Record Nr. UNISA996465305303316 Speaker classification I: fundamentals, features and methods // **Titolo** Christian Muller (editor) Pubbl/distr/stampa Berlin; ; Heidelberg; ; New York: ,: Springer, , [2007] ©2007 3-540-74200-X **ISBN** Edizione [1st ed. 2007.] Descrizione fisica 1 online resource (X, 355 p.) Collana Lecture Notes in Artificial Intelligence; ; 4343 Disciplina 006.454 Automatic speech recognition Soggetti 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 Fundamentals -- How Is Individuality Expressed in Voice? An Introduction to Speech Production and Description for Speaker Classification -- Speaker Classification Concepts: Past, Present and Future -- Characteristics -- Speaker Characteristics -- Foreign Accent -- Acoustic Analysis of Adult Speaker Age -- Speech Under Stress: Analysis, Modeling and Recognition -- Speaker Characteristics and Emotion Classification -- Emotions in Speech: Juristic Implications --Applications -- Application of Speaker Classification in Human Machine Dialog Systems -- Speaker Classification in Forensic Phonetics and Acoustics -- Forensic Automatic Speaker Classification in the "Coming Paradigm Shift" -- The Many Roles of Speaker Classification in Speaker Verification and Identification -- Methods and Features -- Frame Based Features -- Higher-Level Features in Speaker Recognition -- Enhancing Speaker Discrimination at the Feature Level -- Classification Methods

Sommario/riassunto

As well as conveying a message in words and sounds, the speech signal carries information about the speaker's own anatomy, physiology, linguistic experience and mental state. These speaker characteristics are found in speech at all levels of description: from the spectral information in the sounds to the choice of words and utterances

for Speaker Recognition -- Multi-stream Fusion for Speaker Classification -- Evaluation -- Evaluations of Automatic Speaker Classification Systems -- An Introduction to Application-Independent

Evaluation of Speaker Recognition Systems.

themselves. This volume and its companion volume, LNAI 4441, constitute a state-of-the-art survey for the field of speaker classification. They approach the following questions: What characteristics of the speaker become manifest in his or her voice and speaking behavior? Which of them can be inferred from analyzing the acoustic realizations? What can this information be used for? Which methods are the most suitable for diversified problems in this area of research? How should the quality of the results be evaluated? The 19 contributions to this volume comprise general and overview-like articles that are organized in topical sections on fundamentals, characteristics, applications, methods and features, as well as evaluation.