Contents

SESSION 1  IMAGE CODING I

2  Dependent coding in quantized matching pursuit [3024-01]
   V. K. Goyal, Univ. of California/Berkeley; M. Vetterli, Univ. of California/Berkeley and Swiss
   Federal Institute of Technology

13  Efficient arithmetic coding for wavelet image compression [3024-02]
   Z. Xiong, Princeton Univ.; K. Ramchandran, Univ. of Illinois/Urbana-Champaign;
   M. T. Orchard, Princeton Univ.

25  Low-complexity waveform coding via alphabet and sample-set partitioning [3024-03]
   A. Said, State Univ. of Campinas (Brazil); W. A. Pearlman, Rensselaer Polytechnic Institute

38  Image compression algorithm using local edge information [3024-05]
   A. El-Mabrouk, A. Aggoun, De Montfort Univ./Leicester (UK)

47  Interband coding extension of the new lossless JPEG standard [3024-06]
   N. D. Memon, Northern Illinois Univ.; X. Wu, Chinese Univ. of Hong Kong; V. Sippy,
   G. Miller, Northern Illinois Univ.

59  Optimal decomposition for quad-trees with leaf dependencies [3024-07]

71  DCT computation with minimal average number of operations [3024-08]
   K. Lengwitasatit, A. Ortega, Univ. of Southern California

83  Image compression using conditioning contexts [3024-09]
   F. Müller, B. Menser, Aachen Univ. of Technology (FRG)

SESSION 2  VIDEO CODING I

96  Three-dimensional subband/wavelet coding of video with motion compensation [3024-10]
   S.-J. Choi, J. W. Woods, Rensselaer Polytechnic Institute

105  Rate-distortion optimized bit rate control scheme for a wavelet video coder [3024-11]
   P.-Y. Cheng, Physical Optics Corp.; J. Li, C.-C. J. Kuo, Univ. of Southern California

117  Adaptive lapped transform-based image and video coding [3024-12]
   T. J. Klausutis, V. K. Madisetti, Georgia Institute of Technology

129  MPEG-2/ECVQ look-ahead hybrid quantization and spatially scalable coding [3024-13]
   S. D. Bayrakeri, R. M. Mersereau, Georgia Institute of Technology
<table>
<thead>
<tr>
<th>Session 3</th>
<th>Poster Session on Image Sequence Analysis</th>
</tr>
</thead>
</table>
| 138       | Suboptimal quantization control employing approximate distortion-rate relations for motion video coding [3024-14]  
Y.-M. Chien, Hewlett-Packard Taiwan Ltd.; D. W. Lin, National Chiao Tung Univ. (Taiwan) |
| 149       | Bit allocation for joint coding of multiple video programs [3024-15]  
L. Wang, A. Vincent, Communications Research Ctr. (Canada) |
| 159       | New scene change control scheme based on pseudoskipped picture [3024-16]  
Y. Lee, J. Lee, H. Chang, Electronics and Telecommunications Research Institute (Korea); J. Y. Nam, Keimyung Univ. (Korea) |
| 167       | Fast algorithm for optimal bit allocation [3024-17]  
W. Y. Lee, J. B. Ra, Korea Advanced Institute of Science and Technology |
| 176       | Video coding algorithm based on image warping and nonrectangular DCT coding [3024-18]  
Y.-M. Chou, H.-M. Hang, National Chiao Tung Univ. (Taiwan) |
| 190       | Object tracking for content-based functionalities [3024-19]  
F. Marqués, C. Molina, Univ. Politécnica de Catalunya (Spain) |
| 200       | Motion tracking of color image sequences using neural networks [3024-20]  
H. Iwata, H. Nagahashi, Tokyo Institute of Technology (Japan) |
| 211       | Real-time detection of human faces in uncontrolled environments [3024-21]  
A. V. Nefian, Georgia Institute of Technology; M. Khosravi, NCR Human Interface Technology Ctr.; M. H. Hayes III, Georgia Institute of Technology |
| 220       | Egomotion from optical flow with an uncalibrated camera [3024-22]  
M. J. Brooks, Univ. of Adelaide (Australia); L. Baumela, Univ. Politécnica de Madrid (Spain); W. Chojnacki, Univ. of Adelaide (Australia) |
| 229       | Multitarget tracking system using texture [3024-23]  
J. G. Jeon, Y. H. Kim, Yonsei Univ. (Korea); G. M. Park, Honam Univ. (Korea); K. T. Park, Yonsei Univ. (Korea) |
| 237       | Novel algorithm for automatic contour detection in image sequences [3024-24]  
H. Wang, T. Zhuang, D. Jiang, Shanghai Jiaotong Univ. (China); A. Bacelar, W. Y. Liu, I. E. Magnin, G. Gimenez, INSA (France) |
| 246       | Automatic moving-object and background segmentation by means of higher order statistics [3024-25]  
A. Neri, Univ. of Rome III (Italy); S. Colonnese, G. Russo, Fondazione Ugo Bordoni (Italy) |
| 257       | Integrated segmentation approach for video coding [3024-26]  
C. T. Swain, T. Chen, AT&T Labs. |
| 263       | 3D-3D registration of free-formed objects using shape and texture [3024-27]  
SESSION 4  MOTION ESTIMATION FOR VIDEO CODING I

276  Low-bit-rate video coding using an adaptive partially connected motion model [3024-28]
J. W. Monaco, M. J. T. Smith, Georgia Institute of Technology

284  Fast hierarchical block matching algorithm utilizing spatial motion vector correlation [3024-30]
K. W. Lim, B. C. Song, J. B. Ra, Korea Advanced Institute of Science and Technology

293  Reduced entropy motion compensation using variable-sized blocks [3024-31]
G. R. Martin, R. A. Packwood, M. Steliaros, Univ. of Warwick (UK)

303  Complexity reduction for overlapped block motion compensation (OBMC) [3024-32]
T. Kuo, C.-C. J. Kuo, Univ. of Southern California

315  Determining the optical flow using wavelet coefficients [3024-33]
A. Corghi, R. Leonardi, Univ. of Brescia (Italy); J. M. Corridoni, A. Delbimbo, Univ. of Florence (Italy)

328  Two-dimensional triangular mesh-based mosaicking for object tracking in the presence of occlusion [3024-34]
C. Toklu, A. M. Tekalp, Univ. of Rochester; A. T. Erdem, Bilkent Univ.

SESSION 5  STEREOSCOPIC DATA PROCESSING AND ANALYSIS

340  Multiview image coding using local orthogonal bases [3024-35]
H. Aydinoglu, M. H. Hayes III, Georgia Institute of Technology

352  Motion and disparity estimation using rate-distortion theory for very low bit rate and multiview image sequence coding [3024-36]
D. Tzovaras, M. G. Strintzis, Aristotle Univ. of Thessaloniki (Greece)

360  Optical-flow estimation for multichannel video sequences [3024-37]
C.-J. Tsai, A. K. Katsaggelos, Northwestern Univ.

369  Disparity map coding for 3D teleconferencing applications [3024-38]
A. Redert, E. A. Hendriks, Delft Univ. of Technology (Netherlands)

380  Construction of multiple views using jointly estimated motion and disparity fields [3024-39]
I. K. Patras, Foundation for Research and Technology-Hellas (Greece) and Univ. of Crete (Greece); E. A. Hendriks, Delft Univ. of Technology (Netherlands); G. G. Tziritas, Foundation for Research and Technology-Hellas (Greece) and Univ. of Crete (Greece)

391  Stereo image compression based on disparity field segmentation [3024-40]
W. Woo, A. Ortega, Univ. of Southern California

403  Hierarchical stereo correspondence using features of gray connected components [3024-41]
Y. Wang, P. Bhattacharya, Univ. of Nebraska/Lincoln

413  3D visual data compression based on ray-space projection [3024-42]
T. Naemura, M. Kaneko, H. Harashima, Univ. of Tokyo (Japan)
### SESSION 6  
**POSTER SESSION ON MODEL-BASED CODING**

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contour coding technique employing using motion information [3024-44]</td>
<td>S. H. Cho, Seoul National Univ. (Korea); R. C. Kim, Hunsung Univ. (Korea); S. U. Lee, Seoul National Univ. (Korea)</td>
</tr>
<tr>
<td>Adaptive nonstationary DPCM image coding with variable block size [3024-45]</td>
<td>J.-C. Wu, D. G. Daut, Rutgers Univ.</td>
</tr>
<tr>
<td>Vector quantization based on a psychovisual lattice for a visual subband coding scheme [3024-46]</td>
<td>H. Senane, A. Saadane, D. Barba, IRESTE (France)</td>
</tr>
<tr>
<td>Automatic face segmentation using color cues for coding typical videophone scenes [3024-48]</td>
<td>Y. J. Zhang, Y. R. Yao, Y. He, Tsinghua Univ. (China)</td>
</tr>
</tbody>
</table>

### SESSION 7  
**ARCHITECTURES AND IMPLEMENTATIONS**

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel implementation of gray-scale morphological operators on MVP [3024-52]</td>
<td>C. Laurent, CCETT (France) and Lab. Bordelais de Recherche en Informatique/CNRS (France); C. Bouville, CCETT (France)</td>
</tr>
<tr>
<td>Approaching real-time processing for fractal compression [3024-53]</td>
<td>J. Hämmerle, A. Uhl, Univ. of Salzburg (Austria)</td>
</tr>
<tr>
<td>Real-time MPEG video over LAN with DSM-CC signaling [3024-54]</td>
<td>K.-S. Kan, National Central Univ. (Taiwan); C.-T. Chen, CRISC Corp.; A. C. Loui, Bell Communications Research</td>
</tr>
<tr>
<td>Analysis and implementation of precise synchronization mechanism for MPEG-2 media objects [3024-55]</td>
<td>J. D. Kim, S. J. Kim, J.-S. Koh, Korea Telecom</td>
</tr>
</tbody>
</table>

### SESSION 8  
**MOTION ANALYSIS AND ESTIMATION**

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion analysis of image sequences using connected operators [3024-56]</td>
<td>L. Garrido, A. Oliveras, P. Salembier, Univ. Politècnica de Catalunya (Spain)</td>
</tr>
<tr>
<td>Data-driven structure from motion using the epipolar corridor constraint [3024-57]</td>
<td>E. Steinbach, B. Girod, Univ. Erlangen-Nürnberg (FRG); S. Chaudhuri, Indian Institute of Technology</td>
</tr>
<tr>
<td>Motion estimation using segmentation and consistency constraint [3024-58]</td>
<td>D. Wang, P. Haighton, L. Wang, A. Vincent, Communications Research Ctr. (Canada)</td>
</tr>
</tbody>
</table>
SESSION 9 POSTER SESSION ON LOW-BIT-RATE CODING

610 Robust low-bit-rate 3D subband codec [3024-62]
R. Llados-Bermaus, R. L. Stevenson, Univ. of Notre Dame

622 Motion-adaptive model-assisted compatible coding with spatiotemporal scalability [3024-63]

635 Scattered data interpolation algorithm for still-image subsampling and for motion-field representations used for video coding [3024-64]
H. Le Floch, C. Labit, IRISA/INRIA-Rennes (France)

647 Interframe vector wavelet coding technique [3024-65]
J. Wus, W. Li, Lehigh Univ.

658 Block-based DCT and wavelet selective coding for arbitrarily shaped images [3024-66]
Z. Wu, T. Kanamaru, Oki Electric Industry Co., Ltd. (Japan)

666 Hybrid video compression considering regions of interest [3024-67]
F. Müller, K. Illgner, Aachen Univ. of Technology (FRG)

676 Improvements in DCT-based video coding [3024-68]
A. Puri, R. L. Schmidt, B. G. Haskell, AT&T Labs.

Part Two

SESSION 10 OBJECT-ORIENTED VIDEO CODING

690 Segmentation-based coding for very low bit rates [3024-69]
T. Wuyts, L. Van Eycken, Katholieke Univ. Leuven (Belgium)

699 Object-based video coding using forward-tracking 2D mesh layers [3024-70]
P. J. L. van Beek, A. M. Tekalp, Univ. of Rochester

711 Motion-field and image-intensity segmentation for object-oriented coding of video sequences [3024-71]
D. LeQuang, A. Zaccarin, Univ. Laval (Canada)

723 Region-based coding scheme for the transmission of video sequences via channels of varying very low bit rate [3024-72]
A. Saflekos, Aristotle Univ. of Thessaloniki (Greece); J. Benois-Pineau, D. Barba, IRESTE (France)
Adaptive low-pass extrapolation for object-based texture coding of moving video [3024-74]
A. Kaup, Siemens AG (FRG)

Efficient way of coding arbitrary geometric partition for region-based video sequence coding [3024-75]
S. Pateux, C. Labit, IRISA/INRIA-Rennes (France)

Region-based video coding using backward motion-field segmentation [3024-76]
X. Yang, K. Ramchandran, Univ. of Illinois/Urbana-Champaign

SESSION 11 DIGITAL BATTLEFIELD

Model-supported exploitation of aerial images [3024-77]
R. Chellappa, Univ. of Maryland/College Park

Sensor data enhancement of ballistic missile warheads using an affine motion model [3024-78]
J. W. Monaco, M. J. T. Smith, Georgia Institute of Technology

Spatiotemporal continuous wavelets applied to missile warhead detection and tracking [3024-79]
F. Mujica, J.-P. Leduc, M. J. T. Smith, Georgia Institute of Technology; R. Murenzi, Clark Atlanta Univ.

Look-ahead predictive trellis-coded quantization with nonlinear filters for image transmission over tactical channels [3024-81]
L. M. Marvel, Army Research Lab.; C. G. Boncelet, Jr., Univ. of Delaware

Compression of SAR imagery using adaptive residual vector quantization [3024-82]
N. M. Nasrabadi, Army Research Lab.; M. Venkatraman, H. Kwon, SUNY/Buffalo

SESSION 12 POSTER SESSION ON IMAGE CODING II

Efficient arithmetic coding for wavelet image compression [3024-83]
Z. Xiong, Princeton Univ.; K. Ramchandran, Univ. of Illinois/Urbana-Champaign; M. T. Orchard, Princeton Univ.

Rate-distortion analysis for vector quantization based on a variable block-size classification model [3024-84]
M. H. Lee, K. N. Ngan, G. A. Crebbin, Univ. of Western Australia

Computation of image representation based on active triangular meshes through geometrical surface evolution [3024-85]
L. Labelle, H. Sanson, CCETT (France)

Compression-related properties of color spaces [3024-86]
A. I. Drukarev, Hewlett-Packard Labs.

Parametric image coding by means of polynomial transforms [3024-87]
O. Viveros-Cancino, B. Escalante-Ramírez, Univ. Nacional Autónoma de México

Mojette transform: applications for image analysis and coding [3024-88]
J.-P. Guédon, N. Normand, IRESTE (France)
<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Authors and Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>885</td>
<td>Fast regular 2D algorithms for trigonometric transforms</td>
<td>J. T. Astola, D. Akopian, Tampere Univ. of Technology (Finland)</td>
</tr>
<tr>
<td>897</td>
<td>New image compression artifact measure using wavelets</td>
<td>Y.-K. Lai, C.-C. J. Kuo, Univ. of Southern California; J. Li, Sharp Labs. of America</td>
</tr>
<tr>
<td>909</td>
<td>Detection of microcalcifications in mammograms using nonlinear subband decomposition and outlier labeling</td>
<td>M. N. Gürcan, Y. Yardımcı, A. E. Çetin, Bilkent Univ. (Turkey); R. Ansari, Univ. of Illinois/Chicago</td>
</tr>
<tr>
<td></td>
<td><strong>SESSION 13</strong> VIDEO AND IMAGE DATABASE MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>920</td>
<td>Key frame selection from MPEG video data</td>
<td>O. N. Gerek, Bilkent Univ. (Turkey); Y. Altunbasak, Univ. of Rochester</td>
</tr>
<tr>
<td>926</td>
<td>Semantic description of drama scene by using SD-Form</td>
<td>M. Niimi, E. Kawaguchi, Kyushu Institute of Technology (Japan)</td>
</tr>
<tr>
<td>938</td>
<td>Sequence matching using spatiotemporal wavelet decomposition</td>
<td>A. Corghi, R. Leonardi, Univ. of Brescia (Italy)</td>
</tr>
<tr>
<td>953</td>
<td>Object-based indexing of MPEG-4 compressed video</td>
<td>A. M. Ferman, B. Günsel, A. M. Tekalp, Univ. of Rochester</td>
</tr>
<tr>
<td>964</td>
<td>Texture classification on block-transformed data</td>
<td>B. Tao, B. W. Dickinson, Princeton Univ.</td>
</tr>
<tr>
<td>983</td>
<td>Encoding-scaled MPEG video in compressed domain</td>
<td>Q. Hu, S. Panchanathan, Univ. of Ottawa (Canada)</td>
</tr>
<tr>
<td>992</td>
<td>Universal scene change detection on MPEG-coded data domain</td>
<td>Y. Nakajima, K. Ujihara, A. Yoneyama, KDD Co. Ltd. (Japan)</td>
</tr>
<tr>
<td>1004</td>
<td>Scalable mesh-based interpolative coding of synthetic and natural image objects</td>
<td>Y. Altunbasak, Hewlett-Packard Labs.; A. M. Tekalp, Univ. of Rochester</td>
</tr>
<tr>
<td></td>
<td><strong>SESSION 14</strong> FRACTAL/WAVELET/MULTIRESOLUTION IMAGE CODING</td>
<td></td>
</tr>
<tr>
<td>1014</td>
<td>Hybrid wavelet-fractal image compression based on a rate-distortion criterion</td>
<td>J. Li, Sharp Labs. of America; C.-C. J. Kuo, Univ. of Southern California</td>
</tr>
<tr>
<td>1026</td>
<td>Wavelet image coding using rate-distortion optimized backward adaptive classification</td>
<td>S. M. LoPresto, K. Ramchandran, Univ. of Illinois/Urbana-Champaign; M. T. Orchard, Princeton Univ.</td>
</tr>
<tr>
<td>1038</td>
<td>Fractal image coding using region-based transformations and the Cross search</td>
<td>H. Cao, G. Zhu, Y. Zhu, Z. Zhang, Huazhong Univ. of Science and Technology (China)</td>
</tr>
</tbody>
</table>
1046 Shape-adaptive discrete wavelet transform for coding arbitrarily shaped texture [3024-105]
S. Li, W. Li, Lehigh Univ.

1057 Low-bit-rate morpho-subband coding [3024-106]
X. Zhuang, J. Vass, B.-B. Chai, Univ. of Missouri/Columbia

1067 Zerotree edge-adaptive coder for low-bit-rate image transmission [3024-107]
P. Raffy, M. Antonini, M. Barlaud, Univ. de Nice/Sophia Antipolis (France)

1077 Embedded wavelet packet image coder with fast rate-distortion optimized decomposition [3024-108]
J. Li, C.-C. J. Kuo, Univ. of Southern California; P.-Y. Cheng, Physical Optics Corp.

1089 Resolution enhancement of images using fractal coding [3024-109]
M. Gharavi-Alkhansari, R. DeNardo, Univ. of Illinois/Urbana-Champaign; Y. Tenda, Mitsubishi Electric Corp. (Japan); T. S. Huang, Univ. of Illinois/Urbana-Champaign

1101 Still-image compression using CVQ and wavelet transform [3024-110]
S. Lin, LG Electronics, Inc.; E. Salari, Univ. of Toledo

SESSION 15 POSTER SESSION ON MOTION ESTIMATION FOR VIDEO CODING II

1110 Rate-constrained block-matching algorithm [3024-111]
U. Bayazit, W. A. Pearlman, Rensselaer Polytechnic Institute

1122 Three-dimensional motion and dense-structure estimation using convex projections [3024-112]
A. Alatan, A. Erdem, L. Onural, Bilkent Univ. (Turkey)

1132 Optimal block size for block-based motion-compensated video coders [3024-114]
J. Ribas-Corbera, Sharp Labs. of America; D. L. Neuhoff, Univ. of Michigan

1144 Fast and robust algorithm for global motion estimation [3024-115]
D. Wang, L. Wang, Communications Research Ctr. (Canada)

1152 Segmentation algorithm for image sequences from a pel-recursive motion field [3024-116]
D. Gatica-Pérez, F. García-Ugalde, V. García-Garduño, Univ. Nacional Autónoma de México

1164 Compactly encoded optical-flow fields for bidirectional prediction and video coding [3024-117]
R. Krishnamurthy, Rensselaer Polytechnic Institute; P. Moulin, Univ. of Illinois/Urbana-Champaign; J. W. Woods, Rensselaer Polytechnic Institute

SESSION 16 TELEVISION, PACKET AND WIRELESS VIDEO

1176 Vector-based postprocessing of MPEG-2 signals for digital TV receivers [3024-118]
H. Blume, A. Amer, H. Schröder, Univ. Dortmund (FRG)

1188 Compatible NTSC system with cross-talk-free multiplexing of luminance and chrominance [3024-119]
S. Coulombe, E. Dubois, INRS-Télécommunications/Univ. du Québec (Canada)

1200 Rate control for robust video transmission over wireless channels [3024-120]
C.-Y. Hsu, A. Ortega, Univ. of Southern California; M. R. Khansari, Hewlett-Packard Labs.
1212 Wireless video communication system using PHS [3024-121]
T. Sakamaki, H. Ibaraki, T. Ichikawa, R. Suzuki, NTT Human Interface Labs. (Japan)

1220 ATM source-channel image coding [3024-122]
O. Philippé, J.-P. Guédon, F. Terrien, IRESTE (France)

1231 Error-block detection technique for mobile video transmission [3024-123]
D.-S. Park, J. D. Kim, Y.-S. Kim, Samsung Electronics Co., Ltd. (Korea)

1241 Error-protection scheme for the transmission of H.263 coded video over mobile radio channels [3024-124]
C. W. Yap, K. N. Ngan, R. Liyanapathirana, Univ. of Western Australia

SESSION 17 FILTERING, RESTORATION INTERPOLATION

1252 Preprocessing of video for compression [3024-125]
R. Rajagopalan, IBM Thomas J. Watson Research Ctr.; M. T. Orchard, Princeton Univ.

1264 Comparison of linear and nonlinear video processing and evaluation for an MPEG-2 codec [3024-126]
L. Lucat, P. Siohan, CCETT (France)

1274 Linear restoration of block-transform-coded motion video [3024-128]
S.-F. Yang, Industrial Technology Research Institute (Taiwan); D. W. Lin, National Chiao Tung Univ. (Taiwan)

1285 Global brightness-fluctuation compensation in video coding [3024-129]
K. Kamikura, H. Jozawa, H. Watanabe, H. Kotera, NTT Human Interface Labs. (Japan)

1294 Generation of arbitrarily focused images by using multiple differently focused images [3024-130]
K. Kodama, K. Aizawa, M. Hatori, Univ. of Tokyo (Japan)

1306 Regularized multichannel restoration approach for globally optimal high-resolution video sequence [3024-131]
M.-C. Hong, Northwestern Univ.; M. G. Kang, Univ. of Minnesota/Duluth; A. K. Katsaggelos, Northwestern Univ.

1317 Subpixel motion estimation for multiframe resolution enhancement [3024-132]
R. R. Schultz, L. Meng, Univ. of North Dakota; R. L. Stevenson, Univ. of Notre Dame

SESSION 18 POSTER SESSION ON VIDEO CODING II

1330 Very low bit rate coding using hybrid synthetic/real images for multisite videoconference applications [3024-133]
H. Nicolas, J. Motsch, IRISA/INRIA-Rennes (France)

1342 Adaptive quantization in a perceptive uniform color space: an application to H.263 coding [3024-134]
G. Scarano, Univ. of Rome La Sapienza (Italy); S. Colonnese, Fondazione Ugo Bordoni (Italy); S. Praticò, Telecom Italy; G. Russo, Fondazione Ugo Bordoni (Italy)

1354 Subband coding of image sequences using multiple vector quantizers [3024-135]
E. Martins, V. M. Silva, L. A. de Sá, Univ. de Coimbra (Portugal)
Motion compensation of wavelets with implicit optical flow [3024-136]
J. D. Kim, Samsung Electronics Co., Ltd.

Efficient bit allocation under multiple constraints on cumulated rates for delayed video coding [3024-137]
D. W. Lin, J.-J. Chen, National Chiao Tung Univ. (Taiwan)

Fast piecewise linear approximation of rate-distortion functions for MPEG video [3024-138]
C. Choi, O. C. Au, Hong Kong Univ. of Science and Technology

Multigeneration of transform-coded images [3024-139]
H. Z. Sorial, W. E. Lynch, Concordia Univ. (Canada)

Scene adaptive bit-rate control method in MPEG video coding [3024-140]
M. Lee, S. Kwon, J. Kim, Korea Advanced Institute of Science and Technology

Partition encoding based on graph representation and geometric approximation of contours for region-based video coding [3024-141]
H. Sanson, L. Labelle, CCETT (France)

Noise level and MPEG-2 encoder statistics [3024-142]
J. Lee, David Sarnoff Research Ctr.

Forward rate control strategy based on the rate-distortion theory for video coding [3024-143]
C. Xiong, Y. He, Tsinghua Univ. (China)

Author Index