A NEW FUZZY CLUSTER ANALYSIS
APPLIED TO FAMS

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Fuzzy associative memories (FAM) are maps from an n-dimensional real space to p-dimensional real space. These maps can be realized as maps of topological spaces which maps balls of fuzzy sets in \( I^n \) to balls of fuzzy sets in \( I^p \). The FAMs can be adopted even if the data is an unsupervised one. Further, adaptive FAMs are time varying mappings of topological spaces. While adopting geometric procedure to adaptive FAM we translate these rules into a product space clustering. Here the clustering algorithm is used to estimate the unknowns. Here in this paper we use fuzzy cluster analysis given by Frank Hoppner and others to obtain the conclusions. The same new procedure is also adopted to BIOFAMs as adaptive BIOFAMs cluster in input and output product space \( X \times Y \). As BIOFAMs clustering counts synaptic quantizations vectors in FAM cells by adapting at these stages the results are more precise and simple. The technique of adaptive Fuzzy Cluster Analysis to FAMs and BIOFAMs respectively. Interesting results about these techniques and their uses in practical problems are discussed.