Review of "Multiway clustering via tensor block models"

Yuchen Zeng

1 Summary

This paper proposes to extend the biclustering method into higherorder tensors and focus on tensor block models. The tensor block model applied to hybrid error distribution, in which different types of distribution are allowed for different portions of the tensor as long as it is sub-Gaussian. This setting may have a considerable amount of applications. The presentation is very clear. The theoretical result gives a guarantee on the algorithm and the proposed algorithm is reasonable.

2 Improvement

- In the experiment part, enlarging the noise level can make it easier to see the consequence caused by different sizes of mode (e.g. when the d_3 is obviously larger than d_2 , discuss the difference of CER in different mode and explain the reason).
- In the Table 2, deleting the baseline results may make the table look more precise.

 $\bullet\,$ Discuss the change of CER of each mode while changing the R in the experiment part.