STATISTICAL ANALYSIS AND DATA MINING

Call for Papers:
Statistical Analysis and Data Mining of Networks

Special Issue of *Statistical Analysis and Data Mining*
Manuscript Submission Deadline: August 1, 2010

Guest Co-Editors:
Stanley Wasserman and Jennifer Miller
Departments of Psychological and Brain Sciences, and Statistics
Indiana University
stanwass@indiana.edu
jlm19@indiana.edu

Statistical Analysis and Data Mining addresses the broad area of data analysis, including data mining algorithms, statistical approaches, and practical applications. Topics include problems involving massive and complex datasets, solutions utilizing innovative data mining algorithms and/or novel statistical approaches, and the objective evaluation of analyses and solutions.   Of interest for this special issue are articles that describe analytical techniques, and discuss their application to real problems in **network analysis**.

The goals of this interdisciplinary journal, published on behalf of the American Statistical Association, are to encourage collaborations across disciplines, communication of novel data mining and statistical techniques to both novices and experts involved in the analysis of data from practical problems, and a principled evaluation of analyses and solutions.

The 21st Century is becoming the Century of Data, with domains like Network Science striving to produce models and methods for understanding their mountains of stored information.   Statistical analysis remains the most effective body of methodology and technology capable of producing useful general models from massive, complex datasets. New data mining techniques, merged with standard statistical methods hold much promise for the analysis of network data sets from large populations or from multidimensional relationships.

We especially welcome papers that address the following methodological issues:

- **Communities discovery and analysis in large scale online or offline social networks**
- **Detection of communities by document analysis**
- **Dynamics and evolution patterns of social networks**
- **Evolution of patterns in the Web**
- **Evolution of communities in the Web**
- **Evolution of communities in organizations**
- **Knowledge networks**
- **Scalability of network methodology**
- **Temporal analysis on social networks topologies**
- **Visual representation of dynamic networks**

Papers on other topics are welcome as well.   Basically, we are seeking papers on research that combine good statistical practice with novel data mining ideas, illustrated using interesting network data sets.

All papers must be based on original material and must not be under consideration by any other   journal. Papers intended for the ***Statistical Analysis and Data Mining (SAM)*** undergo a standard, ASA review process to ensure relevance and quality. SAM's submission, review, and production process is described at:

www.interscience.wiley.com/sam

under the "Overview" and "Author Guidelines" tabs.

Manuscripts must be submitted electronically using the Journal's web-based submission and review website ***Manuscript Central***

http://mc.manuscriptcentral.com/sam

The deadline for submitting papers is August 1, 2010. Our goal is to complete the editorial process by the end of 2010. Questions about content and ideas should be directed to the guest co-editors noted above. All logistical questions about submitting should be directed to Amy Prisco (aprisco@wiley.com).

Jen Miller and Stan Wasserman
Department of Statistics
Indiana University
309 North Park Street
Bloomington, IN 47408