

Subject: CIKM2018 notification for paper 808

Date: Monday, August 6, 2018 at 6:16:10 PM Pacific Daylight Time

From: CIKM 2018 Short Papers Chairs

To: Li, Chengkai

Dear Chengkai Li,

Congratulations!

Your paper, "Re-evaluating Embedding-Based Knowledge Graph Completion Methods" (submission number 808), has been accepted for inclusion in the CIKM 2018 conference.

We received 414 short paper submissions, out of which 97 were accepted (23.4%). The reviews and metareview of your paper are at the bottom of this email.

A separate email will be sent with instructions for preparation of the camera-ready version of the paper. Please take full account of the reviewers' comments when preparing the camera-ready version.

CIKM requires that one of the authors of your paper attend the conference and present your work. Please also consider attending tutorials and workshops in the conference (<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.cikm2018.units.it%2F&data=02%7C01%7Ccli%40cse.uta.edu%7C50667c97254a41418d0308d5fc036561%7C5cdc5b43d7be4caa8173729e3b0a62d9%7C0%7C0%7C636692013876245757&sdata=14rWWMS4bea1ozrPzkt%2Fj%2B5FQqc9FERqMNEyYFTEU%2BY%3D&reserved=0>).

Best regards,

Mohammed J. Zaki, Andrei Broder, and Rakesh Agrawal

CIKM 2018 Short Paper Track Co-Chairs

----- REVIEW 1 -----

PAPER: 808

TITLE: Re-evaluating Embedding-Based Knowledge Graph Completion Methods

AUTHORS: Farahnaz Akrami, Lingbing Guo, Wei Hu and Chengkai Li

Relevance to CIKM: 5 (excellent)

Originality of the Work: 3 (fair)

Technical Soundness: 3 (fair)

Quality of Presentation: 4 (good)

Impact of Ideas or Results: 3 (fair)

Adequacy of Citations: 4 (good)

Reproducibility of Methods: 5 (excellent)

Overall Evaluation: 3 (I half-champion and would accept if someone else is also at least half-championing)

----- List 3 or more strong points, labelled S1, S2, ... -----

S1: This article makes a compelling case regarding the importance of reverse relations in entity graphs.

S2: It studies the impact of removing inverse-duplicate relations in the performance of different methods.

----- List 3 or more weak points, labelled W1, W2, ... -----

W1: There is no contributed method (however, I did like the study).

W2: Is this really a new finding or a collection of results from different papers?

W3: It also investigates different implementations of some methods. While this is interesting in principle, (and despite the general trend regarding the removal of reverse relations) it sends a muddy message regarding fiability of the reported results.

----- Overall Evaluation -----

This is an interesting problem that looks into the impact of not having inverse-duplicate relations in the training data.

Because the authors report different figures to the same algorithm, the soundness of the results is not very solid.

Experiments are fully reproducible. The data is available and the code is also available. Hence, this paper may have some impact because it provides an interesting benchmark.

----- REVIEW 2 -----

PAPER: 808

TITLE: Re-evaluating Embedding-Based Knowledge Graph Completion Methods

AUTHORS: Farahnaz Akrami, Lingbing Guo, Wei Hu and Chengkai Li

Relevance to CIKM: 5 (excellent)

Originality of the Work: 3 (fair)

Technical Soundness: 3 (fair)

Quality of Presentation: 4 (good)

Impact of Ideas or Results: 4 (good)

Adequacy of Citations: 4 (good)

Reproducibility of Methods: 5 (excellent)

Overall Evaluation: 3 (I half-champion and would accept if someone else is also at least half-championing)

----- List 3 or more strong points, labelled S1, S2, ... -----

1) Extensive comparison of existing methods

2) try to understanding the impact of inverse relation in knowledge graph completion problems

----- List 3 or more weak points, labelled W1, W2, ... -----

1) No new technique.

----- Overall Evaluation -----

This paper compares the existing knowledge graph completion techniques with and without the existence of inverse relationship (i.e., (John is a student of Mary) and (Mary is an advisor of John)) an example of reverse relationship in a knowledge graph) and shows that some of the existing techniques perform much worse if there is much less inverse relationships to be predicted in the knowledge graph.

Although the paper lacks any new algorithm, I believe that the above conclusion could be useful to overall research community to the address this issue.

----- REVIEW 3 -----

PAPER: 808

TITLE: Re-evaluating Embedding-Based Knowledge Graph Completion Methods

AUTHORS: Farahnaz Akrami, Lingbing Guo, Wei Hu and Chengkai Li

Relevance to CIKM: 4 (good)

Originality of the Work: 2 (poor)

Technical Soundness: 3 (fair)

Quality of Presentation: 3 (fair)

Impact of Ideas or Results: 3 (fair)

Adequacy of Citations: 4 (good)

Reproducibility of Methods: 4 (good)

Overall Evaluation: -4 (I believe this should be rejected)

----- List 3 or more strong points, labelled S1, S2, ... -----

1) The paper presents a rigorous experiment to evaluate different algorithms.

- 2) Experimental results are interesting.
- 3) The paper is well written.

----- List 3 or more weak points, labelled W1, W2, ... -----

- 1) The technical contribution of this paper is limited.

----- Overall Evaluation -----

This paper aims at re-evaluating knowledge graph embeddings based on different completion methods. The novelty is limited since the evaluation is very basic given few datasets.

----- METAREVIEW -----

PAPER: 808

TITLE: Re-evaluating Embedding-Based Knowledge Graph Completion Methods

The paper compares a number of algorithms for the completion of knowledge graphs. While no new algorithm is proposed, the experimental evaluation provided in the paper might be of interest to several researchers.