

1. Record Nr.	UNINA9910253964603321
Autore	Sanchez Daniela
Titolo	Hierarchical Modular Granular Neural Networks with Fuzzy Aggregation // by Daniela Sanchez, Patricia Melin
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-28862-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (107 p.)
Collana	SpringerBriefs in Computational Intelligence, , 2625-3712
Disciplina	620
Soggetti	Computational intelligence Artificial intelligence Neural networks (Computer science) Computational Intelligence Artificial Intelligence Mathematical Models of Cognitive Processes and Neural Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- Background and Theory -- Proposed Method -- Application to Human Recognition -- Experimental Results -- Conclusions.
Sommario/riassunto	In this book, a new method for hybrid intelligent systems is proposed. The proposed method is based on a granular computing approach applied in two levels. The techniques used and combined in the proposed method are modular neural networks (MNNs) with a Granular Computing (GrC) approach, thus resulting in a new concept of MNNs; modular granular neural networks (MGNNs). In addition fuzzy logic (FL) and hierarchical genetic algorithms (HGAs) are techniques used in this research work to improve results. These techniques are chosen because in other works have demonstrated to be a good option, and in the case of MNNs and HGAs, these techniques allow to improve the results obtained than with their conventional versions; respectively artificial neural networks and genetic algorithms.