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Optimizacija k-means algoritma

Sažetak. Analizirat će se mogućnosti optimizacije poznatog k -means algoritma za traženje lokalno optimalne particije skupa podataka $\mathcal{A} \subset \mathbb{R}^n$. U tom smislu, posebno će se razmatrati problem pojavljivanja nekog podatka na Voronoijevom dijagramu i predložiti optimalna strategija ponašanja u tom slučaju.

Abstract. (Optimization of the k -means algorithm) In this paper, a possible optimization of the well-known k -means algorithm for searching for a locally optimal partition of the set $\mathcal{A} \subset \mathbb{R}^n$ is analyzed. In this sense, the problem of some data point occurring on the Voronoi diagram is considered, and an optimal strategy by implementation of the k -means algorithm in this case is proposed.

Key words: k-means; Clustering; Data mining; Assignment

MSC2010: 68T10, 62H30, 91C20, 90C26

The paper was prepared in collaboration with: K.Sabo