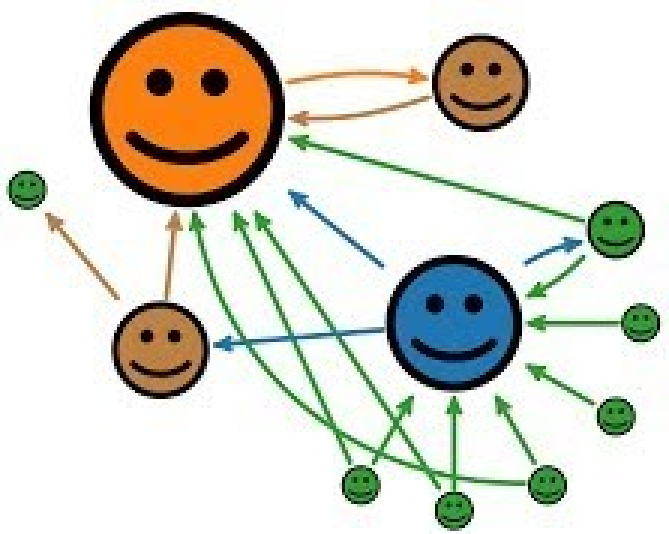
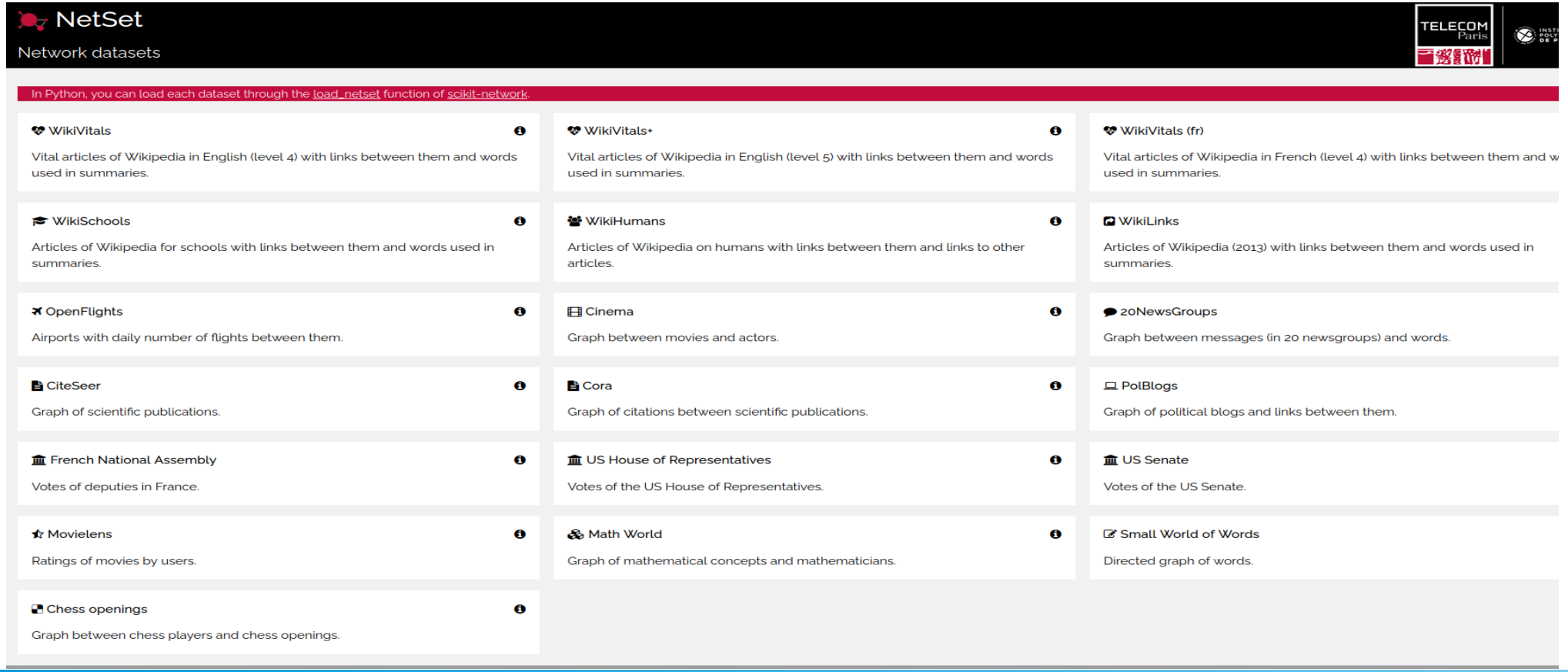
Recommandation Systems based on Page Rank Algorithm

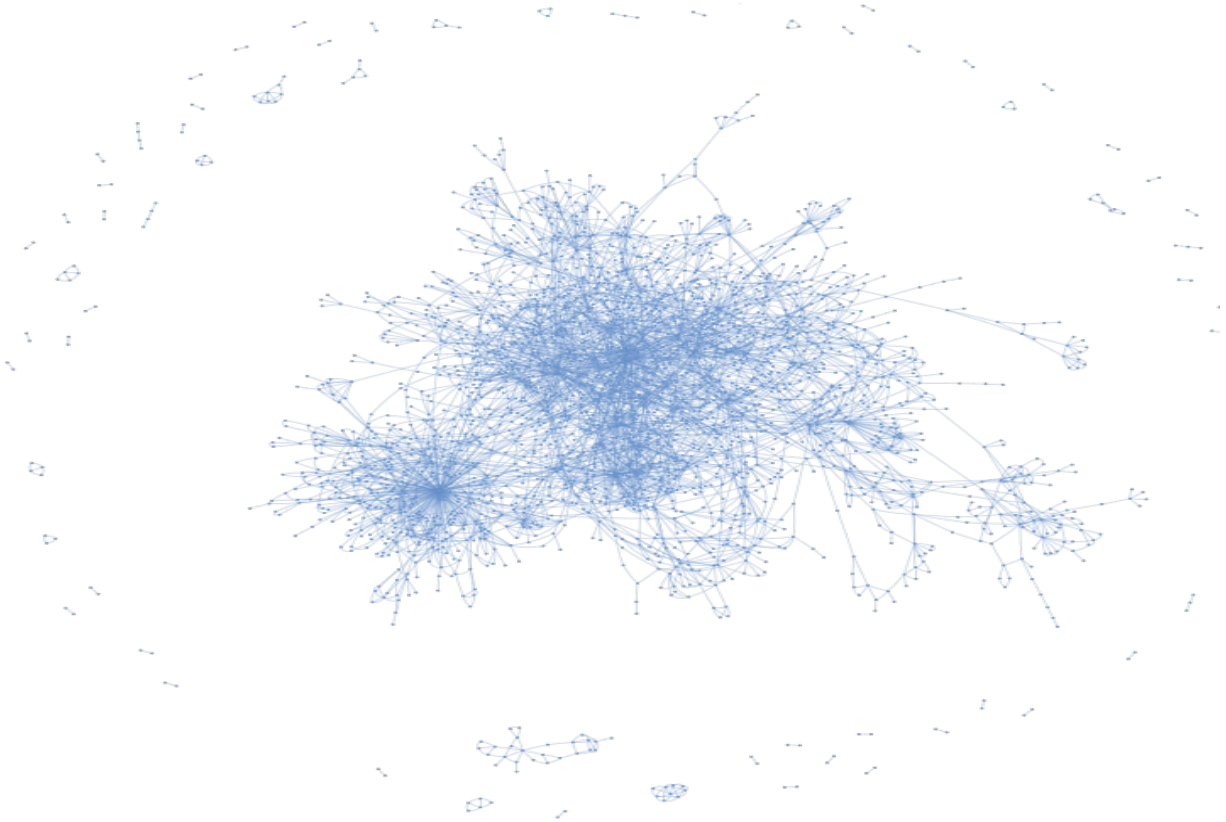
- Building a Graph
- Get (personalised) score
- Make recommandations



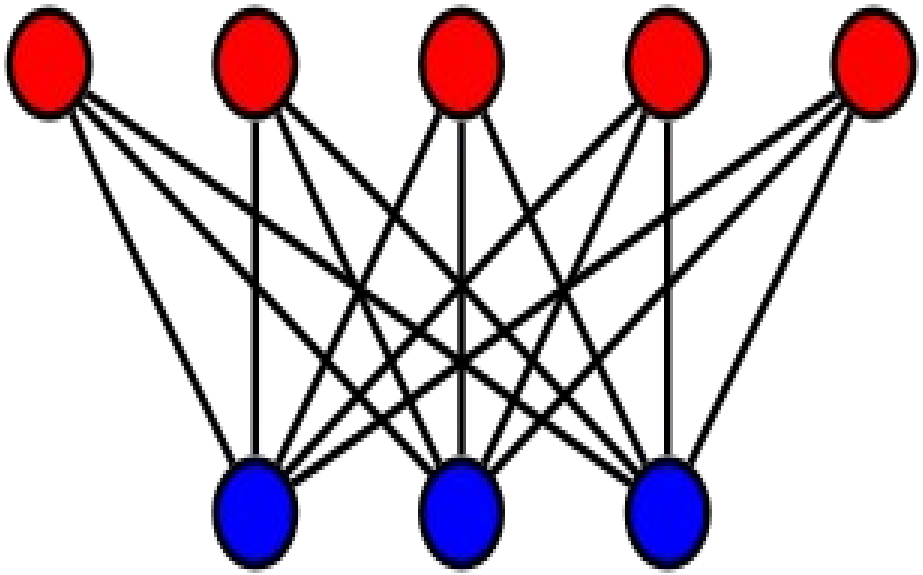
Graph Datasets

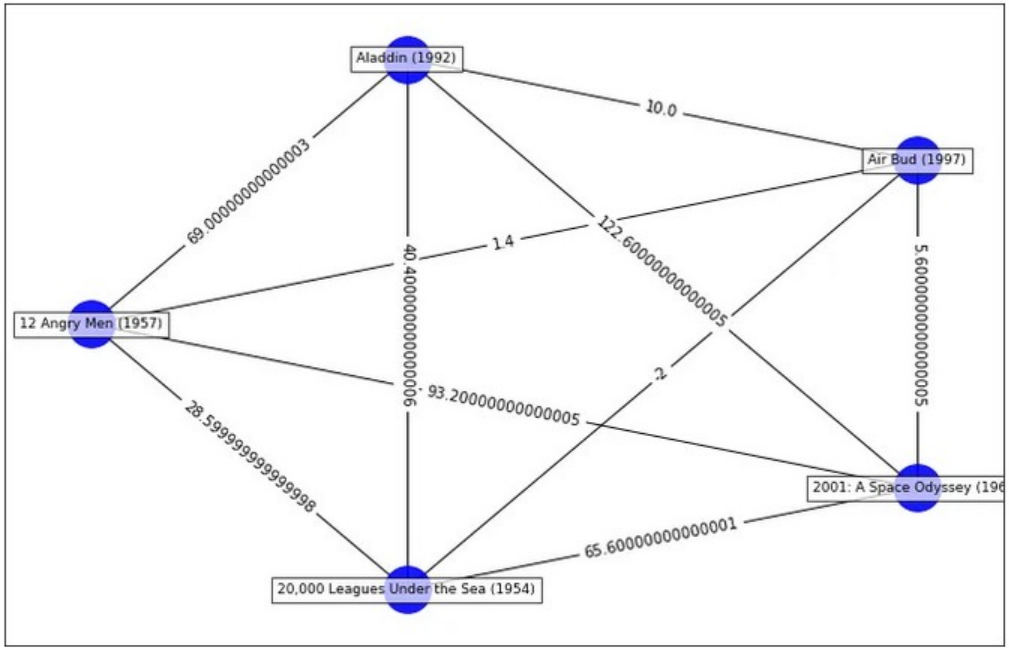


Cora Scientific Citation Network



Building the Graph





What is Page Rank Algorithm

- 1999 Google Page Rank

  Steady State of Random Surfer .
- Score of each node is determined by the number and node_score of incoming links (power iteration till convergence)
- Also Eigenvector of Adjacency – Degree Matrix where eigenvalue is 0
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- Content-Free Ranking of Nodes (Webside) in a Web

Representing a Graphs G(N,V)

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  - Adjancency
  - Biadjacency
  - Monopartite Graph
  - Biparted Graph