Record Nr. UNINA9910437924203321 Advances in intelligent signal processing and data mining: theory and **Titolo** applications / / Petia Georgieva, Lyudmila Mihaylova, and Lakhmi C. Jain (eds.) Berlin; ; New York, : Springer, c2013 Pubbl/distr/stampa **ISBN** 3-642-28696-8 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XIV, 354 p.) Studies in computational intelligence, , 1860-949X;; 410 Collana Altri autori (Persone) GeorgievaPetya MihaylovaLyudmila JainL. C Disciplina 621.382/2 Soggetti Signal processing - Digital techniques - Data processing Data mining 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 and author index. From the content: Introduction to Intelligent Signal Processing and Data Nota di contenuto Mining -- Monte Carlo-Based Bayesian Group Object Tracking and Causal Reasoning -- A Sequential Monte Carlo Method for Multi-Target Tracking with the Intensity Filter -- Sequential Monte Carlo Methods for Localisation in Wireless Networks -- A Sequential Monte Carlo Approach for Brain Source Localization. The book presents some of the most efficient statistical and Sommario/riassunto deterministic methods for information processing and applications in order to extract targeted information and find hidden patterns. The techniques presented range from Bayesian approaches and their variations such as sequential Monte Carlo methods, Markov Chain Monte Carlo filters, Rao Blackwellization, to the biologically inspired paradigm of Neural Networks and decomposition techniques such as Empirical Mode Decomposition, Independent Component Analysis and Singular Spectrum Analysis. The book is directed to the research students, professors, researchers and practitioners interested in exploring the advanced techniques in intelligent signal processing and data mining paradigms. .