Symposia Title Advancements in Fuzzy Information with Applications

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ABSTRACT

We propose a symposium that delves into the cutting-edge developments in the field of Fuzzy Information and explores its diverse applications across various domains. Fuzzy Information, rooted in fuzzy logic, provides a flexible and nuanced approach to handling uncertainty and imprecision in data, enabling more realistic modelling of complex systems. In the recent two decades, the notion of fuzzy sets has become more versatile due to its several extensions like, intuitionistic fuzzy set, Pythagorean fuzzy sets, Fermetean Fuzzy sets, q-rung orthopair fuzzy sets, picture fuzzy sets, neutrosiphic sets, etc., In view of these extended versions, numerous measures of information have been developed and applied to real-life problems, specifically, clustering and classification, decision-making, neural networks and deep learning, control systems in industrial automation, healthcare decision support, modelling for financial forecasting. There is tremendous potential of development of novel information measures based on classical and extended versions of fuzzy sets with their applications to contemporary research concerning AI and data-science.

The symposium aims to bring together researchers, academicians, and industry experts to discuss the latest advancements in fuzzy information theory and its practical applications. By fostering discussions on the advancements in fuzzy information, the symposium aims to catalyse new research directions and promote the practical implementation of fuzzy logic and its extensions in solving real-world problems. Participants will gain insights into innovative applications and methodologies, paving the way for a more robust and adaptive information processing paradigm.

We invite contributions from researchers and professionals working in the field of fuzzy information and related areas to make this symposium a vibrant platform for knowledge exchange and collaboration.

Keywords: Fuzzy set, Intuitionistic fuzzy sets, Pythagorean fuzzy set, Fermetean fuzzy set, q-rung orthopair fuzzy sets, Neutrosophic sets, AI Applications, Decision-Making, Similarity measures, Entropy measures, Knowledge Measures.