

KBCOM 2018: First Workshop on Knowledge Base Construction, Reasoning and Mining

Feb 9, 2018

Los Angeles, California, USA, 2018 (co-located with WSDM'18)

http://www.kbcom.org/

Submission website: https://easychair.org/conferences/?conf=kbcom2018

Submission deadline: November 12, 2017

Call for Papers

The 1st Workshop on Knowledge Base Construction, Reasoning and Mining (KBCOM) is a new workshop that will be co-located with WSDM 2018. The success of data mining and search technologies is largely attributed to the efficient and effective analysis of structured data. Automated construction, mining and reasoning of knowledge bases and graphs have become possible as research advances in many related areas such as information extraction, natural language processing, machine learning and databases. KBCOM aims to gather together leading experts from industry and academia to share their visions about the field, discuss latest research results, and exchange exciting ideas.

We aim to complement the main conference by trying to achieve the following goals:

- Research horizons in KBCOM: The workshop focuses on **invited talks** from leading experts and **position papers** discussing forward-looking work. Its program comprises a good number of <u>keynote speakers</u> from both leading universities (Stanford, University of Washington and more) and industrial organizations like Amazon and Recruit Institute of Technology.
- *Idea exchange in KBCOM*: We will organize a **poster session** for researchers to share ideas, collect feedbacks and form collaborations. We particularly encourage participants to publish **new software and datasets** on related topics, and will hold novel **shared tasks** to help develop a better community.

We expect the highlight of the workshop to be the discussions and brainstorming during invited talks and the poster session. The workshop will also accept **regular submissions** of original research or position/visionary papers which will be presented either as *highlight talks* or during the poster session. With such focuses, KBCOM aims to provide a vivid forum of discussion about knowledge base-related research.

Invited Speakers

- Luna Dong (Amazon)
- Oren Etzioni (Allen Institute for Artificial Intelligence)
- Lise Getoor (University of California Santa Cruz)
- Alon Halevy (Recruit Institute of Technology)
- Monica Lam (Stanford University)
- Christopher Ré (Stanford University)

- Xifeng Yan (University of California at Santa Barbara)
- <u>Luke Zettlemoyer</u> (University of Washington)

List of Topics

The workshop is broad in scope and invites original research contributions on topics that include, but are not limited to the following:

• Knowledge Base Construction:

- information extraction: named entity recognition, relation extraction, entity resolution, synonym mining;
- ontology construction; information integration; schema alignment, ontology alignment;
- tools and systems for automated knowledge base construction;
- structured prediction methods on text, sequence labeling methods on text;
- distant supervision, weak supervision techniques for text;
- Human-in-the-loop techniques for KB construction.

• Mining and Reasoning over Knowledge Bases:

- structured search, KB querying, semantic search;
- representation learning on network/graph, knowledge graph embedding, knowledge base completion/population, link prediction;
- knowledge-based systems, probabilistic knowledge bases, graph databases.

• Knowledge Base-related Applications:

- KB-based QA, hybrid QA, QA with open-domain facts;
- Injecting rule/logic into recommendation systems, recommendation with knowledge bases;
- web search using knowledge bases, search by example; user study in KB-related applications, user interface, best practices.

Submission Guidelines

All papers will be peer reviewed, **single-blinded**. Submissions must be self-contained and in English. Papers must be submitted in PDF according to the new ACM format published in <u>ACM guidelines</u>, selecting the generic "sigconf" sample. The accepted papers will be published on the workshop's website and will not be considered archival for resubmission purposes.

We are soliciting submissions in three categories of papers:

- Full workshop papers of original research (8 pages + 1 page for references)
- Short workshop papers of original research (2-4 pages + 1 page for references)
- Position/visionary papers (unlimited)

Full Workshop Paper. Authors should submit a long paper of up to 8 pages, with up to 1 additional page for references. The reported research should be original work. All papers will be presented as posters, and a few selected papers may also be presented orally at the discretion of the program committee.

Best Paper Award. From the submitted full workshop papers, between zero and two papers will be selected for best paper awards at the discretion of the program committee.

Short Workshop Paper. Preliminary ideas or results may also be submitted as short papers, with a length of 2 to 4 pages plus 1 additional page for references. Similarly to full papers, these abstracts will follow the new ACM format, be submitted through EasyChair, and be reviewed by the program committee. Accepted papers will be presented as posters. Submissions should put "**This is a submission for the short paper track.**" at the end of the abstract submitted to EasyChair (it does not need to be noted in the paper itself).

Position/Visionary Paper. We also encourage position or visionary papers that propose new directions of relevant research, advocate innovative approaches to long-standing problems, or report on deep insights gained from experience with existing systems. There is no page limit for such submissions. Accepted papers will be presented as posters. Papers should put "**This is a submission for the position/visionary paper track.**" at the end of the abstract submitted to EasyChair (it does not need to be noted in the paper itself).

Important Dates

All deadlines are 11:59 PM Pacific time.

• Submission Due: **Nov 12, 2017**

• Notification of acceptance: Dec 11, 2017

• Camera-ready Due: Jan 27, 2018

• Workshop: Feb 9, 2018

Organization and Contact

The workshop is organized by <u>Xiang Ren</u> (USC), <u>Craig Knoblock</u> (USC/ISI), <u>William Wang</u> (UCSB), and <u>YuSu</u> (UCSB). All questions about submissions should be emailed to <u>info@kbcom.org</u>.