

Probabilistic consensus clustering using evidence accumulation

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Abstract Clustering ensemble methods produce a consensus partition of a set of data points by combining the results of a collection of base clustering algorithms. In the *evidence accumulation clustering* (EAC) paradigm, the clustering ensemble is transformed into a pairwise co-association matrix, thus avoiding the label correspondence problem, which is intrinsic to other clustering ensemble schemes. In this paper, we propose a consensus clustering approach based on the EAC paradigm, which is not limited to crisp partitions and fully exploits the nature of the co-association matrix. Our solution determines probabilistic assign-

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