

TextGraphs-5: Graph-based Methods for Natural Language Processing  
Workshop at ACL 2010  
Association for Computational Linguistics Conference  
Uppsala, Sweden - July 16th, 2010

<http://www.textgraphs.org/ws10/>

Deadline for paper submission: Thursday, April 8th, 2010

TextGraphs is at its fifth edition! This shows that two seemingly distinct disciplines, graph theoretic models to computational linguistics, are in fact intimately connected, with a large variety of Natural Language Processing (NLP) applications adopting efficient and elegant solutions from graph-theoretical framework.

The TextGraphs workshop series addresses a broad spectrum of research areas and brings together specialists working on graph-based models and algorithms for natural language processing and computational linguistics, as well as on the theoretical foundations of related graph-based methods. This workshop series is aimed at fostering an exchange of ideas by facilitating a discussion about both the techniques and the theoretical justification of the empirical results among the NLP community members. Spawning a deeper understanding of the basic theoretical principles involved, such interaction is vital to the further progress of graph-based NLP applications.

### **Special Theme: Graph Methods for Opinion Analysis**

For the fifth edition of TextGraphs, we propose the special theme: “Graph Methods for Opinion Analysis”. This choice is motivated by two important factors: (1) advanced opinion analysis that aims to go beyond polarity recognition necessitates the integration of syntactic, semantic and logic structures and (2) previous work in NLP has shown that graph methods are very well suited to represent and exploit such structures in learning systems.

The aim is to bring together researchers from graph theory and opinion analysis in order to enable cross-fertilization of ideas. The proposed theme will encourage publication of early results and initiate discussions of issues in this area. We hope that this will help to shape future directions for ambitious opinion analysis research and provide a new, challenging problem motivation for research in graph algorithms.

Finally, as the field of opinion mining advances towards deeper analysis and more complex systems, graphical approaches may become even more pertinent. For instance, graphs may be employed to capture opinion dynamics over time, or to model interactions between opinion expressions across multiple modalities and, to realize this, new graph-based algorithms and inference methods may need to be developed.

## Suggested topics

We invite submissions on the following (but not limited to) general topics (including those from the special theme):

- \* Graph methods for sentiment lexicon induction
- \* Analysis of blog and web linking structures
- \* Graph methods for sentiment/opinion propagation
- \* Graph representation of data for opinion analysis
- \* Synonym/antonym graphs and their usage to extrapolate semantic orientation
- \* Social graphs and opinion analysis
- \* Graph-based representations, acquisition and evaluation of lexicon and ontology
- \* Dynamic graph representations for NLP
- \* Properties of lexical, semantic, syntactic and phonological graphs
- \* Clustering-based algorithms
- \* Application of spectral graph theory in NLP
- \* Unsupervised and semi-supervised learning models based-on graphs
- \* Dynamic graph representations for NLP
- \* Comparative analysis of graph-based methods and traditional machine learning techniques for NLP applications
- \* Kernel Methods for Graphs, e.g. random walk, tree and sequence kernels
- \* Graph methods for NLP tasks, e.g. morpho-syntactic annotation, word sense disambiguation, syntactic/semantic parsing
- \* Graph methods for NLP applications, e.g. retrieval, extraction and summarization of information
- \* Semantic inference using graphs, e.g. question answering and text entailment recognition

## Important Dates

- \* Deadline for paper submission: Thursday, April 8th, 2010
- \* Notification of acceptance: Thursday, May 6th, 2010
- \* Submission of camera-ready articles: Friday, June 4th, 2010
- \* Workshop at ACL 2010: Friday, July 16th, 2010

## Submission Information

- \* Formatting instructions

Submissions will consist of:

- \* regular full papers of max. 8 pages (one additional page for the Reference section only is allowed - for a maximum of 9 pages)
- \* regular short papers of max. 4 pages
- \* position papers of max. 4 pages (describing new scenarios for the use of graphs for text processing, especially in the field of Opinion Mining).

All submissions must be electronic in PDF and must be formatted using the ACL 2010 style files, which, together with additional author guidelines, are available at ACL 2010 Authors Information (<http://www.acl2010.org/authors.html>).

- \* Multiple-submission policy

Papers that have been or will be submitted to other meetings or publications must indicate this at submission time. Authors submitting multiple papers to TextGraphs-5 may not submit papers that overlap significantly (> 50%) with each other in content or results. Authors of papers accepted for presentation at Textgraphs-5 must notify the organizers immediately as to whether the paper will be presented. All accepted papers must be presented at the conference in order to appear in the proceedings.

- \* Blind review policy

In order to facilitate blind reviewing, the authors should omit their names and affiliations from the paper. Furthermore, self-references that reveal the author's identity, e.g., "We previously showed (Smith, 1991) ..." must be avoided. Instead, use citations such as "Smith previously showed (Smith, 1991) ..." Papers that do not conform to these requirements will be rejected without review.

- \* Submission

Papers should be submitted to the START Conference Manager at <https://www.softconf.com/acl2010/TextGraphs/>.

The submission deadline is Thursday, April 8th, 2010 23:59 EDT. Late submissions will not be accepted.

## Organizing Committee

- \* Carmen Banea, *University of North Texas*,
- \* Alessandro Moschitti, *University of Trento*,

- \* Swapna Somasundaran, *University of Pittsburgh,*
- \* Fabio Massimo Zanzotto, *University of Rome “Tor Vergata”*

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- \* Yejin Choi, *Cornell University, Ithaca, NY, US*