Record Nr. UNISA996465847603316 Progress in nonlinear speech processing / / Yannis Stylianou, Marcos **Titolo** Faundez-Zanuy, Anna Esposito (editors) Pubbl/distr/stampa Berlin; ; Heidelberg:,: Springer,, [2007] 2007 **ISBN** 3-540-71505-3 Edizione [1st ed. 2007.] Descrizione fisica 1 online resource (XII, 276 p.) Collana Lecture notes in computer science; ; 4391 Disciplina 006.454 Soggetti Speech processing systems 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 index. Nota di contenuto A Review of Glottal Waveform Analysis -- Rahmonic Analysis of Signal Regularity in Synthesized and Human Voice -- Spectral Analysis of Speech Signals Using Chirp Group Delay -- Towards Neurocomputational Speech and Sound Processing -- Extraction of Speech-Relevant Information from Modulation Spectrograms -- On the Detection of Discontinuities in Concatenative Speech Synthesis -- Voice Disguise and Automatic Detection: Review and Perspectives -- Audiovisual Identity Verification: An Introductory Overview -- Text-Independent Speaker Verification: State of the Art and Challenges --Nonlinear Predictive Models: Overview and Possibilities in Speaker Recognition -- SVMs for Automatic Speech Recognition: A Survey --Nonlinear Speech Enhancement: An Overview -- The Amount of Information on Emotional States Conveyed by the Verbal and Nonverbal Channels: Some Perceptual Data. Sommario/riassunto This book constitutes of the major results of the EU COST (European Cooperation in the field of Scientific and Technical Research) Action 277: NSP - Nonlinear Speech Processing - running from April 2001 to June 2005. The results were presented at the last meeting of the management committee of COST Action 277, held in Heraklion, Crete, Greece on September 20-23, 2005 during the Workshop on Nonlinear Speech Processing, WNSP 2005. The 13 revised full papers in this stateof-the-art survey were carefully reviewed and selected for inclusion in

the book and are preceded with an introductory leading-in by the

editors. The articles present overviews of the four years research combining linear and non linear approaches for processing the speech signal. The aim of this book is to provide an additional and/or an alternative way to the traditional approach of linear speech processing and be mainly used by the researcher working in the domain. The papers cover areas such as speech analysis for speech synthesis, speech recognition, speech-non speech discrimination and voice quality assessment, speaker recognition/verification from a natural or modified speech signal, speech recognition, speech enhancement, and emotional state detection.