distribution visualization and analysis	1
Other calculated properties with visualization and analysis	1
Conclusion of scale-free, random or other with analysis	2
Comparisons with other graphs	
Comparison with a series of generated scale-free networks	2
Comparison with a series of generated random networks	2
Comparison of theoretically expected values with obtained values	2
Advanced comparison:	
Comparison with a network generated to mock current network	5
Comparison with series of networks generated with dif. parameters	5
Clustering	
Clustering network using one clustering method	2
Clustering visualized meaningfully	2
Clustering interpreted meaningfully / statistically	5
Comparison of results of two clustering methods	5
Comparison of results with existing ground truth (accuracy of clust)	2
Other examples of brilliance in clustering work	2-5
Resilience	
Comparison of failure vs attack strategies on your network	5
Comparison of betweenness centrality vs degree attack strategies	5
Comparison of predicted vs actual breakdown threshold	5
Other examples of brilliance in resilience analysis	2-5
Spreading	
Comparison of spreading on your network vs random network	5
Comparison of spreading on your network with SI vs SIR models	5
Comparison of two or more immunization strategies on your network	5
Other examples of brilliance in spreading analysis	2-5
Other examples of brilliance / struggle / interpretation	Up to 10
Recreating one of the 22 projects with appropriate depth	Up to 20