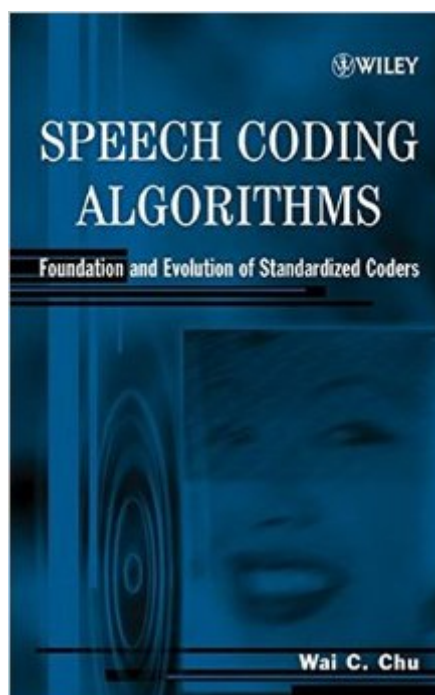# Speech Coding Algorithms: Foundation And Evolution Of Standardized Coders

## Synopsis

Speech coding is a highly mature branch of signal processing deployed in products such as cellular phones, communication devices, and more recently, voice over internet protocol This book collects many of the techniques used in speech coding and presents them in an accessible fashion Emphasizes the foundation and evolution of standardized speech coders, covering standards from 1984 to the present The theory behind the applications is thoroughly analyzed and proved

## Book Information

Hardcover: 592 pages

Publisher: Wiley-Interscience; 1 edition (March 7, 2003)

Language: English

ISBN-10: 0471373125

ISBN-13: 978-0471373124

Product Dimensions:  6.4 x 1.4 x 9.4 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review:  4.8 out of 5 ststarsÂ Â See all reviewsÂ (4 customer reviews)

Best Sellers Rank: #1,839,401 in Books (See Top 100 in Books)   #26 inÂ Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Coding Theory   #44 inÂ Books > Computers & Technology > Software > Voice Recognition   #644 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Acoustics

## Customer Reviews

This is a very good book on speech coding, especially focus on CELP coders. Many kinds of CELP coders are introduced in detail. If you are beginner on speech coding, this book is for you. But other coders, such as MBE and WI, are not presented. So I don't think it is a comprehensive book. I give it 4 stars.


Reading the few introductory chapters, I discovered that this is an easy-to-read book that covers an interesting and evolving area of research. It provides the reader with a "jump- start" to the area of speech coding. Detailed explanations, with a large number of schematics and illustrating diagrams, furnish a vehicle for a fast learning curve.Nevertheless, the quality of some of these schematics and diagrams need to be revised in future editions. Furthermore, there are some missing notations with some of the curves discussed; such as in Figure 1.14. I would be happy to see the word (Absolute Threshold in dB) on the vertical axis and the (Frequency in Hz) on the horizontal axis instead of AT

(f), f.In spite of these anomalies, I found the book to be deserving of esteem and respect. For me, the most interesting chapters were those covering linear prediction, PCM, algebraic CELP and speech quality assessment.

This books serves as an excellent bridge between speech coding standards and speech coding research publications. It does not seek to cover every existing topic in speech coding, but presents analysis and background of some of the most successful speech coding standards. Many "whys" that come to mind reading those standards are addressed. Carefully compiled illustrations accompany almost every important concept presented. This makes cover-to-cover reading of this book a pleasure.

I appreciate very much the amount of figures and simulation results presented in this book; also, the pseudocodes throughout the book helps in the understanding and implementation. In addition, the exercises complement very well with the text. I highly recommend this book to those interested in speech coding.

Download to continue reading...

Speech Coding Algorithms: Foundation and Evolution of Standardized Coders Implementing Cisco IP Routing (ROUTE) Foundation Learning Guide: Foundation learning for the ROUTE 642-902 Exam (Foundation Learning Guides) Implementing Cisco IP Switched Networks (SWITCH) Foundation Learning Guide: Foundation learning for SWITCH 642-813 (Foundation Learning Guides) A Practical Handbook of Speech Coders (Discrete Mathematics and Its Applications) Medical Coding for Non-Coders Coding Interview Ninja: 50 coding questions with Java solutions to practice for your coding interview. Making the Bride's Father's Speech: Know What to Say and When to Say It - Be Positive, Humorous and Sensitive - Deliver the Memorable Speech (Essentials) The Complete Book of Speech Communication: A Workbook of Ideas and Activities for Students of Speech and Theatre Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics and Speech Recognition Windows Speech Recognition Programming: With Visual Basic and ActiveX Voice Controls (Speech Software Technical Professionals) Speech Science Primer: Physiology, Acoustics, and Perception of Speech Using Speech Recognition Software: Dragon NaturallySpeaking and Windows Speech Recognition, Second Edition An Introduction to Text-to-Speech Synthesis (Text, Speech and Language Technology) Pro Microsoft Speech Server 2007: Developing Speech Enabled Applications with .NET (Expert's Voice in .NET) Clinical Measurement of Speech & Voice (Speech Science) The

Design of Innovation: Lessons from and for Competent Genetic Algorithms (Genetic Algorithms and Evolutionary Computation) Algorithms in C++ Part 5: Graph Algorithms (3rd Edition) (Pt.5) Implementing Cisco IP Telephony and Video, Part 1 (CIPTV1) Foundation Learning Guide (CCNP Collaboration Exam 300-070 CIPTV1) (3rd Edition) (Foundation Learning Guides) The Ultimate Insider's Guide to Winning Foundation Grants: A Foundation Ceo Reveals the Secrets You Need to Know Implementing Cisco IP Routing (ROUTE) Foundation Learning Guide: (CCNP ROUTE 300-101) (Foundation Learning Guides)