CIKM'2014
2014 ACM International Conference on Information and Knowledge Management

Reviews For Paper

Track	Databases
Paper ID	273
Title	Generating Preview Tables for Entity Graphs

Masked Reviewer ID: Assigned_Reviewer_1

Review:

Question	
Overall Rating	Reject
Top 3 Strengths	s1 Previewing KBs would be useful s2 Proposed solution is reasonable s3 Validated with real-life KBs such as Freebase
Top 3 Weaknesses	w1 Not very clear whether the proposed type of preview is most desirable w2 Technical depth against [14] and [16] are not sufficiently argued w3 Distinguishing tight/diverse previews is not well motivated
Detailed Comments	As more and larger KBs are released, understanding KBs with low cognitive load is becoming a real and important problem. This paper is proposing a reasonable solution to this problem, but 1) its technical novelty/depth and 2) usefulness to user is somewhat unclear. First, technical novelty/depth against existing schema/graph summarization work needs to be further justified. For example, the concept of coverage and its maximization has been already discussed in [16], and similarly, random walk and entropy was discussed in [14]. Authors need to more clearly argue what new challenges and new technical contributions are. Second, though KB previews are certainly useful, it is unclear to me whether this type is the best way. For example, relationships between tables, e.g., foreign keys, are lost in the proposed preview, and user study of whether this disadvantage outweighs the advantages would help convince readers in this regard. Similarly, preview scoring can be verified by user study. Lastly, it is unclear why previews need to be divided into tight/diverse-- These seem to be a hard parameter to tune, trading performance and accuracy. Discussion on why empirical tuning is not sufficient would clarify this concern. It is also not sufficiently explained why dynamic programming cannot handle tight/diverse previews.
Author feedback needed?	No

Masked Reviewer ID: Assigned_Reviewer_2

Review:

Question	
Overall Rating	Neutral
Top 3 Strengths	- The idea of preview table is user-centered. It tackles with an emerging problem of information overload. - The novelty of the work is clearly stated. - The paper proposes a solid algorithm for the optimization problem.
Top 3 Weaknesses	- The scoring measures for preview tables reflect the intuition insufficiently.

	- The proposed work is hard to follow.
Detailed Comments	This paper studies how to generate preview tables for large-scale and complex entity graphs.
Author feedback needed?	No

Masked Reviewer ID: Assigned_Reviewer_3

Review:

Question	
Overall Rating	Neutral
Top 3 Strengths	- The paper focuses on a real-world problem that has not received much attention to date - Elegant formulation as an optimization problem - Validation of the approach includes a user study, which is rarely seen in this kind of work.
Top 3 Weaknesses	- Except for the user study, the empirical evaluation is fairly weak as it relies on the unsubstantiated assumption that attributes displayed by Freebase in its UI are the ground truth data - Existing schema summarization techniques are not used as baselines in the experiments - The algorithms work exclusively at the schema level, finding the attributes for the preview tables but not the instances that may be most representative (the instances shown in the preview table are simply chosen at random)
Detailed Comments	-
Author feedback needed?	No