

Progress Report

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1 Research Objective and Goal

The objective of this study is to improve the booleanization part of algorithm from Truong et al. (2021). Starting with understanding the nonnegative matrix factorization problem and algorithms to solve it.

2 Short-Term Goals

1. Benchmark the algorithms on the given dataset.

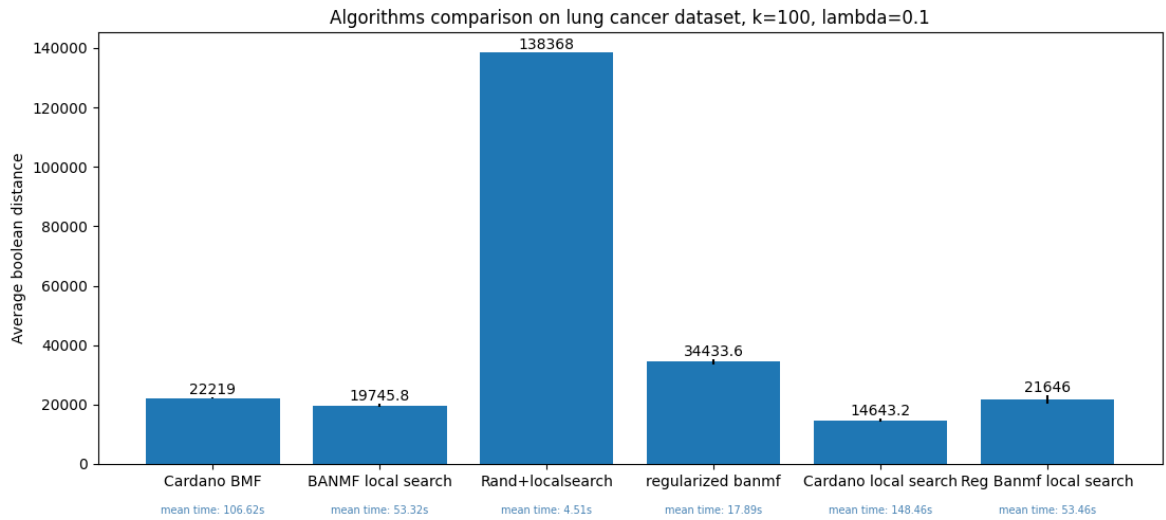


Figure 1: Lung cancer dataset results

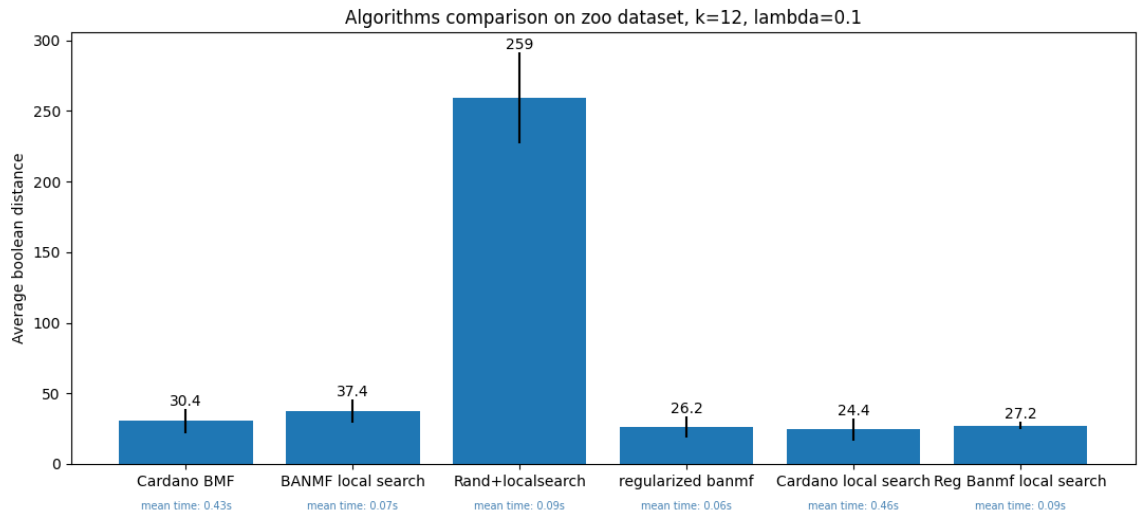


Figure 2: Zoo dataset results

References

Truong, D. P., Skau, E., Desantis, D., and Alexandrov, B. (2021). Boolean matrix factorization via nonnegative auxiliary optimization. *IEEE Access*, 9:117169–117177.