Abstract

Co-authorship is one of the most tangible and well documented forms of research collaboration. Data mining techniques and social network analysis can be used to extract and study these collaborations. Social network analysis provides an insight into the connections between groups of individuals. It is these connections that channel flow of information and the sharing of knowledge. In order to understand flow of information and interpret collaboration, co-authorship can be used as a measure to study intra and inter organization collaborations. In this paper, we analyze the collaboration scenario in Computer Science in India, and access how researchers in few of the best Indian Institutes of Technology (IITs) collaborate and relate to each other. We construct and visualize scientific co-authorship social network graphs of these institutions. We also compare and contrast network metrics for these institutes and experimentally deduce that these networks like other social networks exhibit "small world" properties.
Scientific Co-authorship Social Networks: A Case Study of Computer Science Scenario in India

- Newman, MEJ. "Scientific collaboration Networks-II. Shortest paths, weighted networks, and centrality." Physical Review E, Volume 64,016132
Scientific Co-authorship Social Networks: A Case Study of Computer Science Scenario in India

- http://en.wikipedia.org/wiki/Clustering_coefficient

Index Terms

Computer Science

Information Sciences

Keywords

Co-authorship Networks Visualization IIT