

1. Record Nr.	UNINA9910299818203321
Titolo	Towards the Future of Fuzzy Logic / / edited by Rudolf Seising, Enric Trillas, Janusz Kacprzyk
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-18750-3
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (XV, 376 p. 31 illus., 4 illus. in color.)
Collana	Studies in Fuzziness and Soft Computing, , 1434-9922 ; ; 325
Disciplina	511.3
Soggetti	Computational intelligence Automatic control Economics Computational Intelligence Control and Systems Theory Economic Theory/Quantitative Economics/Mathematical Methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	On Reasoning With Words and Perceptions -- Language, Fuzzy Logic, Metalogic -- On What I Still Hope from Fuzzy Logic -- Fuzzy Logic and Modern Economics -- Linguistic Summaries of Time Series: A Powerful and Prospective Tool for Discovering Knowledge on Time Varying Processes And Systems.-Granular Geometry -- Inquiry About the Origin And Abundance of Vague Language: an Issue for the Future -- Fuzzy Natural Logic: Towards Mathematical Logic of Human Reasoning -- From Lattice Valued Theories to Lattice Valued Analysis -- Applying Fuzzy Mathematics to Empirical Work in Political Science -- Crisis' Origin's Causes. Contributions from the Fuzzy Logic in the Sustainability on the Socio-economic Systems -- Advanced Computing with Words: Status and Challenges -- Informal Meditation on Empiricism and Approximation in Fuzzy Logic and Set Theory: Descriptive Normativity, Formal Informativity and Objective Subjectivity -- Formalizing the Informal, Precisiating the Imprecise: How Fuzzy Logic Can Help Mathematicians and Physicists by Formalizing their Intuitive Ideas -- Future is where Concepts, Theories and Applications

Sommario/riassunto

This book provides readers with a snapshot of the state-of-the art in fuzzy logic. Throughout the chapters, key theories developed in the last fifty years as well as important applications to practical problems are presented and discussed from different perspectives, as the authors hail from different disciplines and therefore use fuzzy logic for different purposes. The book aims at showing how fuzzy logic has evolved since the first theory formulation by Lotfi A. Zadeh in his seminal paper on Fuzzy Sets in 1965. Fuzzy theories and implementation grew at an impressive speed and achieved significant results, especially on the applicative side. The study of fuzzy logic and its practice spread all over the world, from Europe to Asia, America and Oceania. The editors believe that, thanks to the drive of young researchers, fuzzy logic will be able to face the challenging goals posed by computing with words. New frontiers of knowledge are waiting to be explored. In order to motivate young people to engage in the future development of fuzzy logic, fuzzy methodologies, fuzzy applications, etc., the editors invited a team of internationally respected experts to write the present collection of papers, which shows the present and future potentials of fuzzy logic from different disciplinary perspectives and personal standpoints. .