

Clustering Fusion and Uncertainty Intellectual Property

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Patent Pending

Presents a method and a system for combining multiple hard and soft clusterings of a set of objects without accessing the original features. In this general meta-clustering approach a combined partition and uncertainties on cluster memberships are found as a solution to the maximum likelihood estimation problem using the EM algorithm. We derive a Bayesian information criterion for choosing the optimal number of clusters in the combined partition. We also show how this model supports incomplete information such as missing cluster association.