Multi-Armed Bandits for Optimizing New Peers in Peer-to-Peer Networks

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Abstract

Write this last (fewer than 300 words). The completed document should be 5-9 pages.

1. Introduction

Introduction here. Problem, why it is important/interesting, and the plan for the approach.

2. Related Work

Example of related work section. Discuss relevant literature.

(Kool et al., 2018) and (Vaswani et al., 2017) push forward the idea of (Bello et al., 2016) and employ graph attention network that incorporates both the graph topology and input features as opposed to the previous architecture that employed a graph-agnostic sequence to sequence mapping. ... Experimental results also show that this model brings benefits over the pointer network in (Bello et al., 2016).

3. Problem Formulation

Explain the technical bits.

4. Approach

Algorithms we will use and develop (e.g. eps-greedy, UCB, and more). Implementation details, pseudocode here.

5. Results

Use of implementation to produce results. Graphs here.

6. Discussion

Discussion on results. Pros and cons of suggested solution compared with existing solutions.

7. Conclusion and Future Research

What we learned. Future work, takeaways.

References

Bello, I., Pham, H., Le, Q. V., Norouzi, M., and Bengio, S. Neural combinatorial optimization with reinforcement learning. *arXiv preprint arXiv:1611.09940*, 2016.

Kool, W., Van Hoof, H., and Welling, M. Attention, learn to solve routing problems! *arXiv preprint arXiv:1803.08475*, 2018.

Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, Ł., and Polosukhin, I. Attention is all you need. In *Advances in neural information processing systems*, pp. 5998–6008, 2017.

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RL Course Project Report, University of Victoria, Spring, 2022.