2nd International Workshop on

Modeling, Analysis, and Management of Social Networks and their Applications

SOCNET 2018

Call for Papers

February 28 Erlangen, Germany

URL: http://www.mmb2018.de/ws_sn.html

General Information

SOCNET 2018 is a workshop at MMB 2018 on modeling, analysis, and management of complex social networks—the social structures that emerge from the interaction of human actors. Over the years, scholars in the fields of anthropology, sociology, psychology, economics, and organizational theory have proposed different methods and techniques to reveal these structures and analyze their functioning and network outcomes. The practical application of social network analysis constitutes an important and rapidly growing area of research in our modern, interconnected information society. The related scientific concepts incorporate a variety of methods from graph theory, computer science, and statistics, among others.

The workshop will cover all aspects of modeling, analysis, and management of social networks and the applied methodologies that arise in social network theory and analysis. The topics range from purely theoretical to applied areas including the structural inference, modeling, analysis, simulation, control, and use of social networks.

The workshop is interdisciplinary in nature. To incorporate fully the methodological, technical, and economic aspects of social network analysis, we invite contributions from many fields, including, but not restricted to, information systems, computer science, economics, management, sociology, psychology, anthropology, biology, and physics. We also invite practitioners who will enrich the discussion by sharing their experiences with business applications of social networking. We anticipate an open exchange of fresh ideas, problems and new directions.

The workshop is co-located with the 19th International GI/ITG Conference on "Measurement, Modelling and Evaluation of Computing Systems" (MMB 2018).

The workshop is supported by Deutsche Gesellschaft für Netzwerkforschung (German Association for Network Research, DGNet), <u>www.netzwerkforschung.org</u>.

Topics

SOCNET 2018 solicits unpublished material on modeling, analysis, and management of complex social networks. Topics of interest include (but are not limited to):

• Modeling and Analysis

- characterization, inference, and evolution of topologies
- o robustness and vulnerability of network infrastructures
- o influence and epidemic spreading in complex networks
- algebraic and graph-theoretical partitioning techniques and spectral optimization of modularity concepts
- network evolution and dynamic social network analysis
- \circ $\;$ formation of communities and their algorithmic detection
- o percolation properties of equilibrium and growing networks
- investigation of scalability properties
- exponential random graph (p*) models
- o analysis of random graph models and multiplicative stochastic processes
- o models accounting for network autocorrelation
- relationship between structural properties of social networks and individual, group, and organizational performance
- new data collection methods
- synchronization in complex social networks
- signaling, management, and distributed control protocols
- o control methods and algorithms for complex social networks
- methods and tools for network visualization

• Inference and Simulation Algorithms

- o inference of complex network properties in deployed infrastructures
- o structural inference and analysis of user behavior in social networks
- o immunization strategies for next generation networks
- tools supporting analysis, inference, and prediction of complex networks

• Network Theory

- o role of technology in network theory
- theories and ontologies for sociotechnical networks
- effects of content access mechanisms on structural capital and individual performance
- o affordances of social media platforms and their effect on human behavior
- effects of link recommendation systems and features of social media platforms on group formation and homophily

Submissions

Authors are encouraged to submit a PDF version of their original contribution either as an extended abstract of 4 pages or as a short paper not exceeding 6 pages. All submissions must adhere to a single-column LNCS conference format with a font size not smaller than 10 points.

The paper must be submitted electronically prior to the **new deadline November 5, 2017** via Easychair at:

http://www.easychair.org/conferences/?conf=socnet2018

Notification of acceptance will be sent to the authors no later than December 6, 2017. The final PDF versions of accepted papers is due by December 22, 2017.

All accepted contributions will appear in the workshop proceedings. A registration of at least one co-author as a workshop or conference participant is required before the deadline.

Important Dates

- New submission deadline: November 5, 2017
- Acceptance notification: December 6, 2017
- Camera-ready version: December 22, 2017
- Authors' registration deadline: February 1, 2018
- Workshop: February 28, 2018

Organizing Committee

General Chairs

- Kai Fischbach, University of Bamberg, Germany
- Udo R. Krieger, University of Bamberg, Germany

Local Arrangement Co-Chairs

- Cornelia Schecher, University of Bamberg, Germany
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- Katharina A. Zweig, TU Kaiserslautern, Germany

Further Information

For further details on the venue, travel information, and registration process, please view the web page of "19th MMB 2018" at URL: <u>http://www.mmb2018.de/</u>