Dear editor:

We submit hereby the manuscript entitled: “EAGS: An Extracting Auxiliary Knowledge Graph Model in Multi-turn Dialogue Generation”. All authors have read this manuscript and would like to have it considered exclusively for publication in World Wide Web Internet and Web Information Systems. The contribution of this article is very consistent with the aims and scope of this special issue. None of the material related to this manuscript has been published or is under consideration for publication elsewhere, including the internet. We submit this manuscript based on the following reasons:

1. Background and Significance:

Multi-turn dialogue generation is an essential and challenging subtask of text generation in question answering system. Existing methods focused on extracting latent topic-level relevance or utilizing relevant external background knowledge. However, they are prone to ignore the fact that relying too much on latent aspects will lose subjective key information. Furthermore, there is not so much relevant external knowledge that can be used for referencing or a graph which has complete entity links.

1. Originality and Novelties:

We proposed a EAGS model, which combines the subjective pivotal information from explicit dependency tree with sentences implicit semantic information. EAGS model is a knowledge graph enabled multi-turn dialogue generation model. EAGS doesn't need extra external knowledge, it can not only extract and build a dependency knowledge graph from existing sentences, but also prompt the node representation, which is shared with Bi-GRU each time step word embedding in node semantic level. We store the specific domain subgraphs built by EAGS and it can be retrieved as external knowledge graph in the future multi-turn dialogue generation task. We design a multi-task training approach to enhance semantic and structure local feature extraction, and balance with the global features.

We would be very grateful if the submitted manuscript could be reviewed and considered for publication in Knowledge-Based Systems.

Your kind considerations will be greatly appreciated.

With best regards,

Sincerely Yours,

Bo Ning

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