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    | Edizione | [1st ed. 2020.] |
    | Descrizione fisica | 1 online resource (X, 174 p. 44 illus., 41 illus. in color.) |
    | Disciplina | 616.85 |
    | Soggetti | Pattern recognition |
    | | Signal processing |
    | | Image processing |
    | | Speech processing systems |
    | | Biomedical engineering |
    | | Speech pathology |
    | | Pattern Recognition |
    | | Signal, Image and Speech Processing |
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    | | Speech Pathology |
    | Lingua di pubblicazione | Inglese |
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    | Livello bibliografico | Monografia |
    | Note generali | Includes index. |
    | Nota di contenuto | CHAPTER 1 INTRODUCTION -- CHAPTER 2 PATHOLOGICAL VOICE ACQUISITION -- CHAPTER 3 PITCH ESTIMATION -- CHAPTER 4 GLOTTAL CLOSURE INSTANTS DETECTION -- CHAPTER 5 FEATURE LEARNING -- CHAPTER 6 JOINT LEARNING FOR VOICE BASED DISEASE DETECTION -- CHAPTER 7 ROBUST MULTI VIEW DISCRIMINATIVE LEARNING FOR VOICE BASED DISEASE DETECTION -- CHAPTER 8 BOOK REVIEW AND FUTURE WORK. |
    | Sommario/riassunto | While voice is widely used in speech recognition and speaker identification, its application in biomedical fields is much less common. This book systematically introduces the authors' research on voice analysis for biomedical applications, particularly pathological voice analysis. Firstly, it reviews the field to highlight the biomedical value of voice. It then offers a comprehensive overview of the workflow and aspects of pathological voice analysis, including voice acquisition |

systems, voice pitch estimation methods, glottal closure instant detection, feature extraction and learning, and the multi-audio fusion approaches. Lastly, it discusses the experimental results that have shown the superiority of these techniques. This book is useful to researchers, professionals and postgraduate students working in fields such as speech signal processing, pattern recognition, and biomedical engineering. It is also a valuable resource for those involved in interdisciplinary research. .