

1. Record Nr.	UNINA9910437900803321
Titolo	Time series analysis, modeling and applications : a computational intelligence perspective / / Witold Pedrycz and Shyi-Ming Chen (eds.)
Pubbl/distr/stampa	Berlin, : Springer, 2013
ISBN	9781283911436 1283911434 9783642334399 3642334393
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (396 p.)
Collana	Intelligent systems reference library, , 1868-4394 ; ; 47
Altri autori (Persone)	PedryczWitold <1953-> ChenShyi-Ming
Disciplina	336.4
Soggetti	Time-series analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	From the Contents: The links between statistical and fuzzy models for time series analysis and forecasting -- Incomplete time series: imputation through Genetic Algorithms -- Intelligent aggregation and time series smoothing -- Financial fuzzy Time series models based on ordered fuzzy numbers -- Stochastic-fuzzy knowledge-based approach to temporal data modeling.-A Novel Choquet integral composition forecasting model for time series data based on completed extensional L-measure -- An application of enhanced knowledge models to fuzzy time series -- A wavelet transform approach to chaotic short-term forecasting -- Fuzzy forecasting with fractal analysis for the time series of environmental pollution -- Support vector regression with kernel Mahalanobis measure for financial forecast.
Sommario/riassunto	Temporal and spatiotemporal data form an inherent fabric of the society as we are faced with streams of data coming from numerous sensors, data feeds, recordings associated with numerous areas of application embracing physical and human-generated phenomena (environmental data, financial markets, Internet activities, etc.). A quest for a thorough analysis, interpretation, modeling and prediction of time

series comes with an ongoing challenge for developing models that are both accurate and user-friendly (interpretable). The volume is aimed to exploit the conceptual and algorithmic framework of Computational Intelligence (CI) to form a cohesive and comprehensive environment for building models of time series. The contributions covered in the volume are fully reflective of the wealth of the CI technologies by bringing together ideas, algorithms, and numeric studies, which convincingly demonstrate their relevance, maturity and visible usefulness. It reflects upon the truly remarkable diversity of methodological and algorithmic approaches and case studies. This volume is aimed at a broad audience of researchers and practitioners engaged in various branches of operations research, management, social sciences, engineering, and economics. Owing to the nature of the material being covered and a way it has been arranged, it establishes a comprehensive and timely picture of the ongoing pursuits in the area and fosters further developments.
