Meeting 2019/11/27

Stephen Coleman

27/11/2019

Summary

Discussed different datasets to apply Consensus Clustering and / or MDI to. Agreed upon the Cancer Genoma Atlas (TGCA) Breast Cancer (as per Lock and Dunson (2013)) and the Pan-Cancer (as per Hoadley et al. (2014)) datasets.

I will bring results from MDI and Consensus Clustering applied to the Yeast data from the original MDI paper to the next meeting.

Plan

From the Lock and Dunson (2013) paper, we intend to use the same reduced dataset as input to both MDI and Consensus Clustering. As this dataset is of reduced form due to the computational limits of the algorithm proposed within the paper, we will also run Consensus Clustering on the full dataset.

We will also compare Consensus Clustering to the clustering produced by Cluster-of-cluster-analysis in figure 1 of Hoadley et al. (2014).

References

Hoadley, Katherine A, Christina Yau, Denise M Wolf, Andrew D Cherniack, David Tamborero, Sam Ng, Max DM Leiserson, et al. 2014. "Multiplatform Analysis of 12 Cancer Types Reveals Molecular Classification Within and Across Tissues of Origin." *Cell* 158 (4). Elsevier: 929–44.

Lock, Eric F, and David B Dunson. 2013. "Bayesian Consensus Clustering." *Bioinformatics* 29 (20). Oxford University Press: 2610–6.