

1. Record Nr.	UNINA9910350219403321
Autore	Chakraverty Snehashish
Titolo	Concepts of Soft Computing : Fuzzy and ANN with Programming // by Snehashish Chakraverty, Deepti Moyi Sahoo, Nisha Rani Mahato
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-7430-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (206 pages)
Disciplina	004.6
Soggetti	Computer organization Artificial intelligence Computer Systems Organization and Communication Networks Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Soft Computing -- Intervals -- Fuzzy Sets -- Fuzzy Numbers -- Fuzzy Relations -- Fuzzy Functions -- Fuzzy differentiation and integration -- Defuzzification -- Interval system of linear equations -- Interval eigenvalue problems.
Sommario/riassunto	This book discusses soft computing, which provides an efficient platform to deal with imprecision, uncertainty, vagueness and approximation in order to attain robustness and reliable computing. It explores two major concepts of soft computing: fuzzy set theory and neural networks, which relate to uncertainty handling and machine learning techniques respectively. Generally, fuzzy sets are considered as vague or uncertain sets having membership function lying between 0 and 1, and ANN is a type of artificial intelligence that attempts to imitate the way a human brain works by configuring specific applications, for instance pattern recognition or data classification, through learning processes. The book also presents C/MATLAB programming codes related to the basics of fuzzy set, interval arithmetic and ANN in a concise, practical and adaptable manner along, with simple examples and self-validation unsolved practice questions in few cases.

