

Analysis of constraints in fuzzy clustering and applications

Nguyen Thi Khang

Abstract: This topic focuses on exploring the necessity of constraints in the fuzzy clustering process, a method for optimizing multidimensional space. The main objective is to build a highly flexible fuzzy clustering model to solve more complex practical problems by incorporating specific constraints. The research methodology includes both theory and empirical application, combining statistical tools with fuzzy set modeling. The expected outcome of this topic is to provide a useful tool for scientists and engineers in handling uncertain data and designing efficient automation systems.

Keywords: Fuzzy clustering, Constraints, Fuzzy sets, Data analysis, Practical applications