

Publication List of Prof. King N. Ngan

A. Authored Books

1. K.N. Ngan, T. Meier and D. Chai, *Advanced Video Coding: Principles and Techniques*, Elsevier Science Publishers B.V., ISBN 0-444-82667-X, August 1999, 430 pages.
2. K.N. Ngan, C.W. Yap and K.T. Tan, *Video Coding for Future Generation Mobile Communication Systems*, Marcel Dekker Inc., ISBN 0-8247-0489-4, January 2001, 560 pages.
3. W.J. Heng and K.N. Ngan, *Digital Video Transition Analysis and Detection*, World Scientific Publishing Co. Pte. Ltd., ISBN 981-238-185-6, November 2002, 200 pages.

B. Edited Books

1. K.N. Ngan and I. Shirakawa, *Proceedings of IEEE International Symposium on Circuits and Systems*, Singapore, ISBN 0-7803-0050-5, June 1991, 3177 pages.
2. K.N. Ngan, *Proceedings of IEEE Workshop on Visual Signal Processing and Communications*, Melbourne, Australia, ISBN 0-7326-0512-1, September 1993, 347 pages.
3. K.N. Ngan, *Proceedings of IEEE Region 10 Conference (TENCON'96)*, Perth, Australia, ISBN 0-7803-3679-8, November 1996, 966 pages.
4. H.R. Wu, K.N. Ngan, B. Qiu and S. Suthaharan, *Proceedings of IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Melbourne, Australia, ISBN 0-7803-9948-X, November 1998, 953 pages.
5. K.N. Ngan, T. Sikora and M.T. Sun, *Proceedings of SPIE International Conference on Visual Communications and Image Processing*, Perth, Australia, ISSN 0277-786X, ISBN 0-8194-3703-4, vol. 4067, June 2000, 1684 pages.
6. K.N. Ngan and H. Li (Eds.), *Video Segmentation and Its Applications*, Springer, ISBN 978-1-4419-9481-3, May 2011, 164 pages.
7. 颜庆义(作者), 李宏亮(作者), 郑丽颖(译者), *视频分割及其应用*, 国防工业出版社, Chinese ISBN 978-7-118-09216-5, April 2014, 160 pages.
8. C. Deng, L. Ma, W. Lin and K.N. Ngan (Eds.), *Visual Signal Quality Assessment - Quality of Experience*, Springer, ISBN 978-3-319-10367-9, November 2014, 303 pages.

C. Book Chapters

1. K.N. Ngan and C.W. Yap, "Combined Source-Channel Video Coding," in *Signal Recovery Techniques for Image and Video Compression and Transmission*, Kluwer Academic Publisher, ISBN 0-7923-8298-6, October 1998, pp. 269-297.
2. J. Dong and K.N. Ngan, "Present and Future Video Coding Standards," in *Intelligent Multimedia Communication: Techniques and Applications*, Springer, ISBN 978-3-642-11685-8, January 2010, pp. 75-124.
3. S. Li, C.M. Mak and K.N. Ngan, "Visual Quality Evaluation for Images and Videos," in *Multimedia Analysis, Processing and Communication*, Springer, ISBN 978-3-642-19550-1, November 2010, pp. 497-544.
4. H. Li and K.N. Ngan, "Image/Video Segmentation: Current Status, Trends, and Challenges," in *Video Segmentation and Its Applications*, Springer, ISBN 978-1-4419-9481-3, January 2011, pp. 1-23.

5. Q. Zhang and K.N. Ngan, "Multiview Image Segmentation and Video Tracking," in *Video Segmentation and Its Applications*, Springer, ISBN 978-1-4419-9481-3, January 2011, pp. 117-143.
6. L. Ma, C. Deng, W. Lin, K.N. Ngan and L. Xu, "Retargeted Image Quality Assessment: Current Progresses and Future Trends," in *Visual Signal Quality Assessment - Quality of Experience*, Springer, ISBN 978-3-319-10367-9, November 2014, pp. 213-242.

D. Refereed Journal Papers

1. R. Steele, K.N. Ngan and D.J. Goodman, "Adaptive difference detection and correction system for partial correction of transmission errors in linear PCM," *Electronics Letters*, U.K., vol. 14, no. 12, 1978, pp. 381-382.
2. K.N. Ngan and R. Steele, "Enhancement of PCM and DPCM images corrupted by transmission errors," *IEEE Transactions on Communications*, U.S.A., vol. 30, no. 1, January 1982, pp. 257-264.
3. K.N. Ngan, "Adaptive transform coding of video signals," *IEE Proceedings-F*, U.K., vol. 129, no. 1, February 1982, pp. 28-40.
4. K.N. Ngan, "Image display techniques using the cosine transform," *IEEE Transactions on Acoustics, Speech and Signal Processing*, U.S.A., vol. 32, no. 1, February 1984, pp. 173-177.
5. K.N. Ngan, "Hierarchical transmission of multi-level images for videotex systems," *Displays*, U.K., vol. 5, no. 2, April 1984, pp. 84-88.
6. K.N. Ngan, W.C. Hui and S.C. Lim, "Picture transmission for videotex," *IEEE Transactions on Consumer Electronics*, U.S.A., vol. 31, no. 3, August 1985, pp. 301-310.
7. K.N. Ngan and K.S. Leong, "Fast convergence method for Lloyd-Max quantiser design," *Electronics Letters*, U.K., vol. 22, no. 16, July 1986, pp. 844-846.
8. K.N. Ngan, "Experiments on two-dimensional decimation in time and orthogonal transform domain," *Signal Processing*, The Netherlands, vol. 11, no. 3, October 1986, pp. 249-263.
9. K.N. Ngan and H. Singh, "Robotic vision system for automatic identification and sorting of parts," *Engineering Journal of Singapore*, Singapore, vol. 13, no. 1, 1986, pp. 17-25.
10. K.N. Ngan, A.A. Kassim and H. Singh, "A parallel image processing system based on the TMS32010 digital signal processor," *IEE Proceedings-E*, U.K., vol. 134, no. 2, March 1987, pp. 119-124.
11. K.N. Ngan, C.H. Aw and H. Singh, "Automated inspection and drilling system for printed circuit boards," *IES Journal*, Singapore, vol. 27, no. 1, May 1987, pp. 7-13.
12. K.N. Ngan and S.B. Kang, "Geometric modelling of IC die bonds for inspection," *Pattern Recognition Letters*, The Netherlands, vol. 10, no. 1, July 1989, pp. 47-52.
13. K.N. Ngan, K.S. Leong and H. Singh, "Adaptive discrete cosine transform coding in perceptual domain," *IEEE Transactions on Acoustics, Speech and Signal Processing*, U.S.A., vol. 37, no. 11, November 1989, pp. 1743-1750.
14. K.N. Ngan and B.Y.K. Aw, "Morphologic edge detector," *Ngee Ann Polytechnic Journal*, Singapore, vol. 4, October 1990, pp. 33-38.
15. K.C. Chua, W.C. Wong and K.N. Ngan, "Error detection and correction of vector quantised digital images," *IEE Proceedings-I*, U.K., vol. 137, no. 6, December 1990, pp. 417-423.

16. (Invited paper) K.N. Ngan, H.C. Koh and W.C. Wong, "A hybrid image coding scheme incorporating human visual system characteristic," *Optical Engineering*, U.S.A., vol. 30, no. 7, July 1991, pp. 940-946.
17. K.N. Ngan, D.W. Lin and M.L. Liou, "Enhancement of image quality for low bit rate video coding," *IEEE Transactions on Circuits and Systems*, U.S.A., vol. 38, no. 10, October 1991, pp. 1221-1225.
18. K.N. Ngan and H.C. Koh, "Predictive classified vector quantization," *IEEE Transactions on Image Processing*, U.S.A., vol. 1, no. 3, July 1992, pp. 269-280.
19. K.N. Ngan and Sing B. Kang, "3-D object recognition using fuzzy quaternions," *IEE Proceedings-I*, U.K., vol. 139, no. 6, December 1992, pp. 561-568.
20. K.N. Ngan, J.S. Yee and H.C. Koh, "Low bit rate video coding using predictive classified vector quantization," *Asia-Pacific Engineering Journal*, Singapore, vol. 2, no. 4, December 1992, pp. 471-482.
21. K.N. Ngan and W.L. Chooi, "Subband motion analysis," *Optical Engineering*, U.S.A., vol. 32, no. 7, July 1993, pp. 1483-1488.
22. K.N. Ngan, K.K. Sin and H.C. Koh, "HDTV coding using hybrid MRVQ/DCT," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 3, no. 4, August 1993, pp. 320-323.
23. A.W. Johnson, T. Sikora, T.K. Tan and K.N. Ngan, "Filters for drift reduction in frequency scalable video coding schemes," *Electronics Letters*, U.K., vol. 30, no. 6, March 1994, pp. 471-472.
24. T.K. Tan, K.K. Pang and K.N. Ngan, "A frequency scalable coding scheme employing pyramid and subband techniques," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 4, no. 2, April 1994, pp. 203-207.
25. K.N. Ngan and W.L. Chooi, "Very low bit rate video coding using 3D subband approach," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 4, no. 3, June 1994, pp. 309-316.
26. L.H. Kieu and K.N. Ngan, "Cell-loss concealment techniques for layered video codecs in an ATM network," *IEEE Transactions on Image Processing*, U.S.A., vol. 3, no. 5, September 1994, pp. 666-677.
27. K.N. Ngan, D. Chai and A. Millin, "Very low bit rate video coding using H.261-like coder," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 6, no. 3, June 1996, pp. 308-312.
28. S.H. Tan, K.K. Pang and K.N. Ngan, "Classified perceptual coding with adaptive quantization," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 6, no. 4, August 1996, pp. 375-388.
29. M. Lee, K.N. Ngan and G. Crebbin, "A rate-distortion function for vector quantization with a variable block-size classification model," *Journal of Visual Communications and Image Representation*, Academic Press, U.S.A., vol. 8, no. 4, December 1997, pp. 356-363.
30. M. Lee and K.N. Ngan, "Video coding with a variable block-sizing technique in the wavelet transform domain," *SPIE Journal of Electronic Imaging*, U.S.A., vol. 7, no. 3, July 1998, pp. 539-547.
31. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, "Special Issue on Segmentation, Description and Retrieval of Video Content," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 8, no. 5, September 1998, pp. 521-524.

32. ¹(Invited paper) T. Meier and K.N. Ngan, "Automatic segmentation of moving objects for video objects plane generation," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 8, no. 5, September 1998, pp. 525-538.
33. S. Benton, B. Choquet, R. Horst, K.N. Ngan and M. Tanimoto, "Special Issue on 3D Video Technology," *Signal Processing: Image Communication*, Europe, vol. 14, Nos. 1-2, November 1998, pp. 1-6.
34. H. Fan and K.N. Ngan, "Disparity map coding based on adaptive triangular surface modelling," *Signal Processing: Image Communication*, Europe, vol. 14, Nos. 1-2, November 1998, pp. 119-130.
35. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, "Special Issue on Representation and Coding of Images and Video I," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 8, no. 7, November 1998, pp. 797-801.
36. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, "Special Issue on Representation and Coding of Images and Video II," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 9, no. 1, February 1999, pp. 1-4.
37. T. Meier, K.N. Ngan and G. Grebbin, "Reduction of blocking artifacts in image and video coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 9, no. 3, April 1999, pp. 490-500.
38. C.W. Yap, K.N. Ngan and R. Liyanapathirana, "A combined source-channel video coding scheme for mobile channels," *Signal Processing: Image Communication*, Europe, vol. 14, nos. 6-8, May 1999, pp. 559-574.
39. ²D. Chai and K.N. Ngan, "Face segmentation using skin color map in videophone applications," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 9, no. 4, June 1999, pp. 551-564.
40. T. Meier and K.N. Ngan, "Segmentation and tracking of moving objects for content-based video coding," *IEE Proceedings - Vision, Image and Signal Processing*, U.K., vol. 146, no. 3, June 1999, pp. 144-150.
41. W.J. Heng, K.N. Ngan and M.H. Lee, "Comparison of MPEG domain elements for low-level shot boundary detection," *Journal of Real-Time Imaging*, Academic Press, U.S.A., vol. 5, no. 5, October 1999, pp. 341-358.
42. T. Meier and K.N. Ngan, "Video segmentation for content-based coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 9, no. 8, December 1999, pp. 1190-1203.
43. K.N. Ngan, M. Strintzis, M. Tanimoto and Y. Wang, "Special Issue on 3-D Video Technology," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 10, no. 2, March 2000, pp. 185-187.
44. C.W. Yap and K.N. Ngan, "Error resilient transmission of SPIHT coded images over fading channels," *IEE Proceedings - Vision, Image and Signal Processing*, U.K., vol. 148, no. 1, February 2001, pp. 59-64.
45. W.J. Heng and K.N. Ngan, "Long transition analysis for digital video sequences," *Circuits, Systems and Signal Processing*, Birkhäuser Boston, U.S.A., vol. 20, no. 2, 2001, pp. 113-141.
46. W.J. Heng and K.N. Ngan, "An object-based shot boundary detection using edge tracing and tracking," *Journal of Visual Communications and Image Representation*, Academic Press, U.S.A., vol. 12, no. 3, September 2001, pp. 217-239.

¹ Fourth most cited paper in IEEE Transactions on Circuits and Systems for Video Technology in 1998.

² Second most cited paper in IEEE Transactions on Circuits and Systems for Video Technology in 1999.

47. C. Zhao, K.N. Ngan, J. Zhang, R. Mathew and X. Zhang, "Using inter frame dependence history to select intra refresh blocks," *Electronics Letters*, U.K., vol. 38, no. 22, October 2002, pp. 1337-1338.
48. W.J. Heng and K.N. Ngan, "Shot boundary refinement for long transition in digital video sequence," *IEEE Transactions on Multimedia*, U.S.A., vol. 4, no. 4, December 2002, pp. 434-445.
49. W.J. Heng and K.N. Ngan, "High accuracy flashlight scene determination for shot boundary detection," *Signal Processing: Image Communication*, Europe, vol. 18, no. 3, March 2003, pp. 203-219.
50. K.N. Ngan, T. Meier and Z. Chen, "Improved single video object rate control for MPEG-4," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 13, no. 5, May 2003, pp. 385-392.
51. Y. Altunbasak, C.W. Chen, M.R. Civanlar and K.N. Ngan, "Guest Editorial: Recent Advances in Wireless Video," *Signal Processing: Image Communication*, Europe, vol. 18, no. 10, Nov. 2003, pp. 857-860.
52. Z. Chen, K.N. Ngan and C. Zhao, "Improved rate control for MPEG-4 video transport over wireless channel," *Signal Processing: Image Communication*, Europe, vol. 18, no. 10, Nov. 2003, pp. 879-887.
53. J. Lim, J. Kim, K.N. Ngan and K. Sohn, "Advanced rate control technologies for 3D-HDTV," *IEEE Transactions on Consumer Electronics*, U.S.A., vol. 49, no. 4, Nov. 2003, pp. 1498-1507.
54. J. Lim, K.N. Ngan, W. Yang and K. Sohn, "A multiview sequence CODEC with view scalability," *Signal Processing: Image Communication*, Europe, vol. 19, no. 3, March 2004, pp. 239-256.
55. Z. Chen and K.N. Ngan, "Linear rate-distortion models for MPEG-4 shape coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 14, no. 6, June 2004, pp. 869-873.
56. Z. Chen and K.N. Ngan, "Rate-constrained arbitrarily shaped video object coding with object-based rate control," *IEE Proceedings - Vision, Image and Signal Processing*, U.K., vol. 151, no. 4, August 2004, pp. 250-256.
57. W. Yang, K.N. Ngan, J.E. Lim and K. Sohn, "Joint Motion and Disparity Fields Estimation for Stereoscopic Video Sequences" *Signal Processing: Image Communication*, Europe, vol. 20, no. 3, March 2005, pp. 265-276.
58. Z. Ni, Z. Chen and K.N. Ngan, "A real-time video transport system for the best-effort Internet," *Signal Processing: Image Communication*, Europe, vol. 20, no. 3, March 2005, pp. 277-293.
59. J. Han, K.N. Ngan, M. Li and H. Zhang, "A memory learning framework for effective image retrieval," *IEEE Transactions on Image Processing*, U.S.A., vol. 14, no. 4, April 2005, pp. 511-524.
60. D. Gao, J. Cai and K.N. Ngan, "Admission Control in IEEE 802.11e Wireless LANs," *IEEE Network*, U.S.A., July-August 2005, pp. 6-13.
61. C.W. Chen, M. Ghanbari and K.N. Ngan, "Special issue on visual communication in the ubiquitous era," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 16, no. 4-5, August-October 2005, pp. 393-396.
62. J. Cai, J. Wu, K.N. Ngan and Z. He, "Joint mode selection and unequal error protection for bitplane coded video transmission over wireless channels," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 16, no. 4-5, August-October 2005, pp. 412-431.

63. J. Li, C. Zhao and K.N. Ngan, "VLC/FLC data partitioning with intra AC prediction disabled," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 16, no. 4-5, August-October 2005, pp. 544-562.
64. Z. Chen and K.N. Ngan, "Joint texture-shape optimization for MPEG-4 multiple video objects," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 15, no. 9, September 2005, pp. 1170-1174.
65. J. Han, K.N. Ngan, M. Li and H. Zhang, "Unsupervised extraction of visual attention objects in color images," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 16, no. 1, January 2006, pp. 141-145.
66. Y. Liu and K.N. Ngan, "Embedded wavelet packet object-based image coding based on context classification and quadtree ordering," *Signal Processing: Image Communication*, Europe, vol. 21, no. 2, February 2006, pp. 143-155.
67. W. Yang and K.N. Ngan, "MPEG-4 based stereoscopic video encoder using joint disparity/motion estimation," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 16, no. 2, February 2006, pp. 286-290.
68. Andy C. Yu, K.N. Ngan, Graham R. Martin, "Efficient Intra- and Inter-mode Selection Algorithms for H.264/ MPEG-4 AVC," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 17, no. 2, April 2006, pp. 322-344.
69. Z. Chen and K.N. Ngan, "Distortion variation minimization in real time video coding," *Signal Processing: Image Communication*, Europe, vol. 21, no. 4, April 2006, pp. 273-279.
70. D. Tao, J. Cai, H. Yi, D. Rajan, L.-T. Chia, K.N. Ngan, "Dynamic Programming-Based Reverse Frame Selection for VBR Video Delivery under Constrained Resources," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 16, no. 11, November 2006, pp. 1362-1375.
71. W. Yang, Y. Lu, F. Wu, J. Cai, K.N. Ngan and S. Li, "4-D wavelet-based multi-view video coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 16, no. 11, November 2006, pp. 1385-1396.
72. Z. Chen, J. Han and K.N. Ngan, "Dynamic Bit Allocation for Multiple Video Object Coding," *IEEE Transactions on Multimedia*, U.S.A., vol. 8, no. 6, December 2006, pp. 1117-1124.
73. H. Wang, K.N. Ngan and J. Ostermann, "Guest Editorial: Advances in Visual Content Analysis and Adaptation for Multimedia Communications", *IEEE Communications Magazine*, U.S.A., vol. 45, no. 1, January 2007, pp. 24-26.
74. H. Li and K.N. Ngan, "Automatic Video Segmentation and Tracking for Content-Based Applications", *IEEE Communications Magazine*, U.S.A., vol. 45, no. 1, January 2007, pp. 27-33.
75. ³Z. Chen and K.N. Ngan, "Recent advances in rate control for video coding," *Signal Processing: Image Communication*, Europe, vol. 22, no. 1, January 2007, pp. 19-38.
76. Z. Chen and K.N. Ngan, "Towards Rate-Distortion Tradeoff in Real-Time Color Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 17, no. 2, February 2007, pp. 158-167.
77. Y. Liu, F. Wu and K.N. Ngan, "3-D Object-Based Scalable Wavelet Video Coding With Boundary Effect Suppression", *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 17, no. 5, May 2007, pp. 639-644.
78. Y. Liu and K.N. Ngan, "Fast multiresolution motion estimation algorithms for wavelet-based scalable video coding," *Signal Processing: Image Communication*, Europe, vol. 22, no. 5, June 2007, pp. 448-465.

³ One of the top 25 hottest articles in Signal Processing: Image Communication in 2007.

79. Z. Chen and K.N. Ngan, "A Unified Approach of Bit Rate Control for Binary and Gray Level Shape Sequences Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 17, no. 7, July 2007, pp. 823-832.
80. Z. Chen and K.N. Ngan, "A rate and distortion analysis of multiscale binary shape coding based on statistical learning," *IEEE Transactions on Multimedia*, U.S.A., vol. 9, no. 5, August 2007, pp. 987-994.
81. Z. Wei, T.K. Lam and K.N. Ngan, "Implementation of H.264 on Mobile Device," *IEEE Transactions on Consumer Electronics*, U.S.A., vol. 53, no. 3, August 2007, pp. 1109-1116.
82. C.H. Foh, Y. Zhang, Z. Ni, J. Cai, and K.N. Ngan, "Optimized Cross-Layer Design for Scalable Video Transmission over the IEEE 802.11e Networks," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 17, no. 12, December 2007, pp. 1665-1678.
83. H. Li and K.N. Ngan, "Unsupervised video segmentation with low depth of field," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 17, no. 12, December 2007, pp. 1742-1751.
84. D. Gao, J. Cai, C.T. Lau, K.N. Ngan, "Improving WLAN VoIP Capacity through Service Differentiation," *IEEE Transactions on Vehicular Technology*, U.S.A., vol. 57, no. 1, January 2008, pp. 465-474.
85. Y. Liu and K.N. Ngan, "Weighted Adaptive Lifting-based Wavelet Transform for Image Coding," *IEEE Transactions on Image Processing*, U.S.A., vol. 17, no. 4, April 2008, pp. 500-511.
86. H. Li, K.N. Ngan and Z. Wei, "Fast and Efficient Method for Block Edge Classification and Its Application in H.264/AVC Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 18, no. 6, June 2008, pp. 756-768.
87. H. Li and K.N. Ngan, "Saliency Model based Face Segmentation and Tracking in Head-and-Shoulder Video Sequences," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 19, no. 5, July 2008, pp. 320-333.
88. Y. Liu, K.N. Ngan and F. Wu, "3-D Shape-Adaptive Directional Wavelet Transform for Object-Based Scalable Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 18, no. 7, July 2008, pp. 888-899.
89. J. Li and K.N. Ngan, "Adaptive Partition Size Temporal Error Concealment for H.264 using Weighted Double-Sided EBME Minimization," *Signal Processing: Image Communication*, Europe, vol. 23, no. 6, July 2008, pp. 451-462.
90. Z. Wei, K.N. Ngan and H. Li, "An Efficient Intra Mode Selection Algorithm for H.264 Based on Edge Classification and Rate-Distortion Estimation," *Signal Processing: Image Communication*, Europe, vol. 23, no. 9, October 2008, pp. 699-710.
91. Z. Chen, D. Zhang and K.N. Ngan, "An Efficient Algorithm for H.264/AVC High Definition Video Coding," *IEEE Transactions on Consumer Electronics*, U.S.A., vol. 54, no. 4, November 2008, pp. 1852-1857.
92. H. Li, K.N. Ngan and Q. Liu, "FaceSeg: Automatic Face Segmentation for Real-time Video," *IEEE Transactions on Multimedia*, U.S.A., vol. 11, no. 1, January 2009, pp. 77-88.
93. Z. Wei and K.N. Ngan, "Spatio-temporal Just Noticeable Distortion Profile for Grey Scale Image/Video in DCT Domain," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 19, no. 3, March 2009, pp. 337-346.

94. W. Gao, K.N. Ngan and, L. Yu, "Special issue on AVS and its applications: Guest editorial," *Signal Processing: Image Communication*, Europe, vol. 24, no. 4, April 2009, pp. 245-246.
95. X. Jin, S. Li and K.N. Ngan, "Platform-independent MB-based AVS video standard implementation," *Signal Processing: Image Communication*, Europe, vol. 24, no. 4, April 2009, pp. 312-323.
96. D. Zhang, K.N. Ngan and Z. Chen, "A Two-Pass Rate Control Algorithm for H.264/AVC High Definition Video Coding," *Signal Processing: Image Communication*, Europe, vol. 24, no. 5, May 2009, pp. 357-367.
97. H. Shu and K.N. Ngan, "Pre- and Post-shift Filteringing for Blocking Removing in Downsizing Transcoding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 19, no. 6, June 2009, pp. 882-886.
98. H. Li and K.N. Ngan, "Semantic Object Segmentation," *IEEE Communications Society Multimedia Communications Technical Committee E-Letter*, vol. 4, no. 6, July 2009, pp. 6-8.
99. (Invited Paper) C. Cui, Q. Zhang and K.N. Ngan, "Multi-view Video Based Object Segmentation - A Tutorial," *ECTI Transactions on Electrical Engineering, Electronics and Communications*, Thailand, vol. 7, no. 2, August 2009, pp. 90-105.
100. J. Dong, K.N. Ngan, C.K. Fong and W.K. Cham, "2D Order-16 Integer Transforms for HD Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 19, no. 10, October 2009, pp. 1462-1474.
101. Z. Liu, H. Yan, L. Shen, K.N. Ngan and Z. Zhang, "Adaptive Image Retargeting Using Saliency-based Continuous Seam Carving," *Optical Engineering*, U.S.A., vol. 49, no. 1, January 2010, pp. 017002.1-10.
102. C. Cui and K.N. Ngan, "Plane-based External Camera Calibration with Accuracy Measured by Relative Deflection Angle," *Signal Processing: Image Communication*, Europe, vol. 25, no. 3, March 2010, pp. 224-234.
103. L. Ma, S. Li and K.N. Ngan, "Visual Horizontal Effect for Image Quality Assessment", *IEEE Signal Processing Letters*, U.S.A., vol. 17, no. 7, July 2010, pp. 627-630.
104. Q. Zhang and K.N. Ngan, "Multi-view Video Based Multiple Objects Segmentation Using Graph Cut and Spatiotemporal Projections," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 21, no. 5-6, July-August 2010, pp. 453-461.
105. J. Dong and K.N. Ngan, "Real-time De-interlacing for H.264 Coded HD Videos," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 20, no. 8, August 2010, pp. 1144-1149.
106. J. Dong and K.N. Ngan, "Parametric Interpolation Filter for HD Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 20, no. 12, December 2010, pp. 1892-1897.
107. L. Ma, K.N. Ngan, F. Zhang and S. Li, "Adaptive Block-Size Transform Based Just-Noticeable Difference Model for Images/Videos," *Signal Processing: Image Communication*, Europe, vol. 26, no. 3, March 2011, pp. 162-174.
108. C. Cui and K.N. Ngan, "Scale and Affine Invariant Fan Feature," *IEEE Transactions on Image Processing*, U.S.A., vol. 20, no. 6, June 2011, pp. 1627-1640.
109. Q. Liu, H. Li and K.N. Ngan, "Automatic Body Segmentation with Graph Cut and Self-Adaptive Initialization Level Set (SAILS)," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 22, no. 5, July 2011, pp. 367-377.

110. X. Jin, S. Goto and K.N. Ngan, "Composite Model Based DC Dithering for Suppressing Contour Artifacts in Decompressed Video," *IEEE Transactions on Image Processing*, U.S.A., vol. 20, no. 8, August 2011, pp. 2110-2121.
111. F. Zhang, L. Ma, S. Li and K.N. Ngan, "Practical image quality metric applied to image coding," *IEEE Transactions on Multimedia*, U.S.A., vol. 13, no. 4, August 2011, pp. 615-624.
112. L. Ma, S. Li, F. Zhang and K.N. Ngan, "Reduced-Reference Image Quality Assessment Using Reorganized DCT-Based Image Representation," *IEEE Transactions on Multimedia*, U.S.A., vol. 13, no. 4, August 2011, pp. 824-829.
113. S. Li, F. Zhang, L. Ma and K.N. Ngan, "Image Quality Assessment by Separately Evaluating Detail Losses and Additive Impairments," *IEEE Transactions on Multimedia*, U.S.A., vol. 13, no. 5, October 2011, pp. 935-949.
114. J. Dong and K.N. Ngan, "Adaptive Pre-interpolation Filter for High-performance Video Coding," *Journal of Visual Communications and Image Representation*, U.S.A., vol. 22, no. 8, October 2011, pp. 697-703.
115. H. Li and K.N. Ngan, "Learning to Extract Focused Object from Low DOF Images," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 21, no. 11, November 2011, pp. 1571-1580.
116. F. Zhang, W. Liu, W. Lin and K.N. Ngan, "Spread Spectrum Image Watermarking Based on Perceptual Quality Metric," *IEEE Transactions on Image Processing*, U.S.A., vol. 20, no. 11, November 2011, pp. 3207-3218.
117. Q. Zhang and K.N. Ngan, "Segmentation and Tracking Multiple Objects under Occlusion from Multi-view Video," *IEEE Transactions on Image Processing*, U.S.A., vol. 20, no. 11, November 2011, pp. 3308-3313.
118. H. Li and K.N. Ngan, "A Co-saliency Model of Image Pairs," *IEEE Transactions on Image Processing*, U.S.A., vol. 20, no. 12, December 2011, pp. 3365-3375.
119. H. Li, G. Liu and K.N. Ngan, "Guided Face Cartoon Synthesis," *IEEE Transactions on Multimedia*, U.S.A., vol. 13, no. 6, December 2011, pp. 1230-1239.
120. W. Luo, H. Li, G. Liu and K.N. Ngan, "Global salient information maximization for saliency detection," *Signal Processing: Image Communication*, Europe, vol. 27, no. 3, March 2012, pp. 238-248.
121. J. Dong and K.N. Ngan, "Two-Layer Directional Transform for High Performance Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 22, no. 4, April 2012, pp. 619-625.
122. S. Li, L. Ma and K.N. Ngan, "Full-Reference Video Quality Assessment by Decoupling Detail Losses and Additive Impairments," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 22, no. 7, July 2012, pp. 1100-1112.
123. Z. Liu, R. Shi, L. Shen, Y. Xue, K.N. Ngan and Z. Zhang, "Unsupervised salient object segmentation based on kernel density estimation and two-phase graph cut," *IEEE Transactions on Multimedia*, U.S.A., vol. 14, no. 4, August 2012, pp. 1275-1289.
124. F. Meng, H. Li, G. Liu, and K.N. Ngan, "Object Co-segmentation based on Shortest Path Algorithm and Saliency Model," *IEEE Transactions on Multimedia*, U.S.A., vol. 14, no. 5, October 2012, pp. 1429-1441.
125. L. Ma, W. Lin, C. Deng and K.N. Ngan, "Image Retargeting Quality Assessment: A Study of Subjective Scores and Objective Metrics," *IEEE Journal of Selected Topics in Signal Processing*, U.S.A., vol. 6, no. 6, October 2012, pp. 626-639.

126. L. Ma, S. Li and K.N. Ngan, "Reduced-Reference Video Quality Assessment of Compressed Video Sequences," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 22, no. 10, October 2012, pp. 1441-1456.
127. F. Zhang, W. Lin, Z. Chen and K.N. Ngan, "Additive Log-logistic Model for Video Quality Assessment," *IEEE Transactions on Image Processing*, U.S.A., vol. 22, no. 4, April 2013, pp. 1536-1547.
128. F. Meng, H. Li, G. Liu and K.N. Ngan, "Image Co-segmentation by Incorporating Color Reward Strategy and Active Contours Model," *IEEE Transactions on Cybernetics*, U.S.A., vol. 43, no. 2, April 2013, pp. 725-737.
129. L. Xu, H. Li, L. Zeng and K. N. Ngan, "Saliency detection using joint spatial-color constraint and multi-scale segmentation", *Journal of Visual Communication and Image Representation*, vol. 24, no. 4, pp. 465-476, May 2013.
130. (Invited paper) L. Ma, C. Deng, K.N. Ngan and W. Lin, "Recent Advances and Challenges of Visual Signal Quality Assessment," *China Communication*, China, vol. 10, no. 5, May 2013, pp. 62-78.
131. L. Xu, S. Li, K.N. Ngan and L. Ma, "Consistent Visual Quality Control in Video Coding," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 23, no. 6, pp. 975-989, June 2013.
132. S. Li, L. Ma and K.N. Ngan, "Anaglyph Image Generation by Matching Color Appearance Attributes," *Signal Processing: Image Communication*, Europe, vol. 28, no. 6, pp. 597-607, July 2013.
133. C. Cui and K.N. Ngan, "Global Propagation of Affine Invariant Features for Robust Matching," *IEEE Transactions on Image Processing*, U.S.A., vol. 22, no. 7, pp. 2876-2888, July 2013.
134. M. Wang, B. Yan and K.N. Ngan, "An Efficient Framework for Image/video Inpainting," *Signal Processing: Image Communication*, Europe, vol. 28, no. 7, pp. 753-762, August 2013.
135. L. Ma, S. Li and K.N. Ngan, "Reduced-Reference Image Quality Assessment in Reorganized DCT Domain," *Signal Processing: Image Communication*, Europe, vol. 28, no. 8, pp. 884-902, September 2013.
136. F. Meng, H. Li, K.N. Ngan, L. Zeng and Q. Wu, "Feature Adaptive Co-segmentation by Complexity Awareness," *IEEE Transactions on Image Processing*, U.S.A., vol. 22, no. 12, pp. 4809-4824, December 2013.
137. H. Li, F. Meng and K. N. Ngan, "Co-Salient Object Detection from Multiple Images", *IEEE Transactions on Multimedia*, U.S.A., vol. 15, no. 8, pp. 1896-1909, December 2013.
138. F. Meng, H. Li, G. Liu and K.N. Ngan, "From Logo to Object Segmentation," *IEEE Transactions on Multimedia*, U.S.A., vol. 15, no. 8, pp. 2186-2197, December 2013.
139. M. Wang, K.N. Ngan and L. Xu, "Efficient H.264/AVC Video Coding with Adaptive Transforms," *IEEE Transactions on Multimedia*, U.S.A., vol. 16, no. 4, pp. 933-946, June 2014.
140. M. Wang, K.N. Ngan and H. Li, "An Efficient Frame-content based Intra Frame Rate Control for High Efficiency Video Coding," *IEEE Signal Processing Letters*, U.S.A., vol. 22, no. 7, pp. 896-900, July 2015.
141. L. Sheng, K.N. Ngan, C.-L. Lim and S. Li, "Online Temporally Consistent Indoor Depth Video Enhancement via Static Structure," *IEEE Transactions on Image Processing*, U.S.A., U.S.A., vol. 24, no. 7, pp. 2197-2211, July 2015.
142. Q. Wu, H. Li, F. Meng, K.N. Ngan and S. Zhu, "No Reference Image Quality Assessment Metric via Multi-domain Structural Information and Piecewise

- Regression," *Journal of Visual Communication and Image Representation*, U.S.A., vol. 32, pp. 205-216, October 2015.
143. H. Zeng, A. Yang, K.N. Ngan and M. Wang, "Perceptual sensitivity-based rate control method for high efficiency video coding," *Multimedia Tools and Applications*, vol. 75, no. 17, pp. 10383–10396, September 2016.
 144. R. Shi, K.N. Ngan, S. Li, R. Paramesran and H. Li, "Visual Quality Evaluation of Image Object Segmentation: Subjective Assessment and Objective Measure," *IEEE Transactions on Image Processing*, U.S.A., vol. 24, no. 12, pp. 5033-5045, December 2015.
 145. J. Xiong, H. Li, F. Meng, Q. Wu and K.N. Ngan, "Fast HEVC Inter CU Decision based on Latent SAD Estimation", *IEEE Transactions on Multimedia*, U.S.A., vol. 17, no. 12, pp. 2147-2159, December 2015.
 146. Q. Wu, H. Li, F. Meng, K.N. Ngan, B. Luo, C. Huang, and B. Zeng "Blind Image Quality Assessment Based on Multichannel Feature Fusion and Label Transfer," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 26, no. 3, pp. 425-440, March 2016.
 147. L. Xu, W. Lin, L. Ma, Y. Zhang, Y. Fang, K.N. Ngan, S. Li, and Y. Yan, "Free-energy Principle Inspired Video Quality Metric and Its Use in Video Coding", *IEEE Transactions on Multimedia*, U.S.A., U.S.A., vol. 18, no. 4, pp. 590-602, April 2016.
 148. Q. Liu, W. Zhang, H. Li and K.N. Ngan, "Hybrid human detection and recognition in surveillance," *Neurocomputing*, U.S.A., vol. 194, pp. 10-23, June 2016.
 149. M. Wang, K.N. Ngan and H. Li, "Low-delay Rate Control for Consistent Quality Using Distortion-based Lagrange Multiplier," *IEEE Transactions on Image Processing*, U.S.A., vol. 25, no. 7, pp. 2943-2955, July 2016.
 150. S. Li, K.N. Ngan, R. Paramesran and L. Sheng, "Real-time Head Pose Tracking with Online Face Template Reconstruction," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, U.S.A., vol. 38, no. 9, pp. 1922-1928, September 2016.
 151. Y. Tew, K. Wong, R.C.-W. Phan and K.N. Ngan, "Multi-layer Authentication Method for HEVC Video based on Embedded Statistics", *Journal of Visual Communication and Image Representation*, U.S.A., vol. 40, Part B, pp. 502-515, October 2016.
 152. L. Ma, L. Xu, Y. Zhang, Y. Yan and K.N. Ngan, "No-Reference Retargeted Image Quality Assessment Based on Rank Learning", *IEEE Transactions on Multimedia*, U.S.A., vol. 18, no. 11, pp. 2228-2237, November 2016.
 153. C.-L. Lim, R. Paramesran, W.A. Jassim, Y.-P. Yu and K.N. Ngan, "Blind Image Quality Assessment For Gaussian Blur Images Using Exact Zernike Moments And Gradient Magnitude", *Journal of the Franklin Institute - Engineering and Applied Mathematics*, U.S.A., vol. 353, no. 17, pp. 4715-4733, November 2016.
 154. (Invited Paper) L. Ma, X. Wang, Q. Liu and K.N. Ngan, "Reorganized DCT-based image representation for reduced reference stereoscopic image quality assessment," *Neurocomputing*, U.S.A., vol. 215, pp. 21-31, November 2016.
 155. F. Meng, H. Li, Q. Wu, B. Luo and K.N. Ngan, "Weakly Supervised Part Proposal Segmentation from Multiple Images," *IEEE Transactions on Image Processing*, U.S.A., vol. 26, no. 8, pp. 4019-4031, August 2017.
 156. W. Li, H. Li, B. Luo, H. Shi, Q. Wu and K.N. Ngan, "Improving Object Proposals with Top-down Cues", *Signal Processing: Image Communication*, Europe, vol. 56, pp. 20-27, August 2017.
 157. R. Shi and K.N. Ngan, "Gaze-based Object Segmentation", *IEEE Signal Processing Letters*, U.S.A., vol. 24, no. 10, pp. 1493-1497, October 2017.

158. Q. Wu, H. Li, Z. Wang, F. Meng, B. Luo, W. Li and K.N. Ngan, "Blind Image Quality Assessment Based on Rank-Order Regularized Regression", *IEEE Transactions on Multimedia*, U.S.A., vol. 19, no. 11, pp. 2490-2504, November 2017.
159. L. Ma, H. Li, F. Meng, Q. Wu, and K.N. Ngan, "Learning Efficient Binary Codes From High-Level Image Representations for Multilabel Image Retrieval", *IEEE Transactions on Multimedia*, U.S.A., vol. 19, no. 11, pp. 2545-2560, November 2017.
160. Y. Zhang, K.N. Ngan, L. Ma and H. Li, "Objective Quality Assessment of Image Retargeting by Incorporating Fidelity Measures and Inconsistency Detection", *IEEE Transactions on Image Processing*, U.S.A., vol. 26, no. 12, pp. 5980-5993, December 2017.
161. Q. Wu, H. Li, F. Meng and K.N. Ngan, "Generic Proposal Evaluator: A Lazy Learning Strategy Toward Blind Proposal Quality Assessment", *IEEE Transactions on Intelligent Transportation Systems*, U.S.A., vol. 19, no. 1, pp. 306-319, January 2018.
162. F. Meng, H. Li, Q. Wu, K.N. Ngan and J. Cai, "Seeds-based Part Segmentation by Seeds Propagation and Region Convexity Decomposition", *IEEE Transactions on Multimedia*, U.S.A., vol. 20, no. 2, pp. 310-322, February 2018.
163. L. Tang, H. Li, Q. Wu and K.N. Ngan, "Boundary-Guided Optimization Framework for Saliency Refinement", *IEEE Signal Processing Letters*, U.S.A., vol. 25, no. 4, pp. 491-495, April 2018.
164. F. Meng, H. Li, Q. Wu, B. Luo, C. Huang and K.N. Ngan, "Globally Measuring the Similarity of Superpixels by Binary Edge Maps for Superpixel Clustering", *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 28, no. 4, pp. 906-919, April 2018.
165. Q. Wu, H. Li, F. Meng and K.N. Ngan, "A Perceptually Weighted Rank Correlation Indicator for Objective Image Quality Assessment", *IEEE Transactions on Image Processing*, U.S.A., vol. 27, no. 5, pp. 2499-2513, May 2018.
166. L. Ma, H. Li, F. Meng, Q. Wu and K.N. Ngan, "Global and Local Semantics-Preserving Based Deep Hashing for Cross-Modal Retrieval", *Neurocomputing*, U.S.A., vol. 312, pp. 49-62, May 2018.
167. C.H. Cheung, K.N. Ngan and L. Sheng, "Spatio-Temporal Disocclusion Filling Using Novel Sprite Cells", *IEEE Transactions on Multimedia*, U.S.A., vol. 20, no. 6, pp. 1376-1391, June 2018.
168. Q. Wu, H. Li, F. Meng, K.N. Ngan, "Toward a blind quality metric for temporally distorted streaming video", *IEEE Transactions on Broadcasting*, U.S.A., vol. 64, no. 2, pp. 367-378, June 2018.
169. R. Shi, K.N. Ngan, S. Li and H. Li, "Interactive Object Segmentation in Two Phases", *Signal Processing: Image Communication*, Europe, vol. 65, pp. 107-114, July 2018.
170. B. Luo, H. Li, F. Meng, Q. Wu and K.N. Ngan, "An Unsupervised Method to Extract Video Object via Complexity Awareness and Object Local Parts," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 28, no. 7, pp. 1580-1594, July 2018.
171. Q. Wu, H. Li, K.N. Ngan and K. Ma, "Blind Image Quality Assessment Using Local Consistency Aware Retriever and Uncertainty Aware Evaluator," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 28, no. 9, pp. 2078-2089, September 2018.

172. Y. Tew, K.S. Wong, R.C.W. Phan, K.N. Ngan, “Separable authentication in encrypted HEVC video”, *Multimedia Tools and Applications*, vol. 77, no. 18, pp. 24165–24184, September 2018.
173. H. Shi, H. Li, F. Meng, Q. Wu, L. Xu and K.N. Ngan, “Hierarchical Parsing Net: Semantic Scene Parsing from Global Scene to Objects”, *IEEE Transactions on Multimedia*, U.S.A., vol. 20, no. 10, pp. 2670-2682, October 2018.
174. T. Zhao, S. Li, K.N. Ngan and F. Wu, “3-D Reconstruction of Human Body Shape from a Single Commodity Depth Camera”, *IEEE Transactions on Multimedia*, U.S.A., vol. 21, no. 1, pp. 114-123, January 2019.
175. Fanzi Wu, Songnan Li, Tianhao Zhao, King Ngi Ngan, Lv Sheng, “Cascaded Regression using Landmark Displacement for 3D Face Reconstruction”, *Pattern Recognition Letters*, vol. 125, pp. 766-772, July 2019.
176. H. Qiu, H. Li, Q. Wu, F. Meng, K.N. Ngan and H. Shi, “A²RMNet: Adaptively Aspect Ratio Multi-Scale Network for Object Detection in Remote Sensing Images”, *Remote Sensing*, vol. 11, no. 13, 1594, July 2019.
177. L. Sheng, J. Cai, T.J. Cham, V. Pavlovic, K.N. Ngan, “Visibility Constrained Generative Model for Depth-based 3D Facial Pose Tracking”, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, U.S.A., vol. 41, no. 8, pp. 1994-2007, August 2019.
178. Y. Zhang, C.P. Huynh and K.N. Ngan, “Feature Fusion with Predictive Weighting for Spectral Image Classification and Segmentation”, *IEEE Transactions on Geoscience and Remote Sensing*, U.S.A., vol. 57, no. 9, pp. 6792-6807, September 2019.
179. M. Wang, W. Xie, X. Meng, H. Zeng and K.N. Ngan, “UHD Video Coding: A Light-weight Learning-based Fast Super-block Approach”, *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 29, no. 10, pp. 3083-3094, October 2019.
180. W. Li, H. Li, Q. Wu, X. Chen and K.N. Ngan, “Simultaneously Detecting and Counting Dense Vehicles from Drone Images”, *IEEE Transactions on Industrial Electronics*, U.S.A., vol. 66, no. 12, pp. 9651-9662, December 2019.
181. W. Li, H. Li, Q. Wu, F. Meng, L. Xu and K.N. Ngan, “HeadNet: An End-to-End Adaptive Relational Network for Head Detection”, *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 30, no. 2, pp. 482-494, February 2020.
182. L. Ma, H. Li, F. Meng, Q. Wu and K.N. Ngan, “Discriminative Deep Metric Learning for Asymmetric Discrete Hashing”, *Neurocomputing*, vol. 380, pp. 115-124, March 2020.
183. Q. Cheng, H. Li, Q. Wu and K.N. Ngan, “Hybrid-loss Supervision for Deep Neural Network”, *Neurocomputing*, vol. 388, pp. 78-89, May 2020.
184. Q. Cheng, H. Li, Q. Wu, L. Ma and K.N. Ngan, “Parametric Deformable Exponential Linear Units for Deep Neural Networks”, *Neural Networks*, vol. 125, pp. 281-289, May 2020.
185. M. Wang, J. Xiong, L. Xu, W. Xie, K.N. Ngan and J. Qin, “Rate Constrained Multiple-QP Optimization for HEVC”, *IEEE Transactions on Multimedia*, U.S.A., vol. 22, no. 6, pp. 1395-1406, June 2020.
186. Q. Wu, W. Li, K.N. Ngan, H. Li, , F. Meng and L. Xu and, “Subjective and Objective De-Raining Quality Assessment Towards Authentic Rain Image”, *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 30, no. 11, pp. 3883-3897, November 2020.

187. M. Wang, J. Xiong, L. Xu, W. Xie, K.N. Ngan and J. Qin, "Hierarchical Context Features Embedding for Object Detection", *IEEE Transactions on Multimedia*, U.S.A., vol. 22, no. 12, pp. 3039-3050, December 2020.
188. X. Chen, H. Li, Q. Wu, K.N. Ngan and L. Xu, "High-Quality R-CNN Object Detection Using Multi-Path Detection Calibration Network", *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 31, no. 2, pp. 715-727, February 2021.
189. H. Shi, H. Li, Q. Wu and K.N. Ngan, "Query Reconstruction Network for Referring Expression Image Segmentation", *IEEE Transactions on Multimedia*, U.S.A., vol. 23, pp. 995-1007, 2021.
190. C.H. Cheung, L. Sheng and K.N. Ngan, "Motion Compensated Virtual View Synthesis Using Novel Particle Cell", *IEEE Transactions on Multimedia*, U.S.A., vol. 23, pp. 1908-1923, 2021.
191. H. Wei, Q. Wu, H. Li, K.N. Ngan, H. Li, F. Meng and L. Xu, "Non-Homogeneous Haze Removal via Artificial Scene Prior and Bidimensional Graph Reasoning", *IEEE Transactions on Image Processing*, U.S.A., vol. 30, pp. 9136-9149, 2021.
192. H. Li, Q. Wu, K.N. Ngan, H. Li and F. Meng, "Single Image Dehazing Via Region Adaptive Two-Shot Network", *IEEE Multimedia*, U.S.A., vol. 28, no. 3, pp. 97-106, July-September 2021.
193. R. Zhang, F. Meng, H. Li, Q. Wu and K.N. Ngan, "Category boundary re-decision by component labels to improve generation of class activation map", *Neurocomputing*, vol. 469 pp. 105-118, January 2022.
194. C. Shang, H. Li, F. Meng, H. Qiu, Q. Wu, L. Xu and K.N. Ngan, "Instance-level Context Attention Network for instance segmentation", *Neurocomputing*, vol. 472, pp. 124-137, February 2022.

E. Refereed Conference Papers.

1. K.N. Ngan and R. Steele, "Adaptive partial correction scheme for PCM encoded monochrome pictures," *Picture Coding Symposium*, Ipswich, U.K., July 1979, Paper 13.3.
2. K.N. Ngan and R.J. Clarke, "Lowpass filtering in the cosine transform domain," *IEEE International Conference on Communications*, Seattle, U.S.A., June 1980, pp. 31.7.1-31.7.5.
3. (Invited paper) K.N. Ngan and R. Steele, "Enhancement of PCM and DPCM images corrupted by transmission errors," *IEEE National Telecommunications Conference*, Houston, U.S.A., November 1980, pp. 50.5.1-50.5.5.
4. K.N. Ngan and R.J. Clarke, "Filtering and sub-sampling using transform coding techniques," *IEE International Conference on Electronic Image Processing*, York, U.K., July 1982, pp. 220-224.
5. K.N. Ngan, "Image display techniques for videotex systems," *IEEE International Conference on Consumer Electronics*, Chicago, U.S.A., June 1983, pp. 52.
6. K.N. Ngan, W.C. Hui and S.C. Lim, "Picture transmission for videotex," *IEEE International Conference on Consumer Electronics*, Chicago, U.S.A., June 1985, pp. 202-203.
7. P. Brierley and K.N. Ngan, "Robotic vision," *International Conference on Automation in Manufacturing*, September 1985, Singapore, Part 4, pp. 26-60.
8. K.N. Ngan, "Two-dimensional transform domain decimation techniques," *IEEE International Conference on Acoustics, Speech and Signal Processing*, Tokyo, Japan, April 1986, pp. 1001-100.

9. C.C. Ko, Y.C. Lim and K.N. Ngan, "A simple fast adaptive array based on a null steering beamformer," *IEEE International Conference on Acoustics, Speech and Signal Processing*, Tokyo, Japan, April 1986, pp. 1821-1824.
10. S.H. Boey, M.S.R. Khan, K. Ong, K.N. Ngan and J.S. Daruwalla, "Development of an image processing system for the measurement of spinal deformities in scoliosis," *3rd Symposium on Biomedical Engineering*, April 1986, Singapore, pp. 32-41.
11. K.N. Ngan and K.S. Leong, "Data compression for medical image archiving," *3rd Symposium on Biomedical Engineering*, April 1986, Singapore, pp. 346.
12. K.N. Ngan, K.S. Leong and H. Singh, "Cosine transform coding incorporating human visual system," *SPIE International Conference on Visual Communications and Image Processing*, Cambridge, U.S.A., September 1986, vol. 707, pp. 165-171.
13. K. Ong, M.S.R. Khan, S.H. Boey, K.N. Ngan and J.S. Daruwalla, "Moire contourgraphy on a microcomputer-based image processing system for the detection of scoliosis," *Fourth Symposium on Surface Topography and Spinal Deformity*, Quebec, Canada, September 1986, pp. 377-384.
14. K.N. Ngan, "Robot vision," DECUS Symposium, Singapore, October 1986, pp. 6.1-6.13.
15. K.N. Ngan, A.A. Kassim and H. Singh, "A TMS32010-based fast parallel vision processor (FPVP)," *IEEE International Workshop on Industrial Applications of Machine Vision and Machine Intelligence*, Tokyo, Japan, February 1987, pp. 156-161.
16. Lucas Hui and K.N. Ngan, "Predictive classified vector quantization for image coding," *IEEE Region 10 Conference*, Seoul, Korea, August 1987, pp. 408-412.
17. K.N. Ngan and K.C. Seow, "a circular scanning technique to recognise partially occluded objects," *International Conference on Automation in Manufacturing*, October 1987, Singapore, pp. 5.15-5.21.
18. K.N. Ngan and S.B. Kang, "IC wire bond inspection using elliptical model approximation," *IEEE International Conference on Robotics and Automation*, Philadelphia, U.S.A., April 1988, pp. 1850-1851.
19. K.N. Ngan and S.B. Kang, "Automated inspection of IC bonding wires using Hough transform," *14th Annual Conference of IEEE Industrial Electronics Society*, Singapore, October 1988, pp. 938-942.
20. K.N. Ngan, K.S. Leong and H. Singh, "A HVS-weighted cosine transform coding scheme with adaptive quantization," *SPIE International Conference on Visual Communications and Image Processing*, Cambridge, U.S.A., November 1988, vol. 1001, pp. 702-708.
21. K.N. Ngan and H.C. Koh, "Classified hybrid image coder," *IEEE International Conference on Image Processing*, Singapore, September 1989, pp. 45-49.
22. K.N. Ngan and S.B. Kang, "3-D object recognition using fuzzy quaternions with two degrees of freedom," *IEEE International Conference on Image Processing*, Singapore, September 1989, pp. 222-226.
23. K.C. Chua, W.C. Wong and K.N. Ngan, "Enhancement of vector quantized digital images," *IEEE International Conference on Image Processing*, Singapore, September 1989, pp. 529-533.
24. K.N. Ngan, H.C. Koh and K.Y. Hang, "A Hadamard transform classifier for predictive classified vector quantization," *SPIE International Conference on Visual Communications and Image Processing*, Philadelphia, U.S.A., November 1989, vol. 1199, pp. 541-549.

25. K.N. Ngan and S.B. Kang, "Fuzzy quaternion approach to object recognition incorporating Zernike moment invariants," *IEEE International Conference on Pattern Recognition*, Atlantic City, U.S.A., June 1990, pp. 288-290.
26. K.N. Ngan, "Image sequence coding using predictive classified vector quantization," *Second International Symposium on Signal Processing and its Applications*, Gold Coast, Australia, August 1990, pp. 549-552.
27. K.N. Ngan, D.W. Lin and M.L. Liou, "Enhancement of image quality for low bit rate video coding," *Third International Workshop on 64 kbits Coding of Moving Video*, Rotterdam, The Netherlands, September 1990, Paper 1-6.
28. D.W. Lin, M.L. Liou and K.N. Ngan, "Improvement of low bit rate video coding performance," *IEEE Workshop on Visual Signal Processing and Communications*, Hsinchu, Taiwan, June 1991, pp. 1-4.
29. J.S. Yee, K.N. Ngan and H.C. Koh, "Video coding for ISDN applications using predictive classified vector quantization," *IEEE International Symposium on Circuits and Systems*, Singapore, June 1991, pp. 678-681.
30. K.N. Ngan, H.C. Koh and W.C. Wong, "A hybrid image coding scheme using CVQ and DCT," *IEEE International Symposium on Circuits and Systems*, Singapore, June 1991, pp. 408-411.
31. H.G. Lim, K.K. Pang, S. Dunstan and K.N. Ngan, "Interworking video services with layered coding," *IEEE TENCON 1992*, Melbourne, Australia, November 1992, pp. 918-922.
32. K.N. Ngan and K.K. Pang, "Layered coder using subband approach," *SPIE International Conference on Visual Communications and Image Processing*, Boston, U.S.A., November 1992, vol. 1818, pp. 747-752.
33. (Invited paper) K.N. Ngan, L.H. Kieu, T.K. Tan and K.K. Pang, "Layered coder for interworking and its cell loss performance," *Asia-Pacific Conference on Circuits and Systems*, Sydney, Australia, December 1992, pp. 295-298.
34. L.H. Kieu, T.K. Tan, K.N. Ngan and K.K. Pang, "Layered codec with an effective error concealment technique," *Picture Coding Symposium*, Lausanne, Switzerland, March 1993, Paper 18.23.
35. T. Sikora, T.K. Tan, A.W. Johnson and K.N. Ngan, "A performance comparison of frequency domain pyramid scalable coding schemes within the MPEG framework," *Picture Coding Symposium*, Lausanne, Switzerland, March 1993, Paper 16.1.
36. K.N. Ngan, J. Arnold, T. Sikora, T.K. Tan and A.W. Johnson, "Frequency scalability experiments for MPEG-2 standard," *IEEE Asia-Pacific Conference on Communications*, Taejon, Korea, August 1993, pp. 298-301.
37. K.N. Ngan and S.H. Tan, "Adaptive quantization based on perceptual criteria," *Asia-Pacific Conference on Communications*, Taejon, Korea, August 1993, pp. 654-658.
38. W.L. Chooi and K.N. Ngan, "Motion classified three-dimensional subband VQ coder," *IEEE Workshop on Visual Signal Processing and Communications*, Melbourne, Australia, September 1993, pp. 13-16.
39. K.N. Ngan, W.L. Chooi and K.K. Pang, "Motion analysis in 3D subband coder," *SPIE International Conference on Visual Communications and Image Processing*, Boston, U.S.A., November 1993, vol. 2094, pp. 568-575.
40. L.H. Kieu and K. N. Ngan, "Layered video coder with self-concealed capability using frequency scanning technique," *SPIE International Conference on Visual Communications and Image Processing*, Boston, U.S.A., November 1993, vol. 2094, pp. 1321-1330.

41. W.L. Chooi and K.N. Ngan, "3D subband coder for very low bit rates," *IEEE International Conference on Acoustics, Speech and Signal Processing*, Adelaide, Australia, April 1994, vol. 5, pp. 405-408.
42. Y.S. Tan and K.N. Ngan, "Two layer scalable coder based on MPEG2 with 16x16 blocksize," *Picture Coding Symposium*, Sacramento, U.S.A., September 1994, pp. 71-74.
43. S.H. Tan and K.N. Ngan, "Video coding with perceptually classified adaptive quantization," *Picture Coding Symposium*, Sacramento, U.S.A., September 1994, pp. 190-193.
44. L.H. Kieu and K.N. Ngan, "Cell-loss concealment for video transmission over ATM networks," *Picture Coding Symposium*, Sacramento, U.S.A., September 1994, pp. 30-33.
45. W.L. Chooi, K.K. Pang and K.N. Ngan, "Hybrid 3D subband-predictive VQ coder for VLBR applications," *IEEE Singapore International Conference on Communication Systems*, Singapore, November 1994, pp. 1112-1116.
46. K.N. Ngan and W.L. Chooi, "3D subband VLBR video coding scheme," *IEEE Singapore International Conference on Communication Systems*, Singapore, November 1994, pp. 1130-1134.
47. Y.S. Tan and K.N. Ngan, "A flexible three layer frequency/SNR-scalable video coder," *Australian Telecommunication Networks and Applications Conference*, Melbourne, Australia, December 1994, pp. 119-124.
48. S.H. Tan, K.K. Pang and K.N. Ngan, "Adaptive quantization using perceptual classification," *Australian Telecommunication Networks and Applications Conference*, Melbourne, Australia, December 1994, pp. 135-140.
49. K.N. Ngan and A. Millin, "Some results of ITU-T Test Model TMN1," *SPIE International Conference on Visual Communications and Image Processing*, Taipei, Taiwan, May 1995, pp. 1304-1311.
50. K.N. Ngan and Douglas Chai, "Enhancement of image quality in VLBR coding," *International Workshop on Coding Techniques for Very Low Bit Rate Video*, Tokyo, Japan, November 1995, pp. L3.1-4.
51. R.L. Rudianto and K.N. Ngan, "Automatic 3D WFM model fitting to frontal facial image in model-based video coding," *Picture Coding Symposium*, Melbourne, Australia, March 1996, pp. 585-588.
52. H.J. Kim, M. Chan and K.N. Ngan, "Region-based segmentation and motion estimation in object-oriented analysis-synthesis coding," *Picture Coding Symposium*, Melbourne, Australia, March 1996, pp. 589-594.
53. (Invited paper) R.L. Rudianto and K.N. Ngan, "Automatic face location detection and tracking for model-based video coding," *Third International Conference on Signal Processing*, Beijing, China, October 1996, pp. 1098-1101.
54. D. Chai and K.N. Ngan, "Automatic face location for videophone images," *IEEE TENCON 1996*, Perth, Australia, November 1996, pp. 137-140.
55. T. Meier, K.N. Ngan and G.A. Crebbin, "A region-based algorithm for enhancement of images degraded by blocking effects," *IEEE TENCON 1996*, Perth, Australia, November 1996, pp. 405-408.
56. M.H. Lee, K.N. Ngan and G.A. Crebbin, "Scalable coding of subband images with quadtree-based classified vector quantization," *IEEE TENCON 1996*, Perth, Australia, November 1996, pp. 788-792.
57. H.J. Kim and K.N. Ngan, "2-dimensional motion analysis in object-oriented coding," *IEEE TENCON 1996*, Perth, Australia, November 1996, pp. 945-948.

58. M.H. Lee, K.N. Ngan and G.A. Crebbin, "Rate-distortion analysis for vector quantization based on a variable block-size classification model," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., February 1997, vol. 3024, pp. 834-842.
59. C.W. Yap, R. Liyanapathirana and K.N. Ngan, "An error protection scheme for the transmission of H.263 coded video over mobile radio channels," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., February 1997, vol. 3024, pp. 1241-1249.
60. (Invited paper) D. Chai and K.N. Ngan, "Foreground/Background image coding technique," *IEEE International Symposium on Circuits and Systems*, Hong Kong, June 1997, pp. 1448-1451.
61. M. Lee and K.N. Ngan, "Very low bit rate video coding with wavelet transform and quadtree-based vector quantization," *International Workshop on Coding Techniques for Very Low Bit Rate Video*, Linkoping, Sweden, July 1997, pp. 33-36.
62. D. Chai and K.N. Ngan, "Extraction of VOP from videophone scene," *International Workshop on Coding Techniques for Very Low Bit Rate Video*, Linkoping, Sweden, July 1997, pp. 45-48.
63. C.W. Yap, R. Liyanapathirana and K.N. Ngan, "Error resilient combined source-channel coder for mobile video," *Picture Coding Symposium*, Berlin, Germany, September 1997, pp. 413-418.
64. T. Meier, K.N. Ngan and G.A. Crebbin, "A robust Markovian segmentation based on highest confidence first (HCF)," *IEEE International Conference on Image Processing*, Santa Barbara, U.S.A., October 1997, pp. 216-219.
65. D. Chai and K.N. Ngan, "Coding of area of interest with better quality", *IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Kuala Lumpur, Malaysia, November 1997, pp. S20.3.1-S20.3.10.
66. K.T. Tan, R. Liyanapathirana and K.N. Ngan, "Performance analysis of a family of complex orthogonal sequences for asynchronous BPSK DS-CDMA communication systems," *3rd Asia-Pacific Conference on Communications*, Sydney, Australia, December 1997, pp. 1606-1610.
67. T. Meier and K.N. Ngan, "Automatic video sequence segmentation using object tracking," *IEEE TENCON 1997*, Brisbane, Australia, December 1997, pp. 283-286.
68. H. Kim and K.N. Ngan, "A approach in the object-oriented coding at low bit rates," *IEEE TENCON 1997*, Brisbane, Australia, December 1997, pp. 361-364.
69. T. Meier, K.N. Ngan and G.A. Crebbin, "Reduction of coding artifacts at low bit rates," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., February 1998, vol. 3309, pp. 241-251.
70. D. Chai and K.N. Ngan, "Foreground/background video coding using H.261," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., February 1998, vol. 3309, pp. 434-446.
71. D. Chai and K.N. Ngan, "Locating facial region of a head-and-shoulder color image" *Third International Conference on Automatic Face and Gesture Recognition, (FG'98)*, Nara, Japan, April 1998, pp. 124-129.
72. K.K. Lau, M.H. Lee, K.N. Ngan and G. Rogers, "Priority encoding of video data over ATM", *IEEE International Conference on ATM, (ICATM'98)*, Colmar, France, June 1998, pp. 307-310.

73. H. Fan and K.N. Ngan, "A mesh-based disparity map coding for stereoscopic video sequence", *Tenth IEEE Workshop on Image and Multidimensional Signal Processing (IMDSP'98)*, Alpbach, Austria, July 1998, pp. 123-126.
74. K.T. Tan, R. Liyanapathirana and K.N. Ngan, "Error probability for sequency majority multiplexing in frequency nonselective, slowly fading channels - Part I: Mathematical formulation", *IEEE Fifth International Symposium on Spread Spectrum Techniques and Applications (ISSSTA'98)*, Sun City, South Africa, September 1998, pp. 411-414.
75. K.T. Tan, R. Liyanapathirana and K.N. Ngan, "Error probability for sequency majority multiplexing in frequency nonselective, slowly fading channels - Part I: Numerical analysis", *IEEE Fifth International Symposium on Spread Spectrum Techniques and Applications (ISSSTA'98)*, Sun City, South Africa, September 1998, pp. 415-419.
76. W.J. Heng, K.N. Ngan and M.H. Lee, "Validity of scene cut detection using bit rate information of VBR video", *Symposium on Image, Speech, Signal Processing and Robotics (ISSPR'98)*, Hong Kong, September 1998, pp. II.133-II.138.
77. T. Meier and K.N. Ngan, "Video object plane segmentation using a morphological motion filter and Hausdorff object tracking", *IEEE International Conference on Image Processing (ICIP'98)*, Chicago, U.S.A., October 1998, Paper TP5.05.
78. T. Meier and K.N. Ngan, "Video object plane extraction for content-based functionalities in MPEG-4", *International Workshop on Very Low Bitrate Video Coding (VLBV'98)*, Urbana, Illinois, U.S.A., October 1998, pp. 121-124.
79. H. Kim and K.N. Ngan, "Very low bit-rate video coding using object-based motion estimation and hierarchical shape estimation", *International Workshop on Very Low Bitrate Video Coding (VLBV'98)*, Urbana, Illinois, U.S.A., October 1998, pp. 185-188.
80. M.H. Lee, K.K. Lau, and K.N. Ngan, "Error-Resilient Wavelet Video over ATM," *International Workshop on Very Low Bitrate Video Coding (VLBV'98)*, Urbana, Illinois, U.S.A., October 1998, pp. 204-207.
81. W.J. Heng and K.N. Ngan, "Performance of chromatic barycenter with MPEG elements for low-level shot boundary detection and its improvements", *IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Melbourne, Australia, November 1998, pp. 272-276.
82. C.W. Yap, K.T. Tan and K.N. Ngan, "Error resilient video over synchronous DS-CDMA channels", *IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Melbourne, Australia, November 1998, pp. 348-353.
83. D. Chai and K.N. Ngan, "Content-based bit allocation and rate control for classical MC-DCT video coding systems", *IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Melbourne, Australia, November 1998, pp. 601-605.
84. A. Mertins and K.N. Ngan, "Optimized shape adaptive wavelets with reduced computational cost", *IEEE International Workshop on Intelligent Signal Processing and Communication Systems*, Melbourne, Australia, November 1998, pp. 616-620.
85. K.K. Lau, M.H. Lee and K.N. Ngan, "Priority protection of wavelet encoded video over ATM", *Globecom98*, Sydney, Australia, November 1998, Paper 50.3.
86. T. Meier and K.N. Ngan, "Extraction of moving objects for content-based video coding," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., January 1999, vol. 3653, pp. 1178-1189.

87. W.J. Heng and K.N. Ngan, "The implementation of object-based shot boundary detection via edge tracing and tracking," *IEEE International Symposium on Circuits and Systems (ISCAS'99)*, Orlando, Florida, U.S.A., June 1999, pp. IV 439-IV 442.
88. (Invited paper) C.W. Yap and K.N. Ngan, "Unequal error protection of images over Rayleigh fading channels," *Fifth International Symposium on Signal Processing and its Applications (ISSPA'99)*, Brisbane, Australia, August 1999, pp. 19-22.
89. K.T. Tan and K.N. Ngan, "Concatenated sequency majority multiplexing DS-SSMA for synchronous digital communication indoor wireless narrowband channels," *Fifth International Symposium on Signal Processing and its Applications (ISSPA'99)*, Brisbane, Australia, August 1999, pp. 415-418.
90. W.J. Heng and K.N. Ngan, "Post shot boundary detection: Flashlight scene determination," *Fifth International Symposium on Signal Processing and its Applications (ISSPA'99)*, Brisbane, Australia, August 1999, pp. 447-450.
91. D. Chai and K.N. Ngan, "A performance study on MPEG-4 coder," *Fifth International Symposium on Signal Processing and its Applications (ISSPA'99)*, Brisbane, Australia, August 1999, pp. 821-824.
92. W.J. Heng and K.N. Ngan, "Integrated shot boundary detection using object-based technique," *IEEE International Conference on Image Processing (ICIP'99)*, Kobe, Japan, U.S.A., October 1999, Paper W27AP28.
93. T. Meier and K.N. Ngan, "A flexible Bayesian framework for image segmentation," *IEEE International Conference on Image Processing (ICIP'99)*, Kobe, Japan, U.S.A., October 1999, Paper W27AP14.
94. K.T. Tan and K.N. Ngan, "Codeword sets for sequency majority multiplexing communication systems," *International Conference on Information, Communications and Signal Processing (ICICS'99)*, Singapore, December 1999, Paper 1A1.8.
95. W.J. Heng and K.N. Ngan, "Transition type-independent boundary refinement technique for post shot boundary detection," *International Conference on Information, Communications and Signal Processing (ICICS'99)*, Singapore, December 1999, Paper 1B1.7.
96. W.J. Heng and K.N. Ngan, "Analysis and performance of object-based detection using edge object tracking," *2000 International Workshop on Multimedia Data Storage, Retrieval, Integration and Applications*, Hong Kong, January 2000, pp. 236-242.
97. T. Meier and K.N. Ngan, "Improved single VOP rate control for constant bit-rate applications using MPEG-4," *SPIE International Conference on Visual Communications and Image Processing*, Perth, Australia, June 2000, vol. 4067, pp. 64-75.
98. W.J. Heng and K.N. Ngan, "Soft transition analysis techniques for video sequences," *IEEE TENCON 2000*, Kuala Lumpur, Malaysia, September 2000, pp. I-69-I-72.
99. K.T. Tan and K.N. Ngan, "Sequency, frequency, code or time," *IEEE TENCON 2000*, Kuala Lumpur, Malaysia, September 2000 pp. I-470-I-475.
100. D. Chai, K.N. Ngan and A. Bouzerdoum, "Foreground/Background bit Allocation for region-of-interest coding," *IEEE International Conference on Image Processing (ICIP'00)*, Vancouver, Canada, September 2000, pp. II 923-II 926.
101. W.J. Heng and K.N. Ngan, "Long transition analysis for post shot boundary detection," *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., January 2001, vol. 4310, pp. 486-496.

102. C.M. Lau, W.K. Cham, H.T Tsui and K.N. Ngan, "An energy function for facial feature extraction," *2000 International Symposium on Intelligent Multimedia, Video and Speech Processing*, Hong Kong, May 2001, pp. 348-351.
103. W.J. Heng and K.N. Ngan, "Shot classification for hard transition," *IEEE International Symposium on Circuits and Systems (ISCAS'01)*, Sydney, Australia, May 2001, pp. II 321-II 324.
104. W.J. Heng and K.N. Ngan, "Examination of features used for reference indicator construction in shot boundary refinement," *Sixth International Symposium on Signal Processing and its Applications (ISSPA'01)*, Kuala Lumpur, Malaysia, August 2001, ISBN 0-7803-6704-9, paper 54.
105. W.J. Heng and K.N. Ngan, "Enhanced shot boundary refinement for post-shot boundary detection" *IEEE TENCON 2001*, Singapore, August 2001, pp. 138-142.
106. C.M. Lau, W.K. Cham, H.T Tsui and K.N. Ngan, "Facial feature extraction for constructing 3D human face model," *International Conference on Information, Communications and Signal Processing (ICICS'01)*, Singapore, October 2001, paper 1D3.2.
107. K.K. Lee, W.K. Cham, K.N. Ngan and J.Z. Liu, "DC coefficient restoration on foreground/background video coding," *International Conference on Information, Communications and Signal Processing (ICICS'01)*, Singapore, October 2001, paper 3D2.2.
108. C. Zhao and K.N. Ngan, "Error sensitivity analysis for macroblocks' bit stream," *IEEE TENCON 2002*, Beijing, China, October 2002, pp. 750-753.
109. C. Zhao and K.N. Ngan, "Error sensitivity analysis for macroblock-based video coder," *Second International Symposium on Communications and Information Theory (ISCITS'02)*, Bangkok, Thailand, October 2002, pp. 202-205.
110. W. Yang and K.N. Ngan, "Object-based disparity estimation for stereoscopic images," *Seventh International Conference on Control, Automation, Robotics and Vision (ICARCV'02)*, Singapore, December 2002, pp. 1105-1109.
111. Z. Chen and K.N. Ngan, "Improved single video object rate control for MPEG-4," *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP'03)*, Hong Kong, China, April 2003, pp. III 85-III 88.
112. N. Habil and K.N. Ngan, "Automatic multi-cue VOP extraction for MPEG-4," *Picture Coding Symposium*, Saint-Malo, France, April 2003, pp. 365-370.
113. W. Yang, K.N. Ngan, J. Lim and K. Sohn, "Edge-preserving regularization of disparity and motion fields," *4th EURASIP Conference on Video/Image Processing and Multimedia Communications*, Zagreb, Croatia, July 2003, pp. 71-76.
114. Z. Chen, K.N. Ngan and C. Zhao, "Improved rate control for MPEG-4 video transport over wireless channel," *SPIE International Conference on Visual Communications and Image Processing*, Laguno, Switzerland, July 2003, vol. 5150, pp. 210-221.
115. W. Wei and K.N. Ngan, "Automatic video object segmentation for MPEG-4," *SPIE International Conference on Visual Communications and Image Processing*, Laguno, Switzerland, July 2003, vol. 5150, pp. 9-19.
116. Z. Chen and K.N. Ngan, "Rate-distortion Modeling for Binary Shape in MPEG-4," *IEEE Pacific Rim Conference on Communications, Computers and Signal processing*, Victoria, British Columbia, Canada, August 2003, pp. 77-80.
117. W. Yang, K.N. Ngan and K. Sohn, "Joint disparity-motion regularization for stereoscopic video coding," *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Awaji Island, Japan, December 2003, pp. 629-634.

118. Z. Chen and K.N. Ngan, "Object-based rate control for arbitrarily shaped video object coding," *IEEE International Symposium on Circuits and Systems*, Vancouver, British Columbia, Canada, May 2004, pp. III 973-III 976.
119. J. Li and K.N. Ngan, "A VLC/FLC data partitioning scheme for MPEG-4," *IEEE International Symposium on Circuits and Systems*, Vancouver, British Columbia, Canada, May 2004, pp. III 857-III 860.
120. W. Yang and K.N. Ngan, "MPEG-4 based stereoscopic video sequences encoder," *IEEE International Conference on Acoustics, Speech, and Signal Processing*, Montreal, Quebec, Canada, May 2004, pp. III 741-III 744.
121. W. Wei, K.N. Ngan and N. Habil, "Multiple-feature clustering algorithm for automatic video object segmentation," *IEEE International Conference on Acoustics, Speech, and Signal Processing*, Montreal, Quebec, Canada, May 2004, pp. III 625-III 628.
122. J. Han, K.N. Ngan, M. Li and H. Zhang, "Learning semantic concepts from accumulated user feedback log for image retrieval," *IEEE International Conference on Multimedia and Expo*, Taipei, Taiwan, June 2004, Paper TP4-1, pp. 1-4.
123. R. J. Treasure, V. Sreeram and K. N. Ngan, "Balanced identification and model reduction for 2-D systems based on impulse response data," *5th Asian Control Conference*, Melbourne, Australia, July 2004, pp. 2058-2062.
124. W. Yang, K.N. Ngan and J. Cai, "MPEG-4 based stereoscopic and multiview video coding," *International Symposium on Intelligent Multimedia, Video and Speech Processing*, Hong Kong, October 2004, pp. 61-64.
125. W. Wei and K.N. Ngan, "Integration of motion and image features for automatic video object segmentation," *IEEE International Conference on Image Processing*, Singapore, October 2004, pp. 361-364.
126. Z. Chen and K.N. Ngan, "Optimal bit allocation for MPEG-4 multiple video objects," *IEEE International Conference on Image Processing*, Singapore, October 2004, pp. 761-764.
127. J. Han, K.N. Ngan, M. Li and H. Zhang, "Towards unsupervised attention object extraction by integrating visual attention and object growing," *IEEE International Conference on Image Processing*, Singapore, October 2004, pp. 941-944.
128. J. Han and K.N. Ngan "Automatic segmentation of objects of interest in video: A unified framework," *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Seoul, Korea, November 2004, pp. 375-378.
129. W. Yang, K.N. Ngan and J. Cai, "Coding of stereo/multiview sequences based on MPEG-4," *Asia-Pacific Conference on Multimedia*, Tokyo, Japan, November 2004, vol. 3, pp. 167-174.
130. R. J. Treasure, A. Ghafoor, V. Sreeram and K. N. Ngan, "Frequency weighted identification and model reduction of 2-D separable denominator systems," *6th International Conference on Optimization Techniques and Applications*, Ballarat, Australia, December 2004, pp. 1-13.
131. W. Yang, F. Wu, Y. Lu, J. Cai and K.N. Ngan "Scalable multi-view video coding using wavelet," *IEEE International Symposium on Circuits and Systems*, Kobe, Japan, May 2005, pp. 6078-6081.
132. (Invited Paper) J. Li and K.N. Ngan, "A new macroblock reordering strategy for robust wireless video transmission," *International Symposium on Multimedia over Wireless*, Maui, Hawaii, U.S.A., June 2005, paper TM2.4.

133. Z. Chen and K.N. Ngan, "A unified framework for optimal multiple video object bit allocation," *SPIE International Conference on Visual Communications and Image Processing*, Beijing, China, July 2005, vol. 5960, pp. 641-652.
134. Y. Liu and K.N. Ngan, "Embedded image coding based on context classification and quadtree ordering in wavelet packet domain," *SPIE International Conference on Visual Communications and Image Processing*, Beijing, China, July 2005, vol. 5960, pp. 1723-1731.
135. Z. Chen and K.N. Ngan, "MINVAR: A local optimization criterion for rate-distortion tradeoff in real time video coding," *SPIE Optics East 2005: International Conference on Multimedia Systems and Applications VIII (IT106)*, Boston, U.S.A., October 2005, pp. 9-19.
136. Z. Chen and K.N. Ngan, "A unified framework of unsupervised subjective optimized bit allocation for multiple video coding," *SPIE Optics East 2005: International Conference on Multimedia Systems and Applications VIII (IT106)*, Boston, U.S.A., October 2005, pp. 20-31.
137. W. Wei and K.N. Ngan, "Disparity estimation with edge-based matching and interpolation," *IEEE International Symposium on Intelligent Signal Processing and Communications Systems*, Hong Kong SAR, China, December 2005, pp. 153-156.
138. Z. Chen and K.N. Ngan, "Rate-distortion analysis for multiscale binary shape coding," *IEEE International Symposium on Intelligent Signal Processing and Communications Systems*, Hong Kong SAR, China, December 2005, pp. 801-804.
139. Y. Liu and K.N. Ngan, "Anisotropic double cross search algorithm using multiresolution-spatio-temporal context for fast lossy in-band motion estimation", *Picture Coding Symposium*, Beijing, China, 24-26 April 2006, paper O5-5.
140. H. Li and K.N. Ngan, "Face segmentation in head-and-shoulder video sequences based on facial saliency map", *IEEE International Symposium on Circuits and Systems*, Island of Kos, Greece, May 2006, pp. 2681-2684.
141. Z. Chen and K.N. Ngan, "Towards rate-distortion tradeoff in real-time color video coding", *IEEE International Symposium on Circuits and Systems*, Island of Kos, Greece, May 2006, pp. 3502-3505.
142. Y. Liu and K.N. Ngan, "Fast lossless multi-resolution motion estimation for scalable wavelet video coding", *IEEE International Symposium on Circuits and Systems*, Island of Kos, Greece, May 2006, pp. 3966-3969.
143. (Invited Paper) H. Li and K.N. Ngan, "Fast And Efficient Method for Block Edge Classification", *International Symposium on Multimedia over Wireless*, Vancouver, Canada, July 2006, pp. 67-72.
144. H. Li and K.N. Ngan, "Unsupervised segmentation of defocused video based on matting model", *IEEE International Conference on Image Processing*, Atlanta, U.S.A., October 2006, pp. 1825-1828.
145. J. Dong and K.N. Ngan, "16×16 Integer Cosine Transform for HD Video Coding," in *Advances in Multimedia Information Processing - PCM 2006*, Lecture Notes in Computer Science, Springer Berlin/Heidelberg, ISBN 978-3-540-48766-1, November 2006, vol. 4261, pp. 114-121.
146. Z. Wei and K.N. Ngan, "A Fast Macroblock Mode Decision Algorithm for H.264", *IEEE Asia Pacific Conference on Circuits and Systems*, Singapore, 4-7 December 2006, pp. 773-776.
147. Z. Chen and K.N. Ngan, "A Novel Statistical Learning-Based Rate Distortion Analysis Approach for Multiscale Binary Shape Coding", *SPIE International*

- Conference on Visual Communications and Image Processing*, San Jose, U.S.A., January 2007, vol. 6508, paper 65081J.
148. K.L. Tang and K.N. Ngan, "Enhanced SAD Reuse Fast Motion Estimation", *SPIE International Conference on Visual Communications and Image Processing*, San Jose, U.S.A., January 2007, vol. 6508, paper 65081M.
 149. Z. Wei and K.N. Ngan, "A Fast Rate-Distortion Optimization Algorithm for H.264/AVC", *IEEE International Conference on Acoustics, Speech and Signal Processing*, Honolulu, U.S.A., 15-20 April, 2007, pp. I1157-I1160.
 150. J. Dong and K.N. Ngan, "A Universal Approach to Developing Fast Algorithm for Simplified Order-16 ICT", *IEEE International Symposium on Circuits and Systems*, New Orleans, U.S.A., 27-30 May, 2007, pp. 281-284.
 151. Y. Liu, F. Wu and K.N. Ngan, "3D Object-based Scalable Wavelet Video Coding with Boundary Effects Suppression", *IEEE International Symposium on Circuits and Systems*, New Orleans, U.S.A., 27-30 May, 2007, pp. 1755-1758.
 152. H. Shu and K.N. Ngan, "Quality Enhancement in H.264 Transform Domain Downsizing", *IEEE International Symposium on Circuits and Systems*, New Orleans, U.S.A., 27-30 May, 2007, pp. 2003-2006.
 153. Z. Wei and K.N. Ngan, "An Efficient Intra Mode Selection Algorithm for H.264 Based on Fast Edge Classification", *IEEE International Symposium on Circuits and Systems*, New Orleans, U.S.A., 27-30 May, 2007, pp. 3630-3633.
 154. H. Shu and K.N. Ngan, "Pre- and Post-shift Filteringing for Removing Blocking Effects in Downsizing Transcoding", *IEEE International Conference on Multimedia and Expo*, Beijing, China, 5-7 May, 2007, pp. 416-419.
 155. K.L. Tang and K.N. Ngan, "Enhancement Techniques for Intra Block Matching", *IEEE International Conference on Multimedia and Expo*, Beijing, China, 5-7 May, 2007, pp. 420-423.
 156. W. Yang and K.N. Ngan, "Unsupervised Multiple Object Segmentation of Multiview Images", *Advanced Concepts for Intelligent Vision Systems – ACIVS 2007*, Lecture Notes in Computer Science, Springer Berlin/Heidelberg, ISBN 978-3-540-74606-5, August 2007, vol. 4678, pp. 178-189.
 157. Y. Liu and K.N. Ngan, "Weighted Adaptive Lifting-Based Wavelet Transform", *IEEE International Conference on Image Processing*, San Antonio, U.S.A., 16-19 September, 2007, pp. III189-III192.
 158. D. Zhang, Z. Chen and K.N. Ngan, "Two-Pass Rate Control for Constant Quality H.264/Avc High Definition Video Coding", *Picture Coding Symposium*, Lisbon, Portugal, 7-9 November, 2007, paper 1106.
 159. X. Jin, K.N. Ngan, G. Zhu, "Combined Inter-Intra Prediction for High Definition Video Coding", *Picture Coding Symposium*, Lisbon, Portugal, 7-9 November, 2007, paper 1149.
 160. Q. Liu, C. Cai, K.N. Ngan and H. Li, "Camshift Based Real-Time Multiple Faces Match Tracking", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Xiamen, China, 28 November-1 December 2007, pp. 726-729.
 161. C. Cui, W. Yang, and K.N. Ngan, "External Calibration of Multi-camera System Based on Pair-wise Estimation", in *Advances in Image and Video Technology - PSIVT 2007*, Lecture Notes in Computer Science, Springer Berlin/Heidelberg, ISBN 978-3-540-77128-9, December 2007, vol. 4872, pp. 497-509.
 162. Y. Liu, K.N. Ngan and F. Wu, "3-D Direction Aligned Wavelet Transform for Scalable Video Coding", *IEEE International Symposium on Circuits and Systems*, Seattle, U.S.A., 18-21 May, 2008, pp. 1396-1399.

163. D. Zhang, Z. Chen and K.N. Ngan, "Constant Distortion Rate Control for H.264/AVC High Definition Videos with Scene Change", *IEEE International Symposium on Circuits and Systems*, Seattle, U.S.A., 18-21 May, 2008, pp. 3498-3501.
164. (Invited Paper) X. Jin, S. Li and K.N. Ngan, "AVS Video Standard Implementation for SoC Design", *IEEE International Conference on Neural Networks and Signal Processing*, Zhenjiang, China, 7-11 June, 2008, pp. 660-665.
165. Z. Wei and K.N. Ngan, "Spatial Just Noticeable Distortion Profile for Image in DCT Domain", *IEEE International Conference on Multimedia and Expo*, Hannover, Germany, 23-26 June, 2008, pp. 925-928.
166. J. Dong And K.N. Ngan, "An Adaptive and Parallel Scheme for HD Video De-Interlacing", *IEEE International Conference on Multimedia and Expo*, Hannover, Germany, 23-26 June, 2008, pp. 1137-1140.
167. Q. Zhang, K.N. Ngan and W. Yang, "Automatic Segmentation for Semantic Objects from Multiview Images", *International Conference on Visual Information Engineering*, Xian, China, 29 July-1 August, 2008, pp. 554-559.
168. Z. Wei and K.N. Ngan, "A Temporal Just-Noticeable Distortion Profile for Video in DCT Domain", *IEEE International Conference on Image Processing*, San Diego, U.S.A., 12-15 October, 2008, pp. 1336-1339.
169. J. Li and K.N. Ngan, "Adaptive Partition Size Temporal Error Concealment for H.264", *IEEE Asia Pacific Conference on Circuits and Systems*, Macau, China, 30 November-3 December, 2008, pp. 1739-1742.
170. J. Li and K.N. Ngan, "Joint Temporal Error Control for H.264", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Bangkok, Thailand, 8-11 February, 2009, pp. 154-158.
171. C.M. Mak and K.N. Ngan, "Enhancing Compression Rate by Just-Noticeable Distortion Model for H.264/AVC", *IEEE International Symposium on Circuits and Systems*, Taipei, Taiwan, May 2009, pp. 609-612.
172. Z. Wei and K.N. Ngan, "The Perceptually Transparent Coding for Image", *IEEE International Symposium on Circuits and Systems*, Taipei, Taiwan, May 2009, pp. 1621-1624.
173. Y. Liu and K.N. Ngan, "Fully Scalable Multiview Wavelet Video Coding", *IEEE International Symposium on Circuits and Systems*, Taipei, Taiwan, May 2009, pp. 2581-2584.
174. X. Jin, S. Goto and K.N. Ngan, "Optical Flow Based DC Surface Compensation for Artifacts Reduction", *Picture Coding Symposium*, Chicago, U.S.A., May 2009, pp. 1-4.
175. X. Jin, S. Goto and K.N. Ngan, "Quadratic Composite Modeling of Optical Flow for Artifacts Reduction", *IEEE International Conference on Multimedia & Expo*, New York, U.S.A., June-July 2009, pp. 233-236.
176. C. Cui and K.N. Ngan, "Automatic Scale Selection for Corners and Junctions", *IEEE International Conference on Image Processing*, Cairo, Egypt, November 2009, pp. 989-992.
177. J. Dong and K.N. Ngan, "Parametric Interpolation Filter for Motion Compensated Prediction", *IEEE International Conference on Image Processing*, Cairo, Egypt, November 2009, pp. 1021-1024.
178. H. Li and K.N. Ngan, "Hybrid Cascade of Active/Lazy Boosting", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Kanazawa, Japan, December 2009, pp. 21-24.

179. Q. Liu and K.N. Ngan, "Arbitrarily shaped Object coding based on H.264/AVC", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Kanazawa, Japan, December 2009, pp. 343-346.
180. S. Li and K.N. Ngan, "Influence of the Smooth Region on the Structural Similarity Index", *10th IEEE Pacific-Rim Conference on Multimedia*, Bangkok, Thailand, December 2009, pp. 836-846.
181. L. Ma and K.N. Ngan, "Adaptive Block-Size Transform Based Just-Noticeable Difference Profile for Images", *10th IEEE Pacific-Rim Conference on Multimedia*, Bangkok, Thailand, December 2009, pp. 1208-1218.
182. Q. Zhang and K.N. Ngan, "Multiple Objects Segmentation from Multi-View Sequence", *7th IASTED International Conference on Signal Processing, Pattern Recognition and Applications*, Innsbruck, Austria, February 2010, pp. 260-264.
183. H. Li, G. Liu and K.N. Ngan, "Learn to Segment Attention Object from Low DoF Image", *IEEE International Symposium on Circuits and Systems*, Paris, France, May-June 2010, pp. 2864-2867.
184. S. Li and K.N. Ngan, "Subtractive Impairment, Additive Impairment and Image Visual Quality", *IEEE International Symposium on Circuits and Systems*, Paris, France, May-June 2010, pp. 3373-3376.
185. L. Ma and K.N. Ngan, "Adaptive Block-Size Transform Based Just-Noticeable Difference Profile for Videos", *IEEE International Symposium on Circuits and Systems*, Paris, France, May-June 2010, pp. 4213-4216.
186. (Invited Paper) F. Zhang, S. Li, L. Ma and K.N. Ngan, "Limitation and challenges of Image Quality Measurement", *International Conference on Visual Communications and Image Processing*, Huang Shan, Anhui, China, July 2010, vol. 7744, pp. 774402.1-774402.8.
187. Z. Chen, W. Lin and K.N. Ngan, "Perceptual Video Coding: Challenges and Approaches", *International Conference on Multimedia and Expo*, Singapore, July 2010, pp. 784 - 789.
188. C. Cui and K.N. Ngan, "A Novel Geometric Filter for Affine Invariant Features", *IEEE International Conference on Image Processing*, Hong Kong, China, September 2010, pp. 865-868.
189. L. Ma, F. Zhang, S. Li and K.N. Ngan, "Video Quality Assessment Based on Adaptive Block-Size Transform Just-Noticeable Difference", *IEEE International Conference on Image Processing*, Hong Kong, China, September 2010, pp. 2501-2504.
190. Q. Zhang and K.N. Ngan, "Dense Stereo Matching from Separated Views of Wide-baseline Images", *Advanced Concepts for Intelligent Vision Systems*, Sydney, Australia, December 2010, pp. 255-266.
191. S. Li, L. Ma, F. Zhang and K.N. Ngan, "Temporal Inconsistency Measure for Video Quality Assessment", *Picture Coding Symposium*, Nagoya, Japan, December 2010, pp. 590-593.
192. Q. Liu and K.N. Ngan, "Self-adaptive Initialization of Level Set for Human Body Segmentation", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Chengdu, China, December 2010, pp. 305-308.
193. L. Ma, S. Li and K.N. Ngan, "Perceptual Image Compression via Adaptive Block-Based Super-Resolution Directed Down-Sampling", *IEEE International Symposium on Circuits and Systems*, Rio de Janeiro, Brazil, May 2011, pp. 97-100.
194. J. Dong and K.N. Ngan, "Adaptive Pre-interpolation Filter for Motion-Compensated Prediction", *IEEE International Symposium on Circuits and Systems*, Rio de Janeiro, Brazil, May 2011, pp. 2617-2620.

195. L. Ma, S. Li and K.N. Ngan, "Motion Trajectory Based Visual Saliency for Video Quality Assessment", *IEEE International Conference on Image Processing*, Brussels, Belgium, September 2011, pp. 237-240.
196. S. Li, L. Ma and K.N. Ngan, "Video Quality Assessment by Decoupling Additive Impairments and Detail Losses", *Third International Workshop on Quality of Multimedia Experience*, Mechelen, Belgium, September 2011, pp. 90-95.
197. L. Ma, S. Li and K.N. Ngan, "Reduced-Reference Image Quality Assessment via Intra- and Inter-Subband Statistical Characteristics in Reorganized DCT Domain", *Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference 2011*, Xi'an, China, October 2011, paper 178.
198. Q. Zhang and K.N. Ngan, "Object Segmentation from Sparse Views of Wide-Baseline Images", *IEEE International Symposium on Intelligent Signal Processing and Communication Systems*, Chiangmai, Thailand, December 2011, PID21.
199. Q. Zhang, C. Cui, K.N. Ngan and, Y. Liu "Depth Estimation and View Synthesis for Narrow-Baseline Video", *IEEE International Symposium on Circuits and Systems*, Seoul, Korea, May 2012, pp. 1883-1886.
200. L. Ma, W. Lin, C. Deng and, K.N. Ngan "Study of Subjective and Objective Quality Assessment of Retargeted Images", *IEEE International Symposium on Circuits and Systems*, Seoul, Korea, May 2012, pp. 2677-2680.
201. L. Xu, K.N. Ngan and M. Wang, "Video Content Dependent Directional Transform for Intra Frame Coding", *Picture Coding Symposium*, Krakow, Poland, May 2012, pp. 197-200.
202. M. Wang, K.N. Ngan and L. Xu, "Spatial-temporal decorrelation for image/video coding", *Picture Coding Symposium*, Krakow, Poland, May 2012, pp. 201-204.
203. (Invited Paper) L. Xu and K.N. Ngan, "Video Content Dependent Directional Transform for High Performance Video Coding", *ICME 2012 Workshop on Emerging Multimedia Systems and Applications*, Melbourne, Australia, July 2012, pp. 79-83.
204. Q. Liu and K.N. Ngan, "Overlapping Local Phase Feature (OLPF) for Robust Face Recognition in Surveillance", *Advanced Concepts for Intelligent Vision Systems*, Brno, Czech Republic, September 2012, pp. 246-257.
205. (Invited Paper) L. Xu, K.N. Ngan, S. Li and L. Ma, "Video Quality Metric for Consistent Visual Quality Control in Video Coding", *Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference*, Hollywood, U.S.A., December 2012, paper 56.
206. C. Cui, Q. Zhang and K.N. Ngan, "Object Segmentation from Wide Baseline Video", *IEEE International Symposium on Circuits and Systems*, Beijing, China, May 2013, pp. 717-720.
207. L. Ma, C. Deng, K.N. Ngan and W. Lin, "Overview of Quality Assessment for Visual Signals and Newly Emerged Trends", *IEEE International Symposium on Circuits and Systems*, Beijing, China, May 2013, pp. 1091-1094.
208. (Invited paper) M. Wang and K.N. Ngan, "An Efficient Content Adaptive Transform for Video Coding", *IEEE China Summit & International Conference on Signal and Information Processing*, Beijing, China, July 2013, pp. 547-550.
209. S. Li, K.N. Ngan and S. Lu, "A Head Pose Tracking System using RGB-D Camera", *9th International Conference on Computer Vision Systems*, St. Petersburg, Russia, July 2013, pp. 153-162.
210. L. Ma, K.N. Ngan and L. Xu, "Reduced Reference Video Quality Assessment Based on Spatial HVS Mutual Masking and Temporal Motion Estimation", *IEEE*

- International Conference on Multimedia and Expo*, San Jose, U.S.A., July 2013, paper 217.
211. S. Lu and K.N. Ngan, "Depth Enhancement Based on Hybrid Geometric Hole Filling Strategy", *IEEE International Conference on Image Processing*, Melbourne, Australia, September 2013, pp. 153-162.
 212. S. Ran, K.N. Ngan and S. Li, "The Objective Evaluation of Image Object Segmentation Quality", *Advanced Concepts for Intelligent Vision Systems*, Poznan, Poland, October 2013, pp. 470-479.
 213. L. Xu, L. Ma, K.N. Ngan, W. Lin and Y. Weng, "Visual Quality Metric for Perceptual Video Coding", *International Conference on Visual Communications and Image Processing*, Kuching, Malaysia, November 2013, paper 773.
 214. M. Wang, K.N. Ngan and H. Zeng, "A Rate Distortion Optimized Transform for Motion Compensation Residual", *Picture Coding Symposium*, San Jose, U.S.A., December 2013, pp. 13-16.
 215. H. Zeng, K.N. Ngan and M. Wang, "Perceptual Adaptive Lagrangian Multiplier for High Efficiency Video Coding", *Picture Coding Symposium*, San Jose, U.S.A., December 2013, pp. 69-72.
 216. F. Meng, H. Li, K.N. Ngan, B. Zeng and N. Rao, "Cosegmentation from Similar Backgrounds", *IEEE International Symposium on Circuits and Systems*, Melbourne, Australia, June 2014, pp. 353-356.
 217. Q. Wu, H. Li, K.N. Ngan, B. Zeng and M. Gabbouj, "No Reference Image Quality Metric via Distortion Identification and Multi-Channel Label Transfer", *IEEE International Symposium on Circuits and Systems*, Melbourne, Australia, June 2014, pp. 530-533.
 218. T.-W. Hui and K.N. Ngan, "Motion-Depth: RGB-D Depth Map Enhancement with Motion and Depth in Complement", *IEEE Conference on Computer Vision and Pattern Recognition*, Columbus, Ohio, U.S.A., June 2014, pp. 3962-3969.
 219. L. Ma, L. Xu, H. Zeng, K.N. Ngan and C. Deng, "How Does the Shape Descriptor Measure the Perceptual Quality of the Retargeting Image?", *IEEE International Conference on Multimedia and Expo*, Chengdu, China, July 2014, paper W71.
 220. H. Li, Y. Xie, B. Luo, L. Tang, B. Zeng, K.N. Ngan and F. Meng, "Using Mid-High Level Cues to Detect Salient Object", *IEEE International Conference on Multimedia and Expo*, Chengdu, China, July 2014, paper 320.
 221. H.R. Wu, W. Lin and K.N. Ngan, "Rate-perceptual-distortion optimisation (RpDO) based picture coding – Issues and Challenges", *International Conference on Digital Signal Processing*, Hong Kong, China, August 2014, pp. 777-782.
 222. L. Sheng, K.N. Ngan and S. Li, "Temporal Depth Video Enhancement Based on Intrinsic Static Structure", *IEEE International Conference on Image Processing*, Paris, France, October 2014, pp. 2893-2897.
 223. S. Li, K.N. Ngan and L. Sheng, "Screen-camera Calibration Using a Thread", *IEEE International Conference on Image Processing*, Paris, France, October 2014, pp. 3435-3439.
 224. T.-W. Hui and K.N. Ngan, "Depth Enhancement Using RGB-D Guided Filtering", *IEEE International Conference on Image Processing*, Paris, France, October 2014, pp. 3832-3836.
 225. T.-W. Hui and K.N. Ngan, "Dense Depth Map Generation Using Sparse Depth Data from Normal Flows", *IEEE International Conference on Image Processing*, Paris, France, October 2014, pp. 3837-3841.

226. R. Shi, K.N. Ngan and S. Li, "Jaccard Index Compensation for Object Segmentation Evaluation", *IEEE International Conference on Image Processing*, Paris, France, October 2014, pp. 4457-4461.
227. L. Sheng, K.N. Ngan and T.-W. Hui, "Accelerating the Distribution Estimation for the Weighted Median/Mode Filters ", *Asian Conference on Computer Vision*, Singapore, November 2014, paper P2-53.
228. M. Wang, K.N. Ngan, H. Li and H. Zeng, "Improved Block Level Adaptive Quantization for High Efficiency Video Coding", *IEEE International Symposium on Circuits and Systems*, Lisbon, Portugal, May 2015, pp. 509-512.
229. C.H. Cheung and K.N. Ngan, "A Disocclusion Filling Method Using Multiple Sprites with Depth for Virtual View Synthesis", *IEEE International Conference on Multimedia and Expo*, Torino, Italy, July 2015, paper W129.
230. M. Wang and K.N. Ngan, "Optimal Bit Allocation in HEVC for Real-time Video Communications", *IEEE International Conference on Image Processing*, Quebec City, Canada, September 2015, paper 388-KjTN-121.
231. Y. Zhang and K.N. Ngan, "Region-Based Image Retargeting Quality Assessment", *IEEE International Conference on Image Processing*, Quebec City, Canada, September 2015, paper 388-EoCJ-301.
232. L. Ma, L. Xu, Y. Zhang, K.N. Ngan and Y. Yan, "Rank Learning Based No-Reference Quality Assessment of Retargeted Images", *IEEE International Conference on Systems, Man and Cybernetics*, Hong Kong, China, October 2015, pp. 1024-1028.
233. R. Shi, K.N. Ngan and Y. Zhang, "A Review of Object Segmentation Quality Subjective Assessment Methods", *IEEE Region 10 Conference*, Macau, November 2015, paper 157.
234. T. Zhao, S. Li and K.N. Ngan, "3D Mesh Simplification for Deformable Human Mesh Guided by Deformation saliency", *24th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision*, Plzen, Czech Republic, May-June 2016, pp. 25-32.
235. Y. Zhang, P.H. Cong, N. Habil and K.N. Ngan, "Material segmentation in hyperspectral images with minimal region perimeters", *IEEE International Conference on Image Processing*, Phoenix, U.S.A., September 2016, pp. 834-838.
236. Y. Zhang and K.N. Ngan, "Fast patch-wise image retargeting", *IEEE International Conference on Image Processing*, Phoenix, U.S.A., September 2016, pp. 1813-1817.
237. Q. Wu, H. Li and K.N. Ngan, "GIP: Generic Image Prior for No Reference Image Quality Assessment", *Pacific-Rim Conference on Multimedia*, Xian, China, September 2016, pp. 600-608.
238. Y. Zhang and K.N. Ngan, "Objective Quality Assessment of Image Retargeting Based on Line Distortion", *IEEE International Conference on Systems, Man and Cybernetics*, Budapest, Czech Republic, October 2016, pp. 2505-2510.
239. Q. Wu, H. Li and K.N. Ngan, "Q-DNN: A Quality-Aware Deep Neural Network for Blind Assessment of Enhanced Images", *International Conference on Visual Communications and Image Processing*, Chengdu, China, November 2016, paper 367.
240. F. Wu, S. Li, T. Zhao and K.N. Ngan, "Model-based Face Reconstruction using SIFT Flow Registration and Spherical Harmonics", *International Conference on Pattern Recognition*, Cancun, Mexico, December 2016, pp. 1775-1780.

241. R. Shi, K.N. Ngan and S. Li, “Salient object segmentation using a switch scheme”, *Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference*, Jeju, Korea, December 2016, paper 15.
242. S. Li, F. Wu, T. Zhao, R. Shi and K.N. Ngan, “A Facial Expression Model with Generative Albedo Texture”, *Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference*, Jeju, Korea, December 2016, paper 47.
243. R. Shi, K.N. Ngan and S. Li, “Objectness based unsupervised object segmentation quality evaluation”, *Seventh International Conference on Information Science and Technology*, Danang, Vietnam, April 2017, pp. 256 - 258.
244. Q. Wu, H. Li, F. Meng, K.N. Ngan and L. Xu, “Blind Proposal Quality Assessment via Deep Objectness Representation and Local Linear Regression”, *IEEE International Conference on Multimedia and Expo*, Hong Kong, China, July 2017, pp. 1482-1487.
245. L. Sheng, J. Cai, T.-J. Cham, V. Pavlovic and K.N. Ngan, “A Generative Model for Depth-based Robust 3D Facial Pose Tracking”, *IEEE Conference on Computer Vision and Pattern Recognition*, Honolulu, Hawaii, U.S.A., July 2017, pp. 4598-4607.
246. L. Ma, H. Li, Q. Wu, C. Shang and K.N. Ngan, “Multi-task Learning for Deep Semantic Hashing”, *IEEE International Conference on Visual Communications and Image Processing*, Taichung, Taiwan, December 2018, paper 260157.
247. Y. Zhang, C.P. Huynh, N. Habil and K.N. Ngan, “Material Segmentation in Hyperspectral Images with a Spatio-Spectral Texture Descriptor”, *IEEE International Conference on Acoustics, Speech and Signal Processing*, Brighton, U.K., May 2019, pp. 2397-2401.
248. Q. Wu, R. Ma, K.N. Ngan, H. Li and F. Meng, “Blind Image Sharpness Assessment and Enhancement via Deep Auxiliary Learning”, *IEEE International Conference on Multimedia and Expo*, Shanghai, China, July 2019, pp. 1852-1857.
249. F. Wu, L. Bao, Y. Chen, Y. Ling, Y. Song, S. Li, K.N. Ngan and W. Liu, “MVF-Net: Multi-View 3D Face Morphable Model Regression”, *IEEE/CVF Conference on Computer Vision and Pattern Recognition*, Long Beach, California, U.S.A., July 2019, pp. 959-689.
250. Q. Wu, L. Wang, K.N. Ngan, H. Li and F. Meng, “Beyond Synthetic Data: A Blind Deraining Quality Assessment Metric Towards Authentic Rain Image”, *IEEE International Conference on Image Processing*, Taipei, Taiwan, September 2019, pp. 2364-2368.
251. Y. Yang, F. Meng, H. Li, K.N. Ngan and Q. Wu, “A New Few-Shot Segmentation Network Based on Class Representation”, *IEEE International Conference on Visual Communications and Image Processing*, Sydney, Australia, December 2019, paper 240.
252. K. Huang, F. Meng, H. Li, S. Chen, Q. Wu and K.N. Ngan, “Class Activation Map Generation by Multiple Level Class Grouping and Orthogonal Constraint”, *Digital Image Computing: Techniques and Applications (DICTA)*, Perth, Australia, December 2019, pp. 1-6.
253. H. Li, Q. Wu, K.N. Ngan, H. Li and F. Meng, “Region Adaptive Two-Shot Network for Single Image Dehazing”, *IEEE International Conference on Multimedia and Expo*, London, U.K., July 2020, pp. 1-6.
254. Q. Cheng, H. Li, Q. Wu, F. Meng, L. Xu and K.N. Ngan, “Learn to Pay Attention via Switchable Attention for Image Recognition”, *IEEE Conference on Multimedia*

- Information Processing and Retrieval (MIPR)*, Shenzhen, China, August 2020, pp. 291-296.
255. H. Li, Q. Wu, H. Wei, K.N. Ngan, H. Li, F. Meng and L. Xu, “Haze-robust image understanding via context-aware deep feature refinement”, *IEEE International Workshop on Multimedia Signal Processing (MMSP)*, Tampere, Finland, September 2020, pp. 1-6.
 256. H. Wei, Q. Wu, H. Li, K.N. Ngan, H. Li and F. Meng, “Single Image Dehazing via Artificial Multiple Shots and Multidimensional Context”, *IEEE International Conference on Image Processing*, Abu Dhabi, United Arab Emirates, October 2020, pp. 1023-1027.
 257. R. Zhang, F. Meng, H. Li, Q. Wu and K.N. Ngan, “Mining Larger Class Activation Map with Common Attribute Labels”, *IEEE International Conference on Visual Communications and Image Processing*, Macau, China, December 2020, pp. 29-32.
 258. X. Xu, F. Meng, H. Li, Q. Wu, K.N. Ngan and S. Chen, “A New Bounding Box based Pseudo Annotation Generation Method for Semantic Segmentation”, *IEEE International Conference on Visual Communications and Image Processing*, Macau, China, December 2020, pp. 100-103.
 259. L. Yang, H. Li, Q. Wu, F. Meng and K.N. Ngan, “Mono is Enough: Instance Segmentation from Single Annotated Sample”, *IEEE International Conference on Visual Communications and Image Processing*, Macau, China, December 2020, pp. 120-123.
 260. Q. Wu, L. Chen, K.N. Ngan, H. Li, F. Meng and L. Xu, “A Unified Single Image De-raining Model via Region Adaptive Coupled Network”, *IEEE International Conference on Visual Communications and Image Processing*, Macau, China, December 2020, pp. 205-208.
 261. L. Wang, Q. Wu, K.N. Ngan, H. Li, F. Meng and L. Xu, “Blind Tone-mapped Image Quality Assessment and Enhancement via Disentangled Representation Learning”, *Asia Pacific Signal and Information Processing Association (APSIPA) Annual Summit and Conference*, Auckland, New Zealand, December 2020, pp. 1096-1102.
 262. H. Luo, H. Li, Q. Wu, H. Li, K.N. Ngan, F. Meng and L. Xu, “Few-Shot Segmentation via Complementary Prototype Learning and Cascaded Refinement”, *Pattern Recognition and Computer Vision (PRCV)*, Beijing, China, October 2021, LNCS 13022, pp. 484–495.
 263. R. Ma, H. Luo, Q. Wu, K.N. Ngan, H. Li, F. Meng and L. Xu, “Remember and Reuse: Cross-Task Blind Image Quality Assessment via Relevance-aware Incremental Learning”, *ACM Multimedia*, October 2021, pp. 5248–5256.

F. Edited Special Issues in Journals

1. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, “Special Issue on Segmentation, Description and Retrieval of Video Content,” *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 8, no. 5, September 1998, pp. 521-696.
2. S. Benton, B. Choquet, R. Horst, K.N. Ngan and M. Tanimoto, “Special Issue on 3D Video Technology,” *Signal Processing: Image Communication*, Europe, vol. 14, Nos. 1-2, November 1998, pp. 1-194.
3. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, “Special Issue on Representation and Coding of Images and Video I,” *IEEE Transactions on Circuits*

- and Systems for Video Technology*, U.S.A., vol. 8, no. 7, November 1998, pp. 797-920.
4. K.N. Ngan, S. Panchanathan, T. Sikora and M.-T. Sun, "Special Issue on Representation and Coding of Images and Video II," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 9, no. 1, February 1999, pp. 1-199.
 5. K.N. Ngan, M. Strintzis, M. Tanimoto and Y. Wang, "Special Issue on 3-D Video Technology," *IEEE Transactions on Circuits and Systems for Video Technology*, U.S.A., vol. 10, no. 2, March 2000, pp. 185-330.
 6. Y. Altunbasak, C.W. Chen, M.R. Civanlar and K.N. Ngan, "Special Issue on Recent Advances in Wireless Video," *Signal Processing: Image Communication*, Europe, vol. 18, no. 10, November 2003, pp. 857-1008.
 7. C.W. Chen, M. Ghanbari and K.N. Ngan, "Special Issue on Visual Communication in the Ubiquitous Era," *Journal of Visual Communications and Image Representation*, Academic Press, U.S.A., vol. 16, no. 4-5, August-October 2005, pp. 393-620.
 8. H. Wang, K.N. Ngan and J. Ostermann, "Special Issue on Advances in Visual Content Analysis and Adaptation for Multimedia Communications", *IEEE Communications Magazine*, U.S.A., vol. 45, no. 1, January 2007, pp. 24-91.
 9. W. Gao, K.N. Ngan and L. Yu, "Special Issue on AVS and its Applications," *Signal Processing: Image Communication*, Europe, vol. 24, no. 4, April 2009, pp. 245-344.

G. Patents

1. R.C. Nicol, B.A. Fenn, R.J. Clarke and K.N. Ngan, "Method and process for transmitting an image," US Patent No. 4504860, 12 March 1985.
2. R.C. Nicol, B.A. Fenn, R.J. Clarke and K.N. Ngan, "Method and apparatus for transmitting an image," Canadian Patent No. 1194984, 1985.
3. R.C. Nicol, B.A. Fenn, R.J. Clarke, K.N. Ngan and W.K. Cham, "Method and apparatus for transmitting an image," European Patent No. 0072117, 1985.
4. D.W. Lin and K.N. Ngan, "Low bit-rate video coding technique," US Patent No. US 5214506, 25 May 1993.
5. King Ngi Ngan, Jie Dong and Yan Huo, "Method and Apparatus of De-Interlacing Video", US Patent No. US 8165211 B2, 24 April 2012.
6. King Ngi Ngan and Bangsheng Cheng, "Method and Apparatus for Recognizing and Localizing Landmarks from an Image onto a Map", US Patent No. US 8180146 B2, 15 May 2012.
7. Wai-Kuen Cham, Chi Keung Fong, Jie Dong, King Ngi Ngan, Hoi Ming Wong, Lu Wang, Yan Huo, Thomas H.Y. Pun, "Method and Device for Order-16 Integer Transform from Order-8 Integer Cosine Transform," US Patent No. US 8228983 B2, 24 July 2012.
8. King Ngi Ngan and Hongliang Li, "Real-time Body Segmentation System", US Patent No. US 8233676 B2, 31 July 2012.
9. King Ngi Ngan and Jie Dong, "Parametric Interpolation Filter for Motion-Compensated prediction", US Patent No. US 8548065 B2, 1 October 2013.
10. King Ngi Ngan, Lin Ma, Wai-Kuen Cham and Yu Liu, "Method and Apparatus for Video Coding by ABT-Based Just Noticeable Difference Model", US Patent No. US 8559511 B2, 15 October 2013.
11. King Ngi Ngan and Songnan Li, "Real-Time Head Pose Tracking with Online Face Template Reconstruction", US Patent No. US 9672412 B2, 6 June 2017.

12. King Ngi Ngan and Hongliang Li, "Real-time Body Segmentation System", Hong Kong Patent No. HK 1150284, 15 August 2014.
13. 颜庆义, 马林, 湛伟权, 刘雨, "通过基于 ABT 的最小可觉差模型进行视频编码的方法和装置", 香港应用科技研究院有限公司, China Patent No. CN 101835048B, 26 September 2012.
14. 颜庆义, 李宏亮, "实时身体分割系统", 香港中文大学, China Patent Application No. CN 101971190A, 9 February 2011.

H. Technical Memoranda

1. K.N. Ngan, D.W. Lin and M.L. Liou, "Enhancement of image quality for low bit rate video coding," Bellcore Technical Memorandum TM-ARH-015823, November 1989.
2. D.W. Lin and K.N. Ngan, "Improving low bit rate video quality by randomized ordering of image blocks," Bellcore Technical Memorandum TM-ARH-015784, November 1989.

I. Technical Reports

1. M.H. Lee, D.K.K. Lau, K.N. Ngan, G. Rogers, "Wavelet Video with Priority Encoding Transmission," *CRC-BTN Technical Reports, VRL-TR-004*, November 1997.
2. C. W. Yap, R. Liyanapathirana, and K.N. Ngan, "Bit Error Sensitivity of the H.263 bitstream," *CRC-BTN Technical Reports, VRL-TR-006*, January 1998.
3. R. Liyanapathirana, K.N. Ngan, C.W. Yap and L.K. Chan, "Transmission of H.263-Coded Video over Rayleigh Fading Channels using RCPC Channel Codes," *CRC-BTN Technical Reports, VRL-TR-008*, April 1998.

J. Standards Contributions

1. D. Chai and K.N. Ngan, "Automatic face segmentation algorithm", ISO/IEC JTC1/SC29/WG11/MPEG97/M2237, 1997.
2. T. Meier and K.N. Ngan, "Automatic segmentation based on Hausdorff Object Tracking", ISO/IEC JTC1/SC29/WG11/MPEG97/M2238, 1997.
3. 喻莉, 朱光喜, 颜庆义, "关于制定移动多媒体 (MMS) 标准的建议", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1251: March 2004.
4. 岑峰, 颜庆义, "EFIMS 快速帧内预测模式选择算法", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1363: August 2004.
5. Feng Cen, King Ngi Ngan and Wai-kuen Cham, "HRD Model", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1449: December 2004, Video Proposal.
6. Zhenzhong Chen, Feng Cen, King Ngi Ngan and Wai-kuen Cham, "Analysis on Encoding Delay and Parameter Initialization", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1524: December 2004, Video Information.
7. Feng Cen, King Ngi Ngan and Wai-kuen Cham, "Buffering Model in HRD", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1525: December 2004, Video Proposal.

8. Dong Jie, King Ngi Ngan and Wai-kuen Cham, "Adaptive Block-size Transforms for AVS X-profile", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M1771: March 2006, Video Proposal.
9. W.K. Cham, Calvin Fong, Jie Dong and K.N. Ngan (Chinese University of Hong Kong), Hoi-Ming Wong, Lu Wang, Yan Huo and Thomas Pun (Hong Kong Applied Science and Technology Research Institute Company Limited), "Adaptive Block-size Transform for AVS-X", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M2182: December 2007, Video Proposal.
10. W.K. Cham, Calvin Fong, Jie Dong and K.N. Ngan (Chinese University of Hong Kong), Hoi-Ming Wong, Lu Wang, Yan Huo and Thomas Pun (Hong Kong Applied Science and Technology Research Institute Company Limited), "Adaptive Block-size Transform for AVS-X", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M2284: March 2008, Video Proposal.
11. Xunan Mao, Yunfei Wang and Yun He (Tsinghua University), W.K. Cham, C.K. Fong, J. Dong and K.N. Ngan (Chinese University of Hong Kong), Hoi-Ming Wong, Lu Wang, Yan Huo, Thomas Pun and Carmen Cheng (Hong Kong Applied Science and Technology Research Institute Company Limited), "AVS 自适应块大小编码技术", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M2372: June 2008, Video Proposal.
12. C.M. Mak, J. Dong and K.N. Ngan, "Subjective and Objective Quality Comparison of H.264/AVC and AVS at High Fidelity", Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M2530: March 2009, Video Information.
13. W.K. Cham; C.K. Fong; Y.L. Fong; K.N. Ngan; Y. LIU and Carmen K.M. Cheng. "Adaptive Block-size Transform Towards AVS 2.0". Audio Video Coding Standard Workgroup of China (数字音视频编解码技术标准化工作组), AVS M2610: September 2009, Video Proposal.