

THE BEZIER CURVE AS A FUZZY MEMBERSHIP FUNCTION SHAPE*

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Abstract

Membership functions are a key concept in fuzzy set theory and their correctness and precision are essential for the accuracy of obtained results. This article discusses the use of Bezier curve to construct a membership function. Based on the frequency distribution of data by minimization, the coordinate formulas of the control points that define the curve are derived. Use of the described membership function is illustrated by an example. These formulas are applied to bispectral index data sets in order to compare with other published method.

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