Conceptual of Type-2 Fuzzy Geometric Modelling

ABSTRACT

Geometric modelling is a method of data representation illustrated through the formation of curves and surfaces in various forms. The construction of curves and surfaces is complicated when it comes to data that has complex uncertainty characteristics. Type-1 Fuzzy Set Theory (T1FST) is unable to define this complex uncertainty problem. To overcome this problem, Type-2 Fuzzy Set Theory (T2FST) is used due to its ability to define a higher level of uncertainty problem. In certain cases, both uncertainty and complex uncertainty data occur when there is a combination of degrees of ambiguity in a collection of data sets that would be modelled through the representation of curves and surfaces. Therefore, this paper will review some significant reason for implementation of T1FST and T2FST in geometric modelling. A review on type-1 and type-2 in fuzzy geometric modelling is also presented.