

(54) Title of the invention : AN AUTOMATED DATA CATEGORIZATION AND CLUSTERING SYSTEM USING UNSUPERVISED LEARNING ALGORITHMS

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(57) Abstract :  
 [052] The present invention relates to an Automated Data Categorization and Clustering System employing an ensemble of unsupervised learning algorithms. The system features robust preprocessing methods for noise reduction, outlier detection, and feature extraction. It uses an optimal cluster determination mechanism and a model selection procedure based on various internal quality indices. The system's architecture is built around several modules that conduct these processes, providing accurate and scalable data analysis. The results are visualized in an intuitive and interpretable manner. This comprehensive solution enhances data-driven decision-making processes across various domains by providing insightful knowledge from large-scale datasets. Accompanied Drawing [FIGS. 1-2]

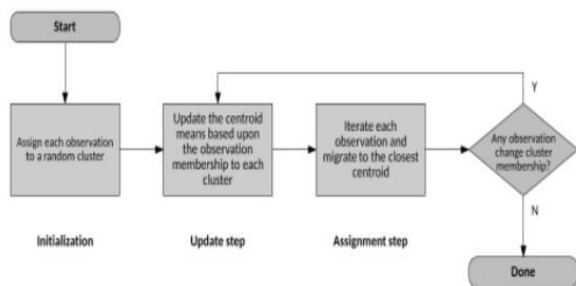


Figure 1

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