Data Compression Conference (DCC '91)

(Sponsored by the IEEE Computer Society)

Snowbird, Utah
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SCHEDULE:

Session 1:

"Analysis of Arithmetic Coding for Data Compression"
P.G. Howard and J.S. Vitter

"Probabilistic and Q-Coder Algorithms for Binary Source Adaption"
G.G. Langdon, Jr.

"Models for Compression in Full-Text Retrieval Systems"
I.H. Witten, T.C. Bell and C.G. Nevill

"Piecewise Arithmetic Coding"
J. Teuhola and T. Raita

"High Efficiencey, Multiplication Free Apporimation of Arithmetic Coding"
D. Chevion, E.D. Karin, and E. Walach

Session 2:

"An Image Database for Low Bandwidth Communication Links"
M. Malak and J. Baker

"On The Complexity of Optimal Tree Pruning for Source Coding"
J. Lin, J.A. Storer, and M. Cohn

"Image Coding by Adaptive Tree-Structured Segmentation"
X. Wu and C. Yao

"Prediction Trees and Lossless Image Compression: An Extended Abstract"
N.D. Memon, S.S. Magliveras, and K. Sayood

"Image Compression Methods with Distortion Controlled Capabilities"
T. Markas and J. Reif

Session 3:

"Entropy-Constrained Trellis Coded Quantization"
T.R. Fischer and M. Wang

"Combining Vector Quantization and Histogram Equalization"
P.C. Cosman, E.A. Riskin, and R.M. Gray

"Concentric-Shell Partition Vector Quantization with Application to Image Coding"
H. Nguyen and J.W. Mark

"Design and Performance of Residual Quantizers"
R.L. Frost, C.F. Barnes, and F. Xu

"An Iteratively Interpolative Vector Quantization Algorithm for Image Data Compression"
K. Xue and J.M. Crissey

"A New Transform Domain Vector Quantization Technique for Image Data Compression in an Asynchronous Transfer Mode Network"
P.P. Polit and N.M. Nasrabadi

"Restricted Boundary Vector Quantization"
R. Linsay and D.E. Abercromie

Session 4:

"W-Orbit Finite Automata for Data Compression"
Y. Liu and H. Ma

"A Practical Approach to Fractal-Based Image Compression"
A. Pentland and B. Horowitz

"Data Compression Using Wavelets: Errors, Smoothness, and Quantization"
R.A. Devore, B. Jawerth, and B.J. Lucier

"A 64 Kb/s Video Codec Using the 2-D Wavelet Transform"
A.S. Lewis and G. Knowles

Session 5:

"Fixed Data Base Version of the Lempel-Ziv Data Compression Algorithm"
A.D. Wyner and J. Ziv

"Asymptotic Convergence of Dual-Tree Entropy Codes"
G.H. Freemand

"On Compression with Two-Way Head Machines"
D. Sheinwald, A. Lempel and J. Ziv

"Asymptotics of Predictive Stochastic Complexity"
L. Gerencser

"On the Optimal Asymptotic Performance of Universal Ordering and Discrimination of Individual Sequences"
M. Weinberger, J. Ziv, and A. Lempel

"A Typical Behaviour of Some Data Compression Schemes"
W. Szpankowski

Session 6:

"New Methods for Lossless Image Compression Using Arithmetic Coding"
P. Howard and J.S. Vitter

"Inducing Codes from Examples"
W.H. Leung and S. Skiena

"The Cascading of the LZW Compression Algorithm with Arithmetic Coding"
Y. Perl, V. Maram, and N. Kadakuntla

"Complexity Aspects of Map Compression"
H. Bodlaender, T. Gonzales, and T. Kloks

"An Optimal Algorithm for the Construction of Optimal Prefix Codes with Given Fringe"
A. De Santis and G. Persiano

Session 7:

"Compression of Natural Images Using Thread-like Visual Primitives"
J.A. Robinson

"Streamlining COntext Models for Data Compression"
D.A. Lelewer and D.S. Hirschberg

"Semantic Data Compression"
G. Promhourse and M. Bennett

"Omproving LZW"
R.N. Horspool

"A Neural Network Based VLSI Vector Quantizer for Real-Time Image Compression"
W. Fang, B. Sheu, and O.T. Chen

Session 8:

"Multibit Decoding/Encoding of Binary Codes Using Memory Based Architectures"
A. Mukherjee, H. Bheda, M.A Bassiouni, and T. Acharya

"An Extremely Fast ZIV-Lempel Data Compression Algorithm"
R.N. Williams

"Practical Evaluation of a Data Compression Algorithm"
D.W. Jones

"Two-Level Context Based Compression of Binary Images"
A. Moffat

"A Better Tree-Structured Vector Quantizer"
X. Wu and K. Zhang

"Flexible Compression for Bitmap Sets"
A. Bookstein and S.T. Klein

"Compression Experiments with AVHRR Data"
J.C. Tilton, D. Han, and M. Manohar

POSTER SESSION

(one page abstracts of each appear in the proceedings)