ACL Rolling Review - July 2025
Submission 425: How to Make LMs Strong Node Classifiers?
Explanation of Revisions PDF

We present the Meta Review from the last round as follows and explain the revisions made in this version.

1 Meta review

This paper presents an approach that enables off-the-shelf language models to perform competitively on node classification tasks without requiring architectural modifications. The method leverages personalized PageRank and a pre-trained lightweight GNN to identify graph nodes relevant to the target node, and further uses the GNN to narrow the prediction label space, thereby facilitating the final prediction made by the LLM.

Summary Of Reasons To Publish:

- The topic is relevant to the ACL community, as it investigates the application of LLMs to node classification.
- The proposed approach is reasonable.
- The paper is generally well-written and easy to follow.

Summary Of Suggested Revisions:

- The primary concern raised by reviewers is the limited technical novelty. The approach mainly combines established techniques, including a pre-trained GNN classifier and the PageRank algorithm. While this integration is reasonable, it is not particularly surprising that such a combination yields competitive results.
- In terms of empirical performance, the proposed method achieves results comparable to existing approaches, but shows only marginal improvements over slightly old LLM-based text-output methods such as instructGLM and LLaGA. It does not outperform methods like SIMTEG or TAPE+RevGAT, which employ GNNs as classifiers.
- As suggested by reviewers, including comparisons to more recent methods would strengthen the paper.

Overall Assessment: 2 = Resubmit next cycle: I think this paper needs substantial revisions that can be completed by the next ARR cycle.

2 Revisions in this version

We made the following revisions based on the guidance from the meta reviewer in the previous review round:

- We expanded our experimental comparisons to include several recent and powerful methods: ENGINE, SimTeG, GraphAdapter, OFA, LLM4GraphTopology, GraphPrompter, and GraphICL. Despite the capability of these new baselines, our model remains the best among text-output methods and is competitive with state-of-the-art vector-output approaches. Please refer to the updated Section 5.2 and Table 1 for details.

- We added an extended related work section (Section H in the Appendix) to ensure comprehensive coverage of relevant literature.