X-ray image segmentation using product-type aggregation of distance functions

Ljubo Nedović • Endre Pap • Nebojša M. Ralević • Marija Delić

Abstract

In clustering algorithms, distance function represent a criterion based on which the objects are divided into predefined number of clusters. The applied distance function, as the criterion for grouping pixels into segments, can be constructed by the usage of different aggregation operators and pixel descriptors. In this paper, we present a construction of distance function by using product-type aggregation operator. The application of such a distance function is shown through the segmentation of one X-ray image in Fuzzy c-means clustering algorithm.