

Integrated fuzzy Bezier surface model

ABSTRACT

: Integrated fuzzy Bezier surface model is introduced based on defining and combining the definition of both uncertainty and complex uncertainty data, which is also named as integrated uncertainty data that exists in data sets. The integrated-uncertainty data set occurs when the data set has various degrees of ambiguity lies in the characteristics and properties of the data set itself. In this case, both type-1 fuzzy set theory (T1FST) and type-2 fuzzy set theory (T2FST) were used to define the integrated-uncertainty data. Then, in order to achieve a final solution as the crisp integrated fuzzy Bezier surface model, the processes such as fuzzification, type-reduction, and defuzzification are being applied against the integrated fuzzy data points.