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Nota di contenuto	Pattern Recognition for Speech Detection -- Speech Production Model -- Feature Extraction of the Speech Signal -- Speech Compression -- Appendix A: Constrained Optimization using Lagrangian Techniques -- Appendix B: Expectation-Maximization Algorithm -- Appendix C: Diagonalization of the Matrix -- Appendix D: Condition Number -- Appendix E: Spectral Flatness -- Appendix F: Functional Blocks of the Vocal Tract and the Ear.
Sommario/riassunto	Digital Speech Processing Using Matlab deals with digital speech pattern recognition, speech production model, speech feature extraction, and speech compression. The book is written in a manner that is suitable for beginners pursuing basic research in digital speech processing. Matlab illustrations are provided for most topics to enable better understanding of concepts. This book also deals with the basic pattern recognition techniques (illustrated with speech signals using Matlab) such as PCA, LDA, ICA, SVM, HMM, GMM, BPN, and KSOM.