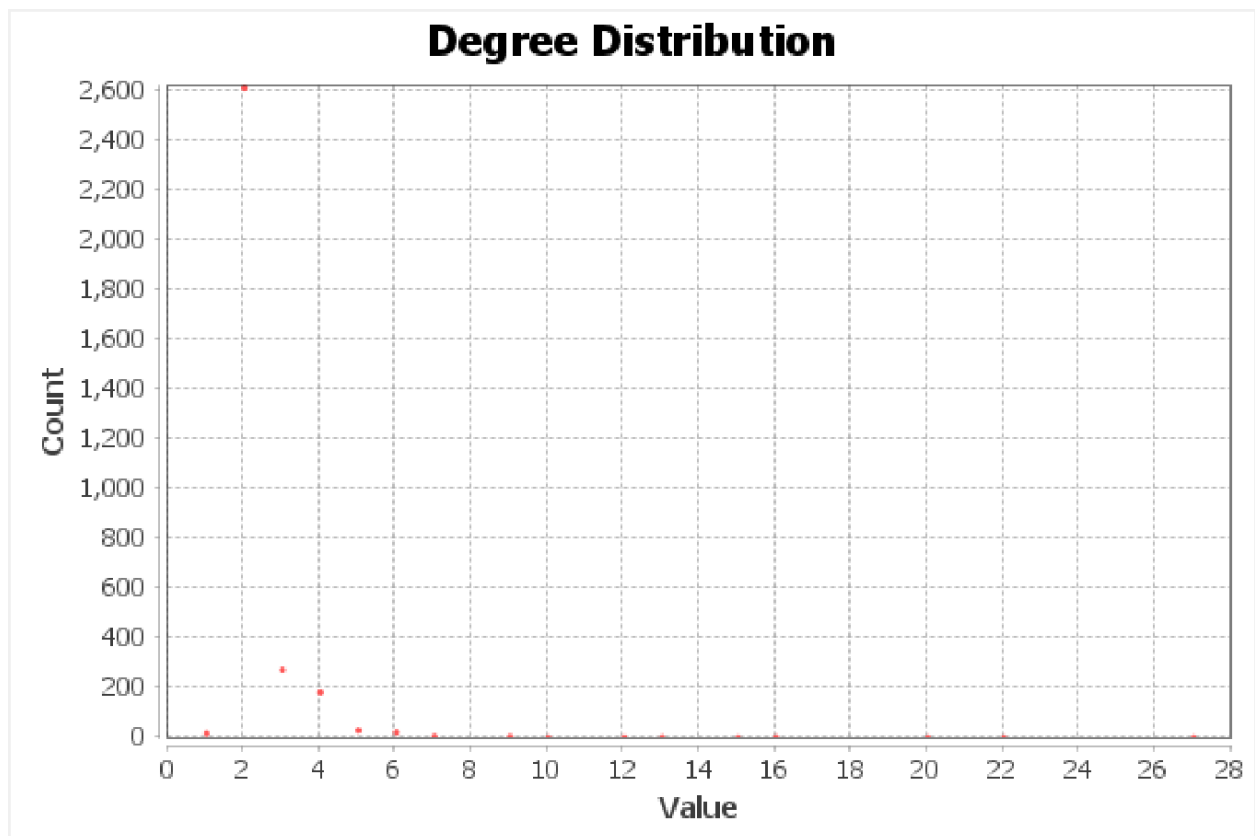


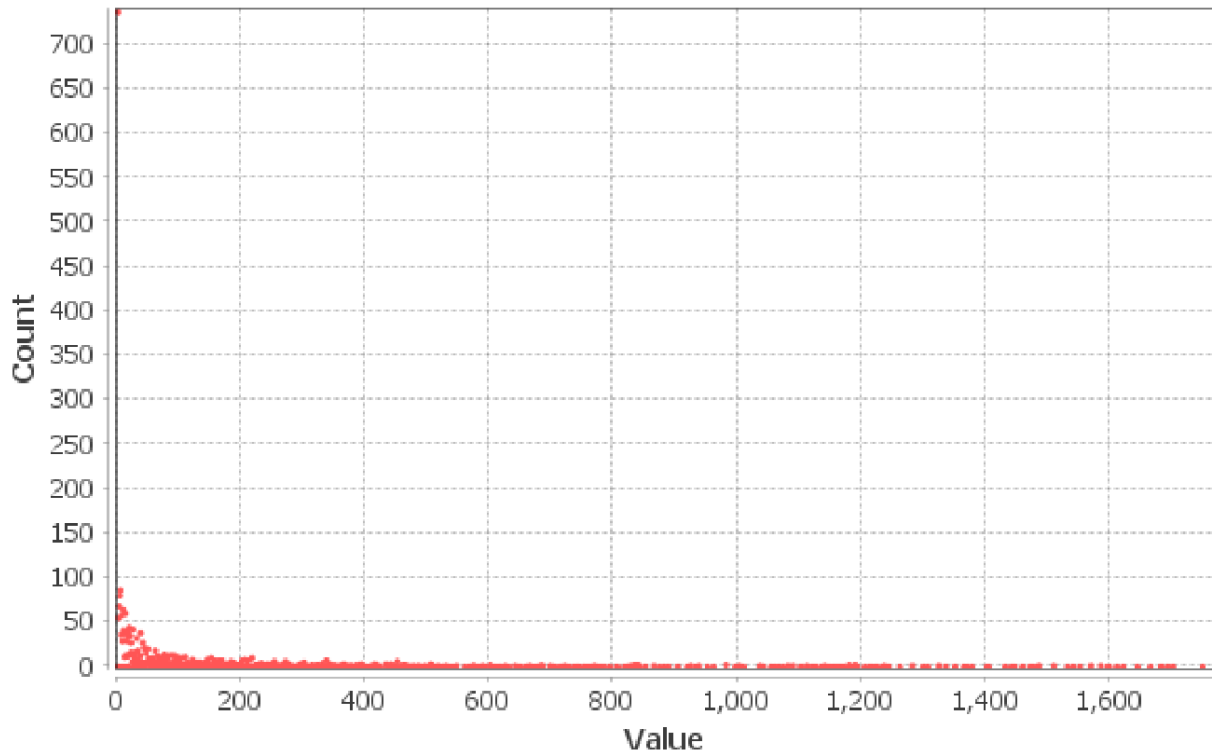
- **Global Metrics:**
 - **Average Shortest Path Length:** Measures the efficiency of travel in the network
 - 10.96774429312739
 - **Diameter:** The longest shortest path in the network.
 - 62
 - **Clustering Coefficient:** Measures the tendency of nodes to form clusters.
 - 0.0489627830684185
- **Local Metrics:**
 - **Average Degree:** The number of direct connections to a node.
 - 1.158
 - **Node with Highest Degree:**
 - Milpitas Transit Center
 - **Degree Distribution:** The distribution of the degrees in the graph



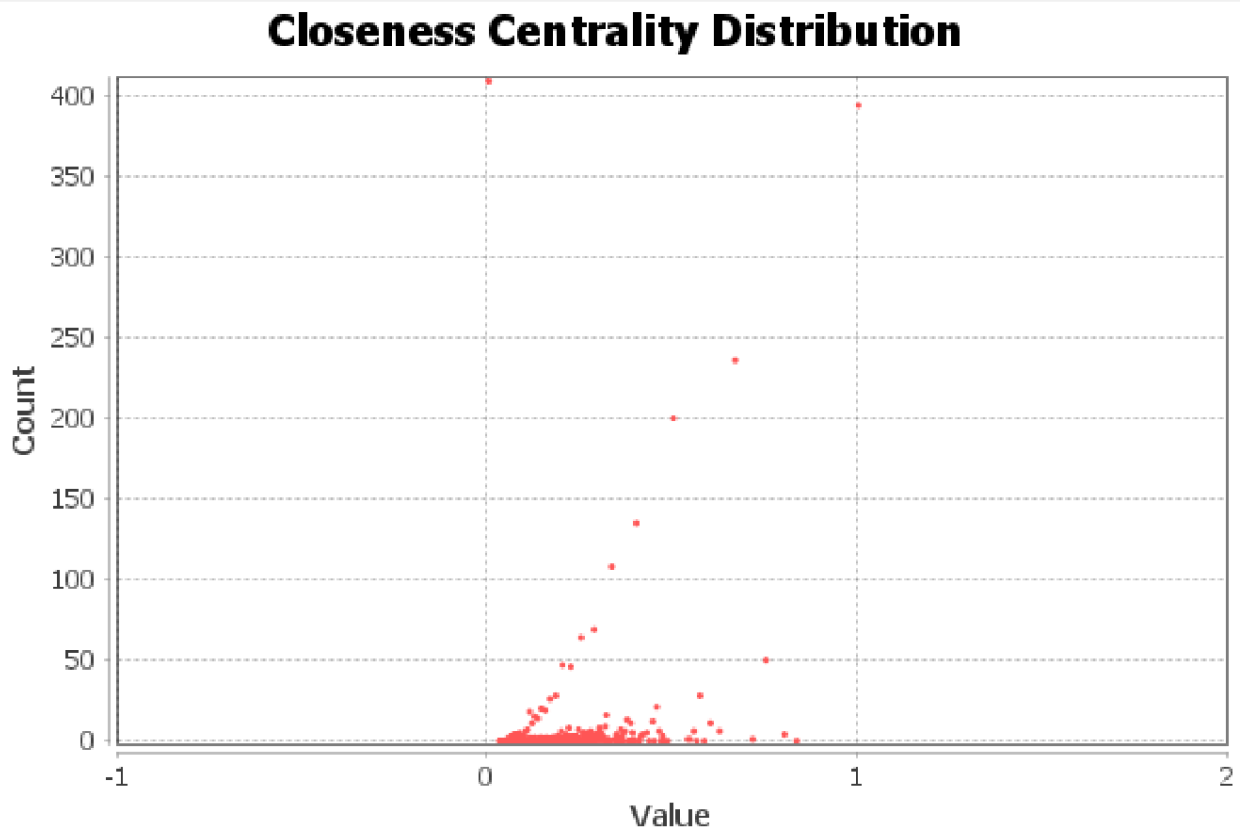
- **Betweenness Centrality:** How often a node lies on the shortest paths between other nodes.

Average Path Length: 10.5077423312733

Betweenness Centrality Distribution

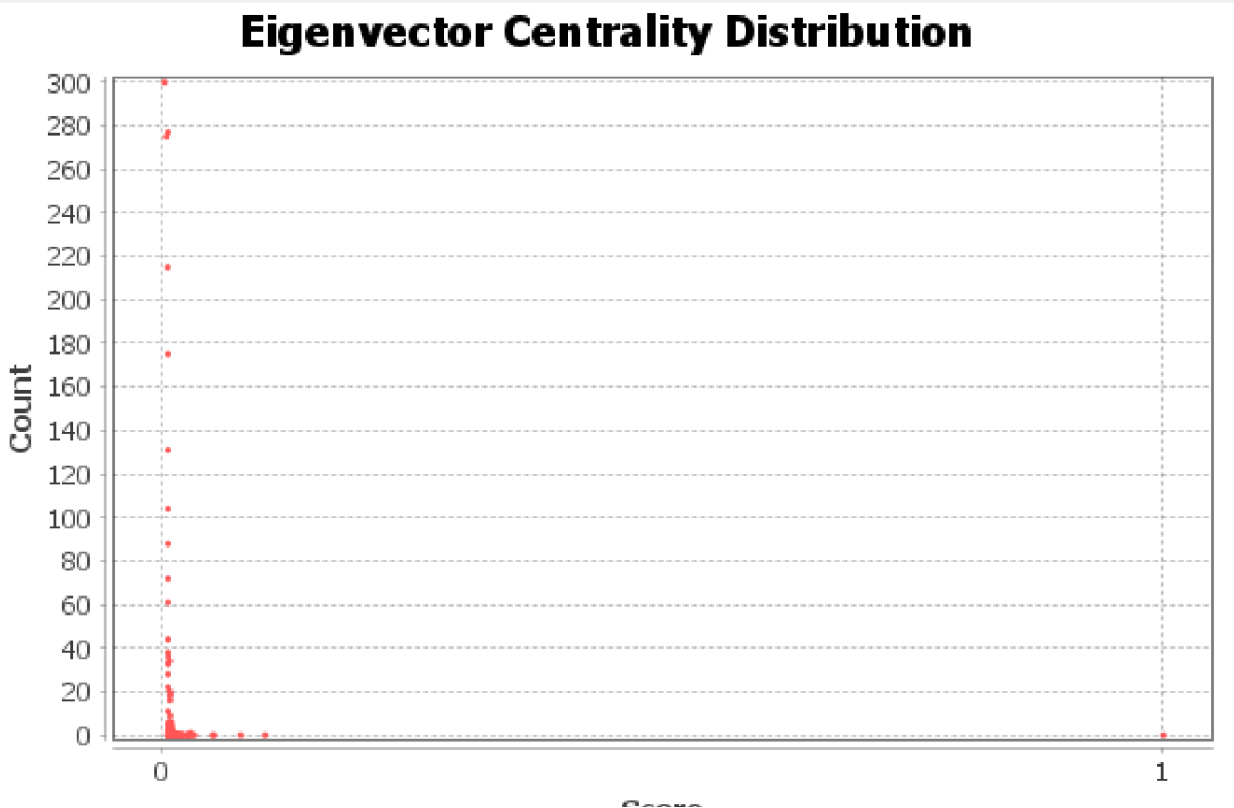


- **Closeness Centrality:** How close a node is to all other nodes in the network.



-

- **Eigenvector Centrality:** Measures the influence of a node based on the influence of its neighbors.



To analyze resilience, simulate different types of failures or attacks:

- **Random Failures:** Randomly remove nodes or edges to simulate random disruptions (e.g., accidents, technical failures).
-
-
- **Targeted Attacks:** Remove high-centrality nodes or edges to simulate deliberate attacks on critical parts of the network (e.g., removing hubs or high-traffic routes).