Studies in Fuzziness and Soft Computing

The series "Studies in Fuzziness and Soft Computing" contains publications on various areas within the so-called soft computing which include fuzzy sets, rough sets, neural networks, evolutionary computations, probabilistic and evidential reasoning, multivalued logic, and related fields. The publications within "Studies in Fuzziness and Soft Computing" are primarily monographs and edited volumes. They cover significant recent developments in the field, both of a foundational and applicable character. An important feature of the series is its short publication time and world-wide distribution. This permits a rapid and broad dissemination of research results.

Humberto Bustince ·Francisco Herrera · Javier Montero (Eds.) Fuzzy Sets and Their Extensions: Representation, Aggregation and Models

This carefully edited book presents an up-to-date state of current research in the use of fuzzy sets and their extensions, paying attention to foundation issues and to their application to four important area where fuzzy sets are seen to be an important tool for modelling and solving problems.

In a first part, sections 1 introduces some non standard representations that extend fuzzy sets, and section 2 reviews different aggregation issues from a theoretical and practical point of view.

In a second part, section 3 is devoted to show how fuzzy sets and their extensions are an important tool for modelling choice problems, section 4 covers different aspects on their use in data mining, section 5 shows their application to the emergent topic of web intelligence, and section 6 is devoted to their application in computer vision.

This volume will be extremely useful to any non-expert reader who is keen to get a good overview on the latest developments in this research field. It will also support those specialists who wish to discover the latest results and trends in the above mentioned areas.

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