Record Nr. UNINA9910144585203321 Autore Vaseghi Saeed V Titolo Multimedia signal processing: theory and applications in speech, music and communications / / Saeed V. Vaseghi Chichester, England;; Hoboken, NJ,: J. Wiley, c2007 Pubbl/distr/stampa **ISBN** 9786611135263 9781281135261 1281135267 9780470066508 0470066504 9780470066492 0470066490 Edizione [1st ed.] Descrizione fisica 1 online resource (676 p.) Classificazione 53.71 05.39 54.74 Disciplina 621.382/2 Soggetti Signal processing Multimedia systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto pt. I. Basic digital signal processing. Introduction; Fourier analysis and synthesis: z-Transform: Digital filters: Sampling and quantisation -pt. II. Model-based signal processing. Information theory and probability models; Bayesian inference; Least square error, Wiener-Kolmogrov filters; Adaptive filters: Kalman, RLS, LMS; Linear prediction models; Hidden Markov models; Eigen vector analysis, principal component analysis and independent component analysis -pt. III. Applications of digital signal processing to speech, music and telecommunications. Music signal processing and auditory perception; Speech processing; Speech enhancement; Echo cancellation; Channel equalisation and blind deconvolution; Signal processing in mobile communication.

Multimedia Signal Processing is a comprehensive and accessible text to

Sommario/riassunto

the theory and applications of digital signal processing (DSP). The applications of DSP are pervasive and include multimedia systems, cellular communication, adaptive network management, radar, pattern recognition, medical signal processing, financial data forecasting, artificial intelligence, decision making, control systems and search engines. This book is organised in to three major parts making it a coherent and structured presentation of the theory and applications of digital signal processing. A range of