Network Science Project 1
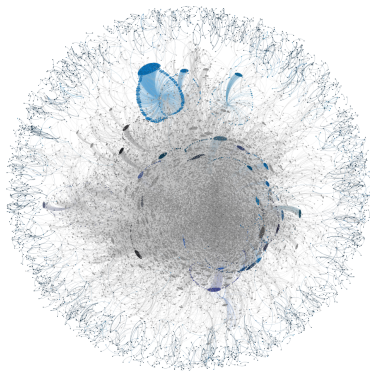
Network Analysis of Emails Sent Within Enron

Presented By
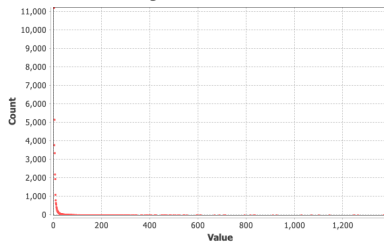
fakvey@edu.hse.ru
http://acquayefrank.github.io/

National Research University
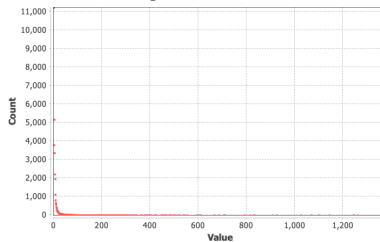Higher School of Economics (Moscow)

April 12, 2020

1. **Nodes/Order:** 36692
2. **Edges/Size:** 183831
3. **Radius:** 7
4. **Diameter:** 13
5. **Transitivity:** 0.085
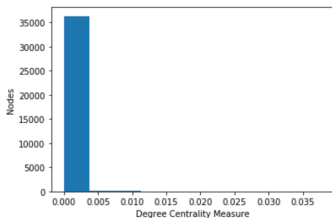6. **Clustering Co-efficient:** 0.497

Scatter Plot of Degree Distribution

Scatter Plot of Weighted Degree Distribution
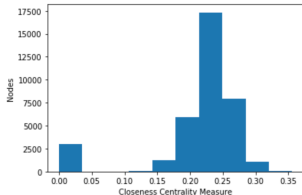
Bar Chart of Degree Centrality Measure

Top Five Nodes according to Degree Centrality

Node -> Measure

1. **5038** -> 0.0376
2. **273** -> 0.0372
3. **458** -> 0.0343
4. **140** -> 0.0339
5. **1028** -> 0.0339
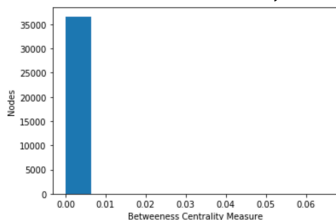
Bar Chart of Closeness Centrality Measure

Top Five Nodes according to Degree Centrality

Node -> Measure

1. **136** -> 0.3557
2. **76** -> 0.3546
3. **46** -> 0.3481
4. **140** -> 0.3441
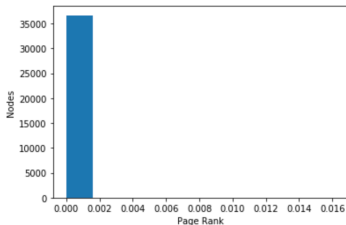5. **370** -> 0.3439

Bar Chart of Betweeness Centrality Measure

Top Five Nodes according to Degree Centrality

Node -> Measure

1. **5038** -> 0.0648
2. **140** -> 0.0604
3. **566** -> 0.0363
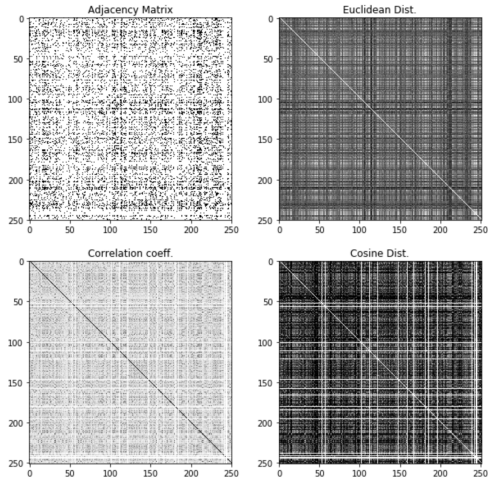4. **588** -> 0.0354
5. **1139** -> 0.0354

Bar Chart of Page-Rank

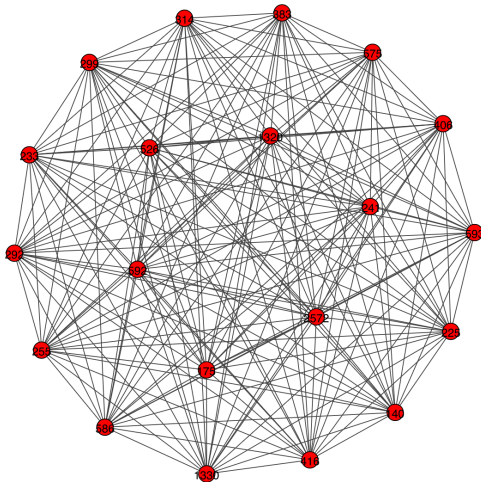Top Five Nodes according to Degree Centrality

Node -> Measure

1. **5038** -> 0.0161
2. **273** -> 0.0033
3. **588** -> 0.0032
4. **566** -> 0.0030
5. **140** -> 0.0029

Assortative Mixing and Structural Similarity of top 250 Nodes according to page rank

Largest Clique

Community Detection of top 250 Nodes according to page rank

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