

# EVIDENTIAL SEED-BASED SEMI-SUPERVISED CLUSTERING

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## TÓM TẮT:

Evidential clustering algorithms produce credal partitions that enhance the concepts of hard, fuzzy or possibilistic partitions to represent all assignments ranging from complete ignorance to total certainty. This paper introduces the first semi-supervised extension of the evidential c-means clustering algorithm that can benefit from the introduction of a small set of labeled data (or seeds). Experiments conducted on real datasets show that the introduction of seeds can lead to a significant increase in clustering accuracy compared to a traditional evidential clustering algorithm as well as a decrease in the number of iterations to convergence.

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