Review for G9: Shortest Path Tree Computation in Dynamic Graphs

Xiaofei Zhao & Rahul Saladi

Technical accuracy:

Technically, this narrative is accurate regarding to the original paper. At the beginning, it gives out an accurate definition and descriptions of the problem. It introduces the main contribution of the paper: improvements on multiple edge weight changed graph. And the author of the narrative also does a good job in illustrating the problem by showing the SPT in a graph network.

Presentation:

The presentation of this paper is comprehensive. It also follows a good and proper structure. Some examples and experiments are listed to help understanding the contribution of the paper.

Analysis and insights:

The author of the narrative presents a good understanding of the paper. It talks about the DynDijkstra algorithm to show the key idea of the whole paper. However, it may be better to have a balance discussion between different algorithms.

Some possible improvements:

First of all, spatio-temporal networks is one of the application domain of this paper. However, the main point of this paper is the discussion of SPT algorithm in Dynamic Graphs. Therefore, the problem definition in the narrative is a little beyond the scope of this paper.

Secondly, for the contribution part, there is much detail information for illustrating the idea of DynDijkstra algorithm. It may be better to make it a little concisely. And a summary table can be used to clearly list the similarity and differences between those algorithms.

More over, adding a conclusion summary and a more specific future in the end can do some help