Reviewer's report

Title: GatewayNet: A Form of Sequential Rule Mining

Version: 0 Date: 08 Sep 2018

Reviewer: Xi Hang Cao

Reviewer's report:

Using a sequential rule mining algorithm for gateway hypothesis problem is somewhat novel in some extend; however, due to the problem similarity between sequential rule mining and gateway hypothesis, one can apply sequential rule mining algorithms to gateway hypothesis problem naturally, even without any extensions or modifications. Therefore, claiming the contribution by applying an classic algorithm to another classic problem seems very weak. The visualization of the mined rules is too weak to be claimed as a contribution. Essentially, one can easily treat each each event as a node in a network in which the edges are defined as the mined rules. Therefore, visualizing such a event-rule network is technically the same as of plotting a weighted directed graph. The author should have compared the proposed association rule mining algorithm with some other state-of-the-art algorithms (for example, the ones that listed in ref. 21, 22, 23). It will be very interesting to see how different variant association rule mining algorithms perform in this context of gateway hypothesis problem and a discussion of their advantages and disadvantages.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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Yes

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