



FUZZY INFORMATION RETRIEVAL BASED ON A NEW SIMILARITY MEASURE OF GENERALIZED FUZZY NUMBERS

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ABSTRACT—This study presents a new similarity measure based on the geometric-mean averaging operator to handle the similarity measure problems of generalized fuzzy numbers. Some properties of the proposed similarity measure are demonstrated, and 26 sets of generalized fuzzy numbers are used to compare the proposed method with existing similarity measures. Comparison results indicate that the proposed similarity measure is better than existing methods. Finally, the proposed similarity measure is applied to propose an algorithm for handling fuzzy-number information retrieval problems.

Key Words: Geometric-mean averaging operator generalized fuzzy numbers, similarity measures, fuzzy-number information retrieval, linguistic queries.