1. Record Nr. UNINA9910254346103321

Autore	Konar Amit
Titolo	Time-series prediction and applications : a machine intelligence approach / / by Amit Konar, Diptendu Bhattacharya
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-54597-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVIII, 242 p. 69 illus., 13 illus. in color.)
Collana	Intelligent Systems Reference Library, , 1868-4394 ; ; 127
Disciplina	519.55
Soggetti	Computational intelligence Artificial intelligence Computer science - Mathematics Computational Intelligence Artificial Intelligence Computational Mathematics and Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	An Introduction to Time-Series Prediction -- Prediction Using Self-Adaptive Interval Type-2 Fuzzy Sets -- Handling Multiple Factors in the Antecedent of Type-2 Fuzzy Rules -- Learning Structures in an Economic Time-Series for Forecasting Applications -- Grouping of First-Order Transition Rules for Time-Series Prediction by Fuzzy-induced Neural Regression -- Conclusions and Future Directions. .
Sommario/riassunto	This book presents machine learning and type-2 fuzzy sets for the prediction of time-series with a particular focus on business forecasting applications. It also proposes new uncertainty management techniques in an economic time-series using type-2 fuzzy sets for prediction of the time-series at a given time point from its preceding value in fluctuating business environments. It employs machine learning to determine repetitively occurring similar structural patterns in the time-series and uses stochastic automaton to predict the most probabilistic structure at a given partition of the time-series. Such predictions help in determining probabilistic moves in a stock index

time-series Primarily written for graduate students and researchers in computer science, the book is equally useful for researchers/professionals in business intelligence and stock index prediction. A background of undergraduate level mathematics is presumed, although not mandatory, for most of the sections. Exercises with tips are provided at the end of each chapter to the readers' ability and understanding of the topics covered.