mst_clustering: Clustering via Euclidean Minimum Spanning Trees

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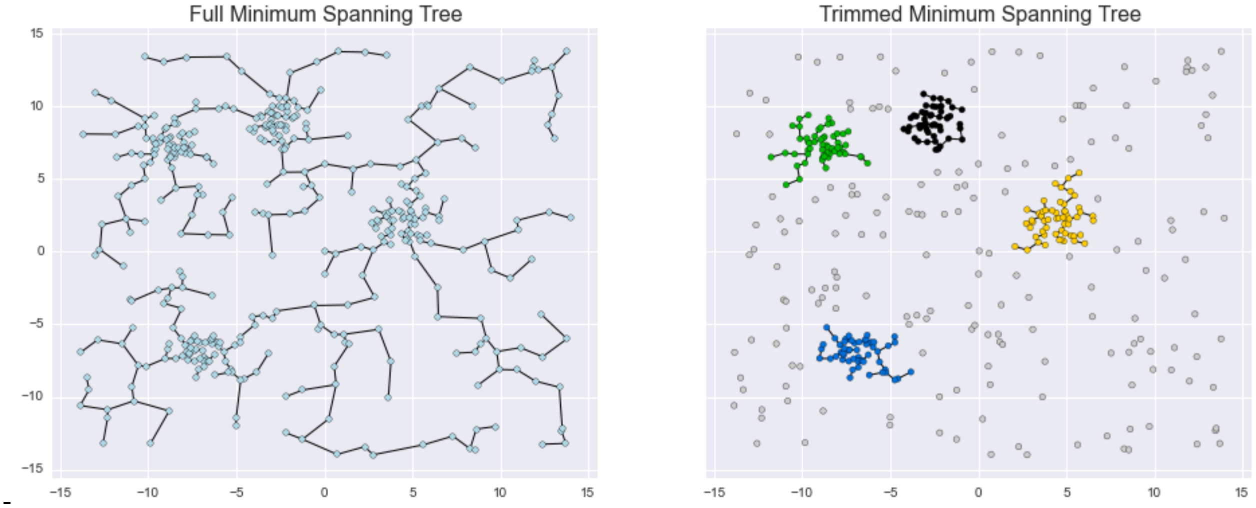
Summary

This package contains a Python implementation of a clustering algorithm based on an efficiently-constructed approximate Euclidean minimum spanning tree (described in (Ivezić et al. 2014)). The method produces a Hierarchical clustering of input data, and is quite similar to single-linkage Agglomerative clustering. The advantage of this implementation is the ability to find significant clusters even in the presence of background noise.

The code makes use of tools within SciPy (Jones et al. 2001–2001--) and scikit-learn (Pedregosa et al. 2011), and is designed for compatibility with the scikit-learn API (Buitinck et al. 2013).



References

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Ivezić, Željko, Andrew J Connolly, Jacob T VanderPlas, and Alexander Gray. 2014. *Statistics, Data Mining, and Machine Learning in Astronomy: A Practical Python Guide for the Analysis of Survey Data*. Princeton University Press.

Jones, Eric, Travis Oliphant, Pearu Peterson, and others. 2001–2001--. "SciPy: Open Source Scientific Tools for Python.” http://www.scipy.org/.

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