Abstract

Fuzzy logic system studies reasoning systems in which the design of precision and deception are considered in a graded fashion, in contrast with classical mathematics where only absolutely true statements are considered. Whereas, Axiomatic fuzzy logic system facilitates a significant step on how to transform the information within databases into the membership functions and their fuzzy logic operations, by taking both the fuzziness and randomness into account. In this paper, various notations and illustrations of fuzzy concepts and coherence membership functions have been studied and analyzed under the framework of Axiomatic Fuzzy set theory. Various examples are illustrated for every concept by considering the hypothetical data.

References


**Index Terms**

Computer Science | Fuzzy Systems

**Keywords**

Axiomatic Fuzzy Set structures, Axiomatic Fuzzy Set algebras, Axiomatic Fuzzy Set logic, Coherence membership functions, Fuzzy logic system.