Data Compression Conference (DCC '92)

(Sponsored by the IEEE Computer Society TCCC)

Snowbird, Utah
March 24-27, 1992

General Chair: J. Storer, Brandeis U.

Program Chair: M. Cohn, Brandeis U.

Program Committee:
R. Arps (IBM), R. Baker (PictureTel), A. Blumer (Tufts U.), M. Cohn (Brandeis U.), R. Capocelli (U. Rome), R. Gallager (MIT), R. Gray (Stanford U.), D. Hirschberg (UC Irvine), D. LeGall (C-Cube), A. Lempel (Technion), B. Lucier (Purdue U.), J. Reif (Duke U.), D. Sheinwald (IBM), J. Storer (Brandeis U.), J. Tilton (NASA), V. Viswanathan (TI), J. Vitter (Brown U.), V. Wei (Bellcore), I. Witten (U. Calgary).

SCHEDULE:

Session 1:

"Subband Vector Quantization of Images Using Hexagonal Filter Banks"
O.S. Haddadin, V.J. Mathews and T.G. Stockham, Jr.

"Complexity Optimized Vector Quantization: A Neutral Network Approach"
J. Buhmann and H. Kühnel

"Nearly Optimal Vecot Quantization via Linear Programming"
J.H. Lin and J.S. Vitter

"Optical Techniques for Image Compression"
J.H. Reif and A. Yoshida

Session 2:

"Textual Image Compression"
I.H. Witten, T.C. Bell, M.E. Harrison, M.L. James, and A. Moffat

"Parallel Algorithms for Optimal Compression Using Dictionaries with the Prefix Property"
S. De Agostino and J.A. Storer

"Constructing Word-Based Text Compression Algorithms"
R.N. Horspool and G.V. Cormack

"Coding for Compression in Full-Text Retrieval Systems"
A. Moffat and J. Zobel

"Model Based Concordance Compression"
A. Bookstein, S.T. Klein, and T. Raita

Session 3:

"Arithmetic Coding for Memoryless Cost Channels"
S.A. Savari and R.G. Gallager

"On the Coding Delay of a General Coder"
M.J. Weinberger, A. Lempel, and J. Ziv

"On Binary Alphabetical Codes"
D. Sheinwald

Session 4:

"A Comparison of Codebook Generation Techniques for Vector Quantization"
R.F. Sproull and I.E. Sutherland

"Vector Quantizer Design by Constrained Global Optimization"
X. Wu

"Perceptually Based Coding of Monochrome and COlor Still Images"
T.R. Reed, V.R. Algazi, G.E. Ford, and I. Hussain

Session 5:

"Real Time Implementation of Pruned Tree Searchg Vector Quantization"
A. Madisetti, R. Jain, and R.L. Baker

"Transpose Coding on the Systolic Array"
L.M. Stauffer and D.S. Hirschberg

"On the JPEG Model for Lossless Image Compression"
G. Langdon, A. Gulati, and E. Seiler

"Progressive Vector Quantization of Multispectral Image Data Using a Massively Parallel SIMD Machine"
M. Manohar and J.C. Tilton

Session 6:

"Possible Harmonic-Wavelet Hybrids in Image Compression"
M. Rollins and F. Carden

"Multispectral KLT-Wavelet Data Compression for Landsat Thematic Mapper Images"
B.R. Epstein, R. Hingorani, J.M. Shapiro, and M. Czigler

"Convolutional Interpolative Coding Algorithms"
M.R.K. Khansari, I. Widjaja, and A. Leon-Garcia

"A Forward Mapping Realization of the Inverse Discrete Cosine Transform"
L. McMillan and L. Westover

Session 7:

"Image Reconstruction for Hybrid Video Coding Systems"
Q.F. Zhu, Y. Whang, and L. Shaw

"A Split-Merge Parallel Block-Matching Algorithm for Video Displacement Estimation"
B. Carpentieri and J.A. Storer

"Lossless Interframe Compression of Medical Images"
X. Wu and Y. Fang

"The Use of Fractal Theory in a Video Compression System"
M. Ali, C. Papadopoulos, and Clarkson

Session 8:

"Error Modeling for Hierarchical Lossless Image Compression"
P. Howard and J.S. Vitter

"Efficient Two-Dimensional Compressed Matching"
A. Amir and G. Benson

"Vector Run-length Coding of Bilevel Images"
Y. Wang and J.M. Wu

"Parallel Lossless Image Compression Using Huffman and Arithmetic Coding"
P.G. Howard and J.S. Vitter

"Compression of Grey-Scale Fingerprint Images"
T. Hopper and F. Preston

Session 9:

"Variable Precision Representation for Efficient VQ Codebook Storage"
R. Dionysian and M.D. Ercegovac

"Universal Coding of Band-Limited Sources by Sampling and Dithered Quanization"
R. Zamir and M. Feder

"Improving Search for Tree-Structured Vector Quantization"
J. Lin and J.A. Storer

Session 10:

"An Adaptive High-Speed Lossy Data Compression"
O. Chen, Z. Zhang, and B.J. Sheu

"Experiments Using Minimal-Length Encoding to Solve Machine Leanring Problems"
A. Gammerman and A. Bellotti

"Random Access in Huffman-Coded Files"
G. Jacobson

POSTER SESSION

(one page abstracts of each appear in the proceedings)