

Network Information & Vizualization

Network Properties

Total Nodes:	505.0
Total Edges:	2316.0
Diameter:	5.0
Density:	0.018
Average Degree:	4.586
Characteristic Path Length:	2.91

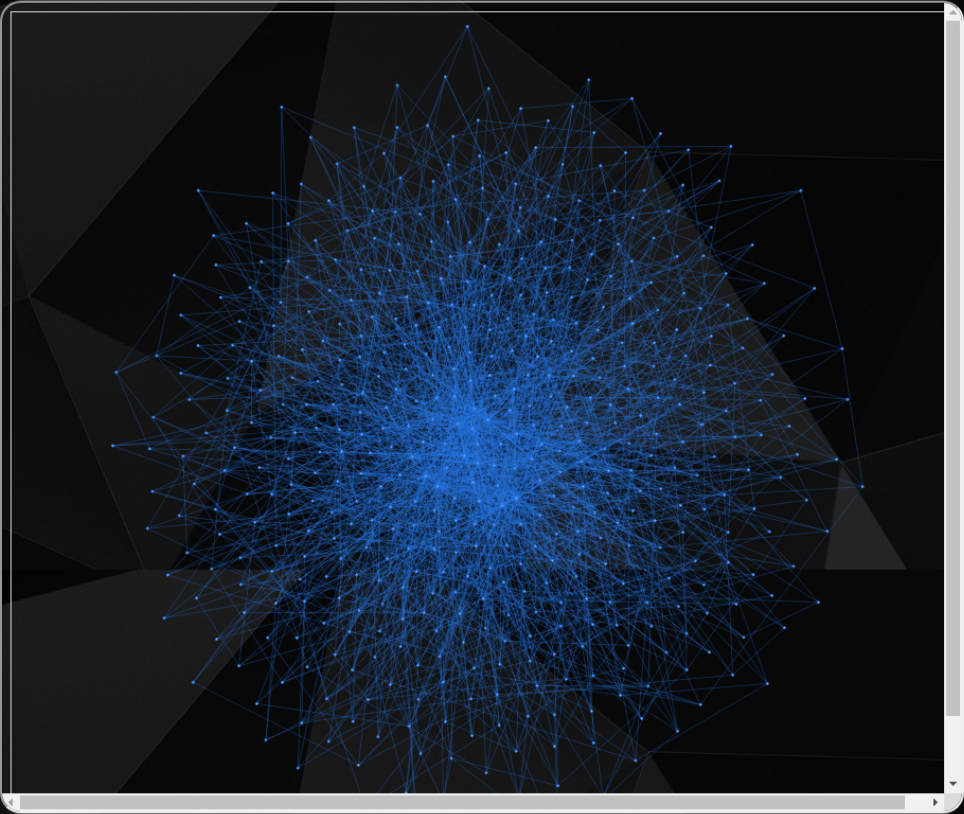
Tolerance

Attack

4.0%

Failure

16.6%



Most Crucial Nodes

Based on Degree

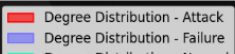
- 6_back610_back
- 4_back10

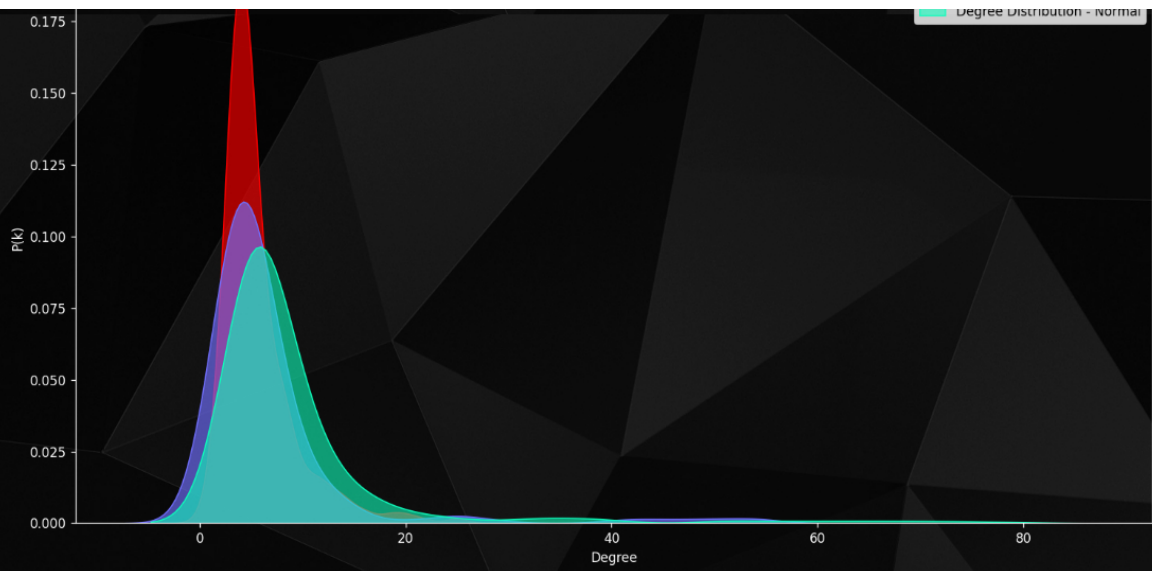
Based on Betweenness Centrality

- 6_back10_back6
- 194_back

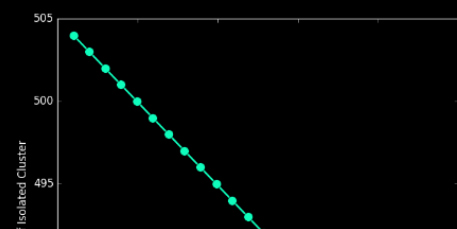
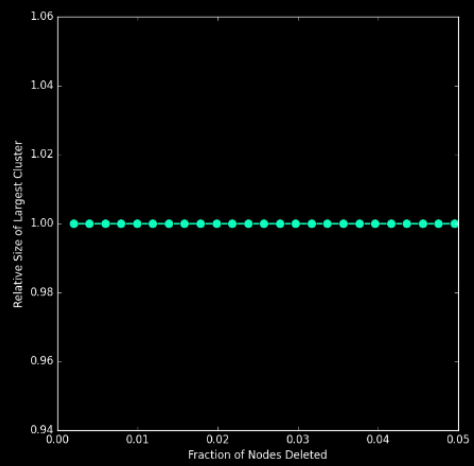
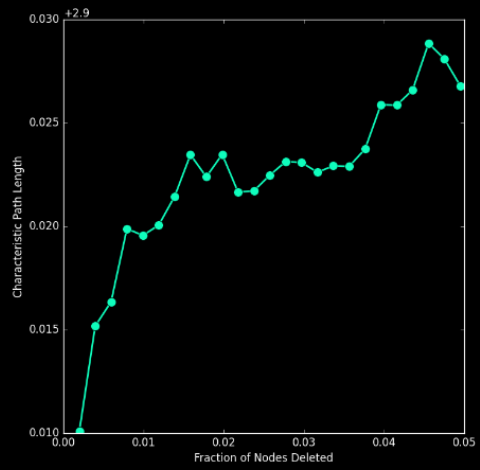
Error & Attack Tolerance Analysis

Degree Distribution - Attack vs Failure vs Normal

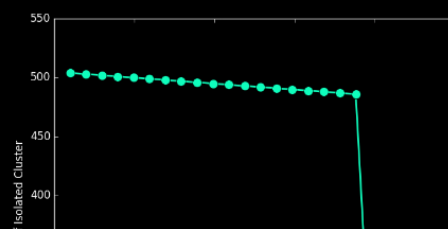
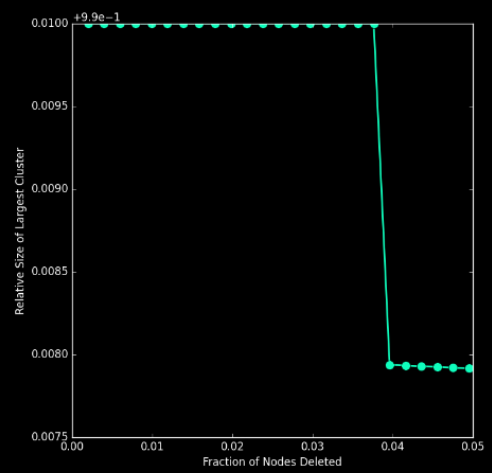
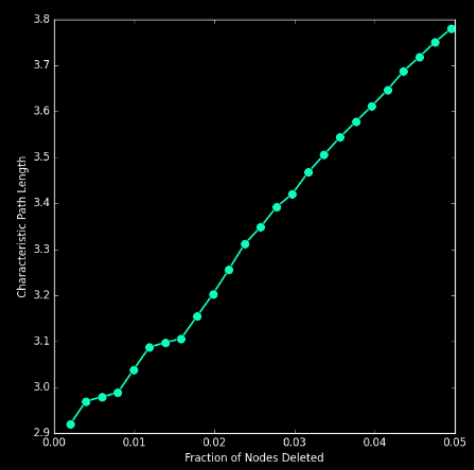


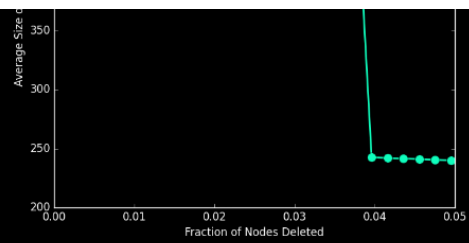
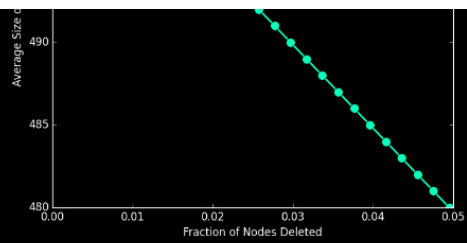


Failure Analysis



Attack Analysis





Recommended Optimized Network

We already know the crucial nodes based on their degree and Betweenness Centrality. Any damage to these nodes either by error or attack will result in damage to the whole network. To save ourselves from such situations, we can take backups of these nodes. This will increase the tolerance of the network.

You can download the updated network file from below.

[Download Recommended Network](#)