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6.6. Exercises. -- 7. Dynamic Range Control. -- 7.1. Basics. -- 7.2. Statics Curve. -- 7.3. Dynamic Behavior. -- 7.4. Implementation. -- 7.5. Realization Aspects. -- 7.6. Java Applet - Dynamic Range Control. -- 7.7. Exercises. -- 8. Sampling Rate Conversion. -- 8.1. Basics. -- 8.2. Synchronous Conversion. -- 8.3. Asynchronous Conversion. -- 8.4. Interpolation Methods. -- 8.5. Exercises. -- 9. Audio Coding. -- 9.1. Lossless Audio Coding. -- 9.2. Lossy Audio Coding. -- 9.3. Psychoacoustics. -- 9.4. ISO-MPEG-1 Audio Coding. -- 9.5. MPEG-2 Audio Coding. -- 9.6. MPEG-2 Advanced Audio Coding. -- 9.7. MPEG-4 Audio Coding. -- 9.8. Spectral Band Replication. -- 9.9. Java Applet - Psychoacoustics. -- 9.10. Exercises. -- References. -- Index.

Sommario/riassunto

A fully updated second edition of the excellent Digital Audio Signal Processing. Well established in the consumer electronics industry, Digital Audio Signal Processing (DASP) techniques are use din audio CD, computer music and multimedia components. In addition, the applications afforded by this versatile technology now range from real-time signal processing to room simulation. Digital Audio Signal Processing covers the latest signal processing algorithms for audio processing. Every chapter has been completely revised with an easy to understand introduction, and exercises have been provided on an accompanying website, which support the book by easy to access application examples. Key features include: . A thoroughly updated and revised second edition of the popular Digital Audio Signal Processing, a comprehensive coverage of the topic as a whole . Provides basic principles and fundamentals for quantization, filters, dynamic range control, room simulation, sampling rate conversion, and audio coding . Includes detailed accounts of studio technology, digital transmission systems, storage media and audio component for home entertainment . Contains precise algorithm description and applications . Provides a full account of the techniques of DASP showing their theoretical foundations and practical solutions . Includes updated computer-based exercises and an accompanying website featuring Web-based interactive JAVA-Applets for audio processing This essential guide to DASP will serve as an invaluable reference to audio engineering professionals, R&D engineers, researchers in industries and academia, and developers in IT companies. Advanced students studying multimedia courses will also find this book of interest.