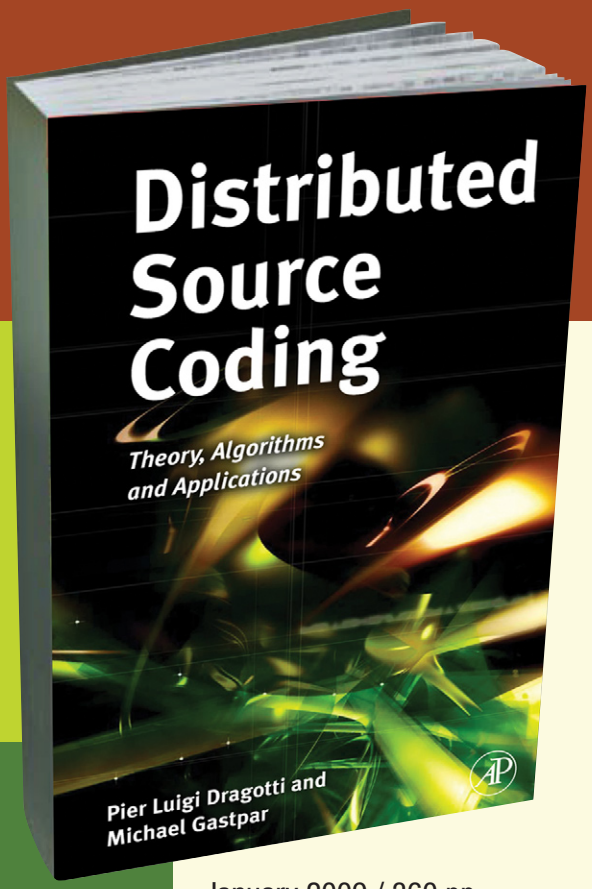

Distributed Source Coding

Theory, Algorithms and Applications

Edited By Pier Luigi Dragotti and Michael Gastpar

Everything a signal and image processing engineer needs to know about distributed source coding—theorems, practical algorithms for design and the latest applications

- The first book on a key technology that is vital for sensor networks, ad-hoc networks and distributed video
- Edited and written by the leading players in the field, providing a complete and authoritative reference
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This book gives a clear understanding of the performance limits of distributed source code for specific classes of sources and presents the design and application of practical algorithms for realistic scenarios.

Material covered includes the use of standard channel codes, such as LDPC and Turbo codes, for DSC, and discussion of the suitability of compressed sensing for distributed compression of sparse signals. Extensive applications are presented and include distributed video coding, microphone arrays and securing biometric data.

*"**Distributed Source Coding** is a great resource covering the breadth and depth of distributed source coding that's appropriate for everyone from theoreticians to practitioners."*

—Richard Baraniuk, Rice University

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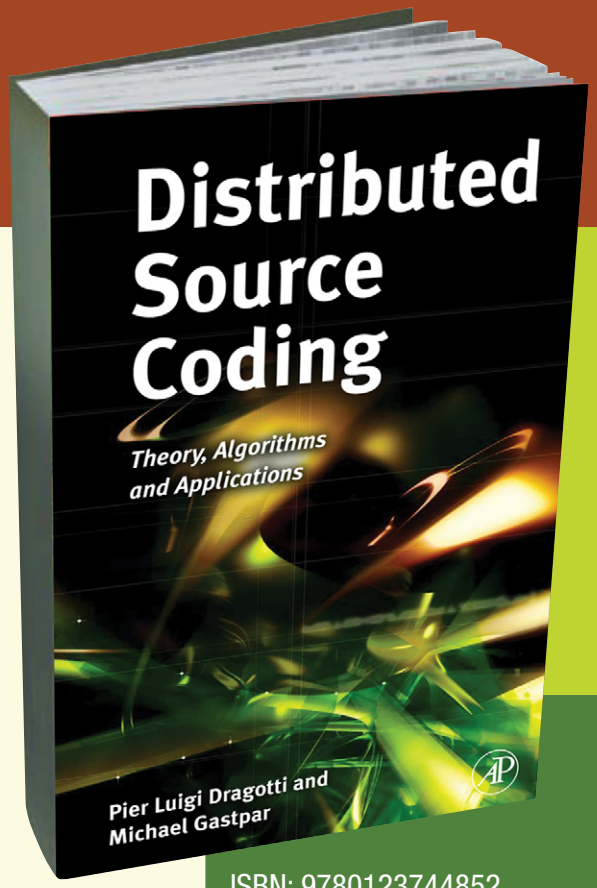

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1. Foundations of Distributed Source Coding
2. Distributed Transform Coding
3. Quantization for Distributed Source Coding
4. Zero-error Distributed Source Coding
5. Distributed Coding of Sparse Signals

ALGORITHMS AND APPLICATIONS:

1. Towards Constructive Slepian-Wolf Coding Schemes
2. Distributed Compression in Microphone Array
3. Distributed Video Coding: Basics, Codecs and Performance
4. Model Based Multi-view Video Compression Using Distributed Source Coding Principles
5. Distributed Compression of Hyperspectral Imagery
6. Securing Biometric Data

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