Abstract

The shadowed sets are proposed by Pedrycz as a granule manner to approximate the fuzzy sets with preserving the uncertainty features. Many methods have been made in this context to maintain various characteristics of uncertainty for fuzzy sets. In this paper, a new method is proposed which it is preserve more than one kind of uncertainty in fuzzy sets. The new technique is based on the use of measures of uncertainty directly to induce ideal values of shadowed set. It's more simply and accurate for describing uncertainty. The features of new method are important for decision applications.
An Improved Fuzzy Number Approximation using Shadowed Sets


Index Terms

Computer Science
Fuzzy Systems
Keywords
  Fuzzy sets  Shadowed sets  Fuzziness measure  Non-specificity measure.