

Call for Papers
ACM Transactions on Intelligent Systems and Technology (ACM TIST)
Special Issue on

Linking Social Granularity and Functions:

From Links, Communities and Social Patterns to their Functions

1. Overview

In recent years, social network research has advanced significantly. Researchers are increasingly interested in investigating network structure features and social patterns residing in social networks, including community discovery, link prediction, anomaly detection, trend prediction etc. Even though detection of these features and patterns is of great interest, understanding their functions in broader applications remains relatively limited.

Encountering a real application about social networks, it is important to select and study the corresponding network structure features and social patterns of the same scale. For example, given a macro-level problem like information maximization, the macro-level structure features like community is worth great consideration; given a micro-level problem like user profiling, the micro-level structure features like neighborhoods are important. Furthermore, network structure features and social patterns in different scales are highly correlated to each other. For example, not only are the macro-level communities often used to detect micro-level links, but also the micro-level patterns like user moods can be used to identify influential users of the whole network.

2. Topics of Interest

In this special issue, we are particularly interested in inviting submissions of high-quality manuscripts reporting relevant research in the area of linking various network structure features and social patterns to their real-life functions by studying the granularities of both features and applications. The special issue welcomes submissions presenting technical, experimental, methodological and/or applicative contributions in this scope, addressing –though not limited to– the following topics:

- Functions of network structure features and social patterns on their real-life applications at the same scale;
- Granularity study for various network structure features and social patterns;
- Influence of cross-granularity network structure features and social patterns;
- General social network study with labeled social patterns;
- Machine learning algorithms by leveraging labeled network structure features and social patterns;
- Prototypes that systematically demonstrate the above ideas.

3. Submissions

Manuscripts shall be sent through the ACM TIST electronic submission system at <http://mc.manuscriptcentral.com/tist> (please select “Special Issue: Linking Social Granularity and Functions” as the manuscript type). Submissions shall adhere to the ACM TIST instructions and guidelines for authors available at the journal web site: <http://tist.acm.org>. The papers will be evaluated for their originality, contribution significance, soundness, clarity, and overall quality. The interest of contributions will be assessed in terms of technical and scientific findings, contribution to the knowledge and understanding of the problem, methodological advancements, and/or applicative value.

4. Important Dates

Paper submission due: October 14, 2012

Final paper notification: December 14, 2012

Camera-ready due: January 14, 2013

5. Guest Editors

[Qi He](#), Research Staff Member, IBM Almaden Research Center, US

[Juanzi Li](#), Professor, Tsinghua University, China

[Rong Yan](#), Research Scientist, Facebook, US

[John Yen](#), University Professor, Pennsylvania State University, US

[Haizheng Zhang](#), Founder, CEO at StarMerx LLC, US