Weather forecast model using DBSCAN and Sepctral Clustering

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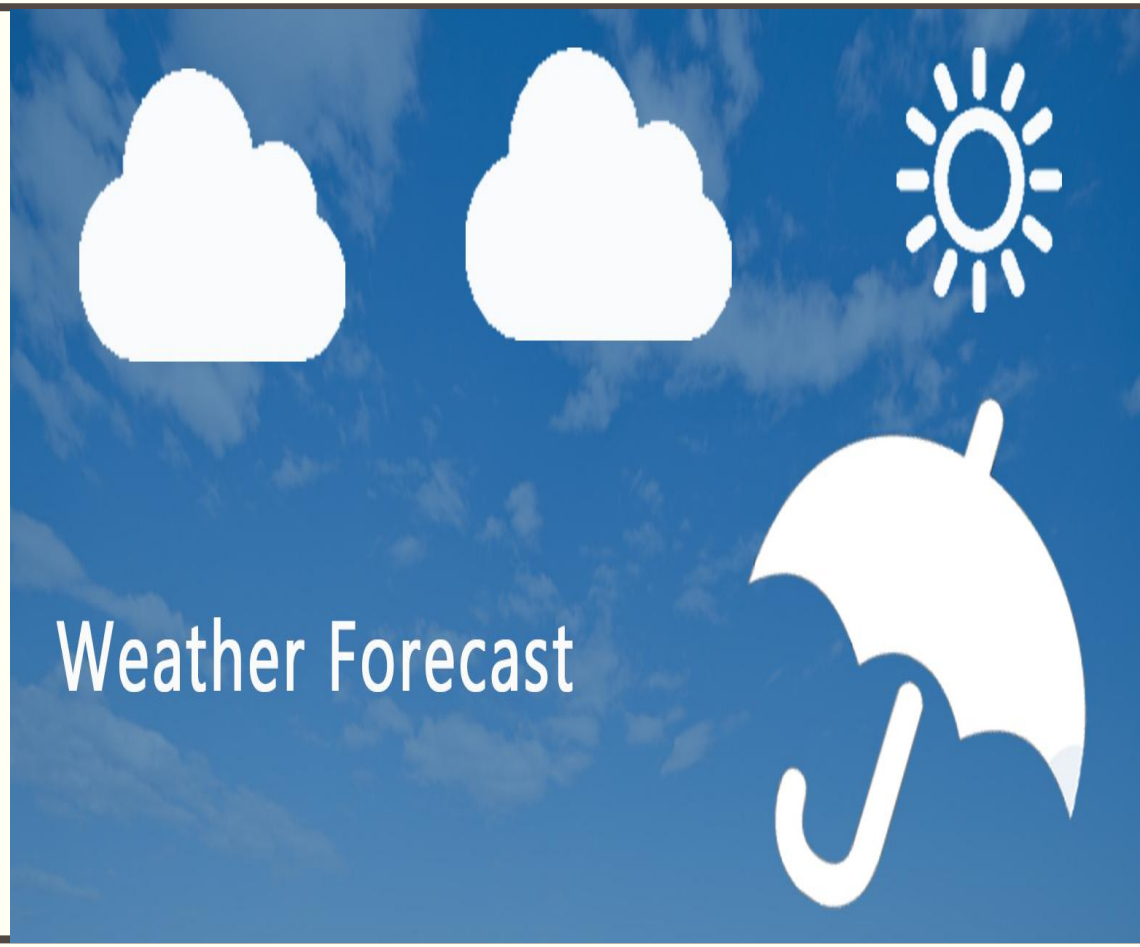
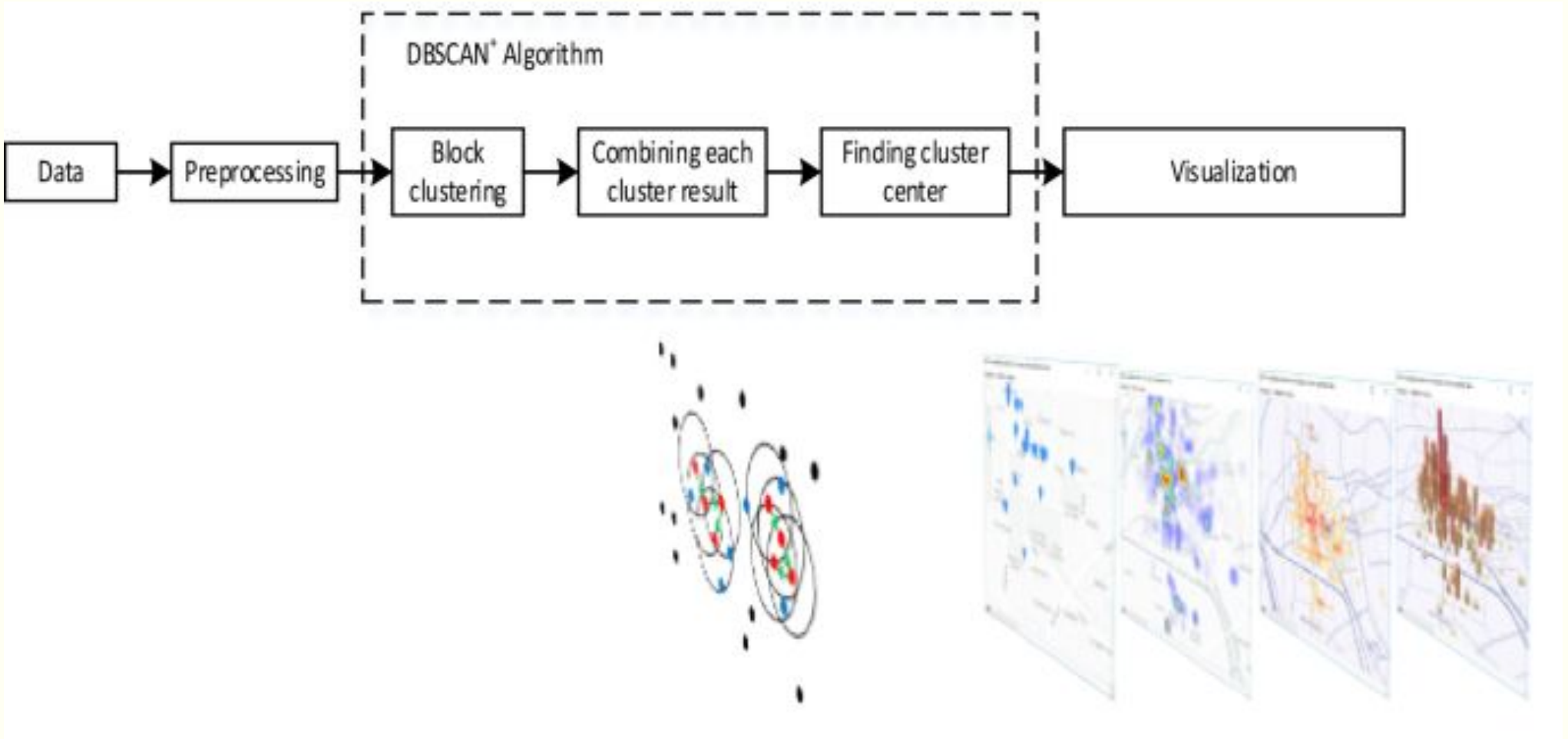


Department of Computer Science and Engineering

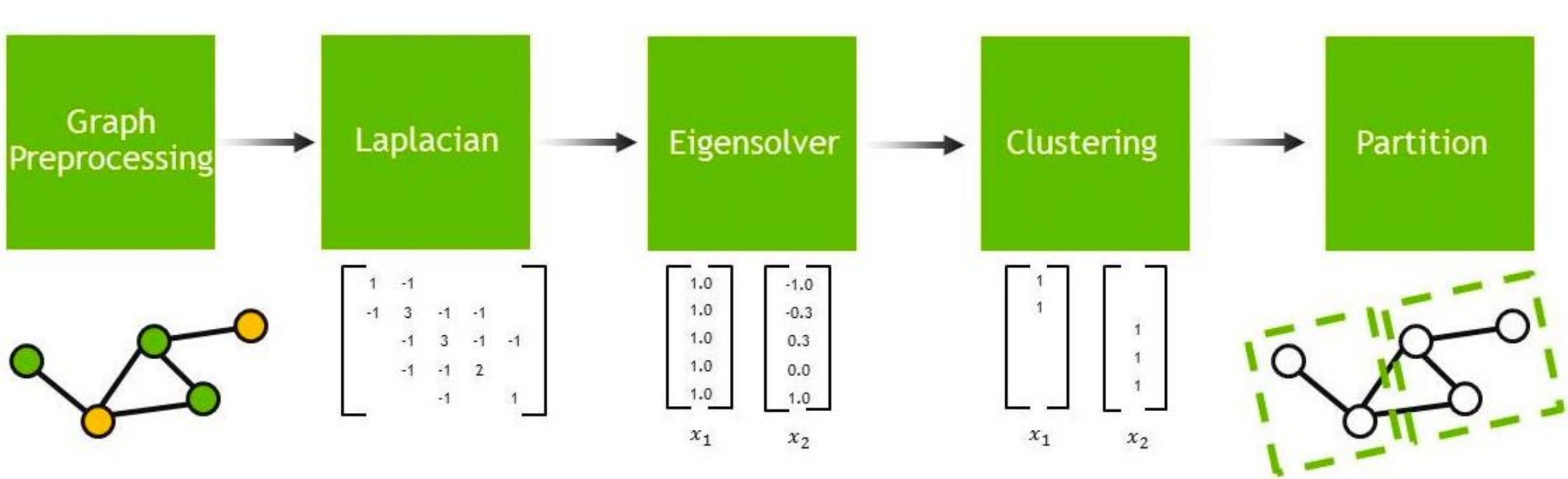
Weather forecast model using clustering algorithm

- To train model using decision tree after clustering data
- Check whether which algorithm clusters the data efficiently
- Compare recall score as performance metrics

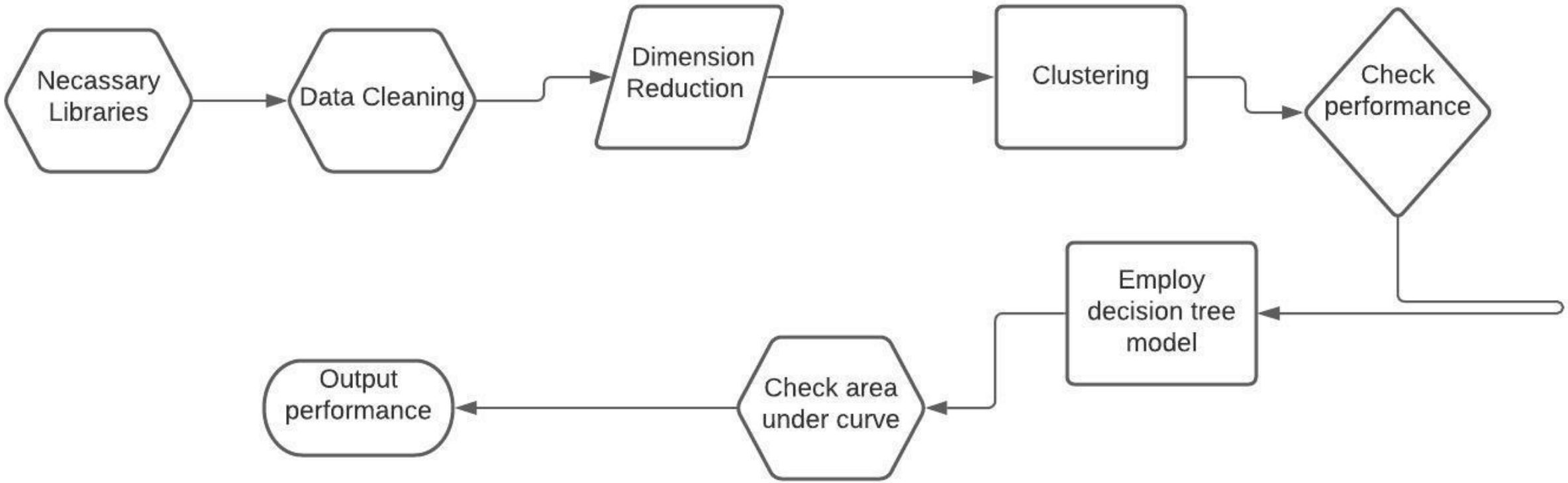
Contribution of your work: Algorithm/Methodology/Flowchart etc.



Methodology



Methodology



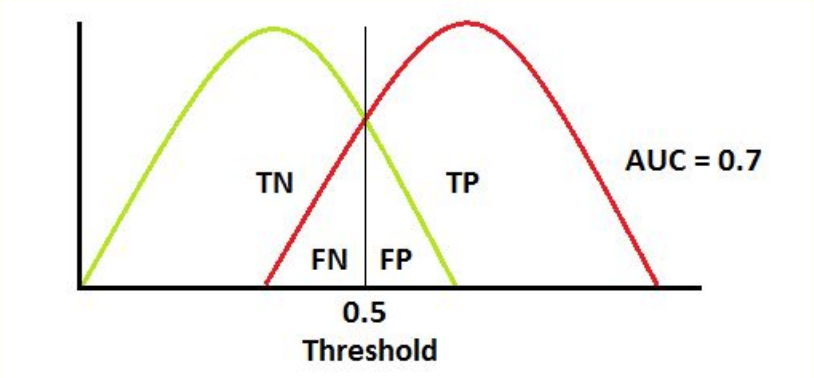
Outcome of the work: Performance analysis, Comparative discussion, if any.

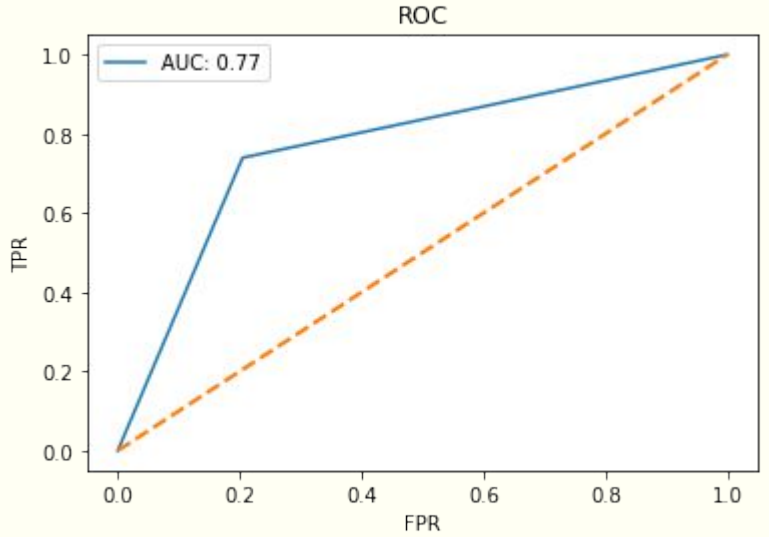
- Performance score of DBSCAN
- Performance score of Spectral
- Spectral Clustering outperforms

Class	DBCSAN	Spectral
Accuracy	0.59	0.76
Recall Score	0.77	0.93

Outcome of the work: Performance analysis, Comparative discussion, if any.

When AUC is 0.7, it means there is a 70% chance that the model will be able to distinguish between positive class and negative class.





Conclusion:

- Spectral Clustering Algorithm performs well in the dataset
- DBSCAN performs lesser than spectral
- Spectral Cluster performs well in large data sets.