

IJCAI-2011 Workshop on Link Analysis in Heterogeneous Information Networks (HINA)

Saturday, 16th July 2011, Barcelona, Spain

Workshop Description

Recent work on link mining and social networks has led to a convergence of methodologies for network modeling, incorporating classification, learning and reasoning with graphical models, frequent subgraph mining, relational representation, and link prediction, among other techniques. Many intelligent systems applications to information extraction, web search, and recommendation call for inferences to be made regarding the existence, type, or attributes of links. Some tasks, such as question answering using information networks, may require that inferences be based upon partial link information and made under uncertainty about participating entities and relationships.

The emphasis of this workshop shall be approaches based on relationship extraction from heterogeneous sources such as technical literature, news articles, social network profile data, and social media. Relevant media include, but are not limited to, forums, blogs, microblogging mechanisms such as Twitter and status updates, podcasts, video, and systems for rating and commenting. However, the scope is not limited to any particular approach to link analysis or any source of network information such as text corpora. Application areas that often exhibit a need for link analysis include:

- Bioinformatics and biomedicine: computational genomics, drug interaction, protein-protein interaction
- Content-management systems: version control, wikification
- Information security: attack graphs, information flow, mechanism design, trust networks
- Knowledge and information management: data fusion, information integration, source attribution
- Recommender systems for social networks: communities, experts, friends, products, reviewers, service providers
- Spatiotemporal reasoning: epidemiology, link formation, meme propagation

Workshop Audience

This workshop shall help to bring together people from these different areas and present an opportunity for researchers and practitioners to share new techniques for identifying and analyzing relationships in networks that integrate multiple types or sources of information. Topics for this workshop include, but are not limited to:

- Cyber-physical systems, sensor networks, and event detection
- Data integration and intelligent search
- Frequent pattern mining in graph and sequence data
- Information extraction, text analytics, and topic detection/tracking
- Online auctions and advertising
- Opinion mining and sentiment analysis
- Social networks, social media, and the semantic web
- Statistical relational learning
- Trust networks and information sharing

Call For Papers

We encourage submissions containing original theoretical and applied concepts in Heterogeneous Information Networks. Experimental results are also encouraged, especially on fielded applications, even if they are only preliminary.

We therefore invite two categories of paper submissions:

- Research papers - 6-8 pages long
- Short summaries and extended abstracts (including position papers) - 2-3 pages long

Papers should follow the standard IJCAI format.

For the workshop agenda, submission procedure, and up-to-date information on the review committee and invited speakers, please visit the workshop web site:

<http://www.kddresearch.org/Workshops/IJCAI-2011/>

<http://www.goo.gl/Z46S3>

<http://bit.ly/dIG7NR>

Important Dates

Full papers due:	Mon 25 Apr 2011
Short papers due:	Wed 27 Apr 2011
Acceptance notification:	Fri 06 May 2011
Camera-ready copy due:	Mon 16 May 2011
Workshop:	Sat 16 Jul 2011

Organizing Committee

- William H. Hsu (primary contact), Kansas State University
- Surya Teja Kallumadi, Kansas State University
- Jiawei Han, University of Illinois at Urbana-Champaign

Program Committee

- Amr Ahmed, Carnegie Mellon University (USA)
- Tao Cheng, Microsoft Research (USA)
- Fabio G. Cozman, University of São Paulo (Brazil)
- Manoranjan Dash, Nanyang Technological University (Singapore)
- Luc De Raedt, Katholieke Universiteit Leuven (Belgium)
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- Wesam Samy Elshamy, Kansas State University (USA)
- Lise Getoor, University of Maryland (USA)
- Kristian Kersting, University of Bonn (Germany)
- Huan Liu, Arizona State University (USA)
- Hiroshi Motoda, AFOSR / AOARD & Osaka University (Japan)
- Nicolas Nicolov, JDPa (USA)
- Scott Sanner, NICTA (Australia)
- Yizhou Sun, University of Illinois at Urbana-Champaign (USA)
- Tim Wenginger, University of Illinois at Urbana-Champaign (USA)