

1. Record Nr.	UNINA9910254352103321
Autore	Iatan Iuliana F
Titolo	Issues in the Use of Neural Networks in Information Retrieval // by Iuliana F. Iatan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-43871-9
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIX, 199 p. 88 illus., 44 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 661
Disciplina	006.32
Soggetti	Computational intelligence Artificial intelligence Neural networks (Computer science) Pattern recognition Computational Intelligence Artificial Intelligence Mathematical Models of Cognitive Processes and Neural Networks Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Mathematical Aspects of Using Neural Approaches for Information Retrieval -- A Fuzzy Kwan- Cai Neural Network for Determining Image Similarity and for the Face Recognition -- Predicting Human Personality from Social Media using a Fuzzy Neural Network -- Modern Neural Methods for Function Approximation -- A Fuzzy Gaussian Clifford Neural Network -- Concurrent Fuzzy Neural Networks -- A New Interval Arithmetic Based Neural Network -- A Recurrent Neural Fuzzy Network.
Sommario/riassunto	This book highlights the ability of neural networks (NNs) to be excellent pattern matchers and their importance in information retrieval (IR), which is based on index term matching. The book defines a new NN-based method for learning image similarity and describes how to use fuzzy Gaussian neural networks to predict personality. It introduces the fuzzy Clifford Gaussian network, and two concurrent neural models: (1) concurrent fuzzy nonlinear perceptron modules, and (2) concurrent

fuzzy Gaussian neural network modules. Furthermore, it explains the design of a new model of fuzzy nonlinear perceptron based on alpha level sets and describes a recurrent fuzzy neural network model with a learning algorithm based on the improved particle swarm optimization method.
