Differential Evolution Classifier with Optimized OWA-Based Multi-distance Measures for the Features in the Data Sets

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Abstract
This paper introduces a new classification method that uses the differential evolution algorithm to feature-wise select, from a pool of distance measures, an optimal distance measure to be used for classification of elements. The distances yielded for each feature by the optimized distance measures are aggregated into an overall distance vector for each element by using OWA based multi-distance aggregation.

Keywords
Classification Differential evolution Pool of distances Multi-distances