

Curriculum Vitae

YUEN, Pong Chi

Professor

Department of Computer Science

Hong Kong Baptist University

Waterloo Road, Kowloon

Hong Kong

E-mail: pcyuen@comp.hkbu.edu.hk

Tel: (852)-3411-7811 Fax: (852)-3411-7892

Educational Qualification

- 1993 Ph.D.
Department of Electrical and Electronic Engineering
The University of Hong Kong
- 1989 B.Sc. (Hons) in Electronic Engineering with First Class Honours
Department of Electronic Engineering
City Polytechnic of Hong Kong

Working Experience

- 9/11 - Present Head
Department of Computer Science
Hong Kong Baptist University
Hong Kong
- 7/05 – Present Professor
Department of Computer Science
Hong Kong Baptist University
Hong Kong
- 10/07 – present Honorary Professor
Sun Yat-Sen University
China
- 9/93 – 6/05 Assistant Professor/Associate Professor
Department of Computer Science
Hong Kong Baptist University
Hong Kong
- 7/05 – 1/06 Visiting Professor
INRIA Rhone Alpes
France
- 2/98 – 7/98 Visiting Scholar
Computer Vision laboratory, UMIACS/CFAR
University of Maryland at College Park

USA

5/96 - 6/96

Visiting Scholar
Imaging Science and Engineering Laboratory
Department of Electrical Engineering
The University of Sydney
Australia

Current Research Interests

Facial Image Processing and Face Recognition, Biometric data security and privacy, Vision-based Human Understanding Technology.

Scholarly and Professional Activities/Awards

- Editorial Board Member
Pattern Recognition (impact factor in 2010: 2.607) 2006 - present

2012

- Program Co-Chair
IEEE Fifth International Conference On Biometrics: Theory, Applications And Systems (BTAS), September 2012
- Program Committee Member
IEEE and IAPR International Conference on Biometric (ICB), March 2012

2011

- Program Committee Member
ICCV Workshop on Benchmarking Facial Image Analysis Technologies, 2011
- Program Committee Member
IEEE and IAPR International Joint Conference on Biometric (IJCB), September 2011
- Program Committee Member
IEEE International Conference on Image Processing (ICIP), September 2011
- Program Committee Member
International Conference on Wavelet, Applications and Pattern Recognition, 2011.
- Program Committee Member
SPIE Conference on Biometric Technology for Human Identification VIII, April 2011
- Program Committee Member
IEEE International Conference on automatic Face and Gesture Recognition (FG11)
April 2011
- Program Committee Member
IAPR Conference on Machine Vision and Application (MVA), May 2011

2010

- Organizing Committee
IEEE International Conference on Image Processing (ICIP), September 2010
- Program Committee Member
The Tenth International Conference on Control, Automation, Robotics and Vision (ICARCV) Dec 2010
- Program Committee Member
2nd KES International Symposium on Intelligent Decision Technologies, July 2010
- Program Committee Member
IEEE Fourth International Conference On Biometrics: Theory, Applications And Systems (BTAS), September, 2010
- Program Committee Member
Pacific Rim International Conference on Artificial Intelligence, August, 2010
- Program Committee Member
International Conference on Bio-Science and Bio-Technology (BSBT 2010), December 2010
- Program Committee Member
International Conference on Pattern Recognition, August 2010
- Program Committee Member
The Seventh International Symposium on Neural Networks (ISNN), June 2010.

2009

- Program Committee Member
IEEE and IAPR International Conference on Biometric (ICB), June 2009
- Program Committee Member
International Conference on Bio-Science and Bio-Technology (BSBT 2009), December 2009
- Program Committee Member
International Conference on Wavelet, Applications and Pattern Recognition, July 2009.

2008

- Program Committee Member
International Conference on Pattern Recognition, December 2008
- Program Committee Member
The Tenth International Conference on Control, Automation, Robotics and Vision (ICARCV) Dec 2008
- Program Committee Member
International Conference on Bio-Science and Bio-Technology (BSBT 2008), December 2008
- Program Committee Member
The International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), December 2008
- Program Committee Member
Biometrics Consortium Conference, September 2008
- Program Committee Member
The 8th International Conference on automatic Face and Gesture Recognition (FG08), September 2008

- Program Committee Member
International Conference on Visualization, Imaging and Image Processing, (VIIP) September 2008
- Program Committee Member
The Sixth International Conference on Wavelet Analysis and Pattern Recognition, August 2008
- Program Committee Member
The 9th International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing August 2008
- Program Committee Member
International Conference on Medical Biometrics (ICMB), Jan 2008

2007

- Track Chair
Pacific-Rim Conference on Multimedia (PCM2007) December 2007
- Program Committee Member
The International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS), Nov/Dec 2007
- Program Committee Member
International Conference on Wavelet Analysis and Pattern Recognition, Nov, 2007
- Program Committee Member
Biometric Symposium Conference, September 2007
- Best Poster Paper Award Committee Member
IEEE and IAPR International Conference on Biometric (ICB), August 2007
- Program Committee Member
IEEE and IAPR International Conference on Biometric (ICB), August 2007
- Program Committee Member
International Conference on Visualization, Imaging and Image Processing, (VIIP) August 2007
- Advisory Peer Group Member
The Open University of Hong Kong, April 2007 – March 2010
- Program Committee Member
The 9th International Conference on Visual Information Systems, June 2007
- Croucher ASI Director
Croucher Advanced Study Institute on “Biometric data security and privacy”, January 2007
- Accessor
Research Grant Council (RGC), Hong Kong 2007
- Accessor
Australian Research Council (ARC), Australia 2007

2006 and before

- Area Chair
The Ninth International Conference on Control, Automation, Robotics and Vision (ICARCV) Dec 2006
- Program Committee Member
The Ninth Pacific Rim International Conference on Artificial Intelligence, Aug 2006

- Program Committee Member
The 7th International Conference on automatic Face and Gesture Recognition (FG06), April 2006
- Program Co-chair
The 18th International Conference on Pattern Recognition (ICPR06), Aug 2006
- Program Committee Member
IAPR International Conference on Biometric (ICB), 2006
- Program Committee Member
International Symposium on Intelligent Signal Processing and Communication Systems, Dec 2005
- Program Committee Member
ICCV Workshop on Biometric Recognition Systems, 2005
- Accessor
Research Grant Council (RGC), Hong Kong 2005, 2006,
- Organizing Committee Member (Tutorial Chair)
International Symposium on Intelligent Signal Processing and Communication Systems, Dec 2005
- Croucher ASI Director
Croucher Advanced Study Institute on “Recent Development on Biometric Authentication”, 2004
- Accessor
IT Excellence Awards 2004
- Accessor
Australian Research Council (ARC), Australia 2004, 2006,
- Program Committee Member
International Symposium on Intelligent Multimedia, Video & Speech Processing, 2004
- Program Committee Member and Organizing Committee Member
The 4th Chinese National Conference on Biometric Recognition, 2004
- Program Committee Member
The 7th International Eurographics Workshop on Multimedia, 2004
- Program Committee Member
International Conference on Biometric Authentication (ICBA), 2004
- Program Committee Member
The 6th International Conference on automatic Face and Gesture Recognition (FG 04), 2004
- Program Committee Member
The 4th International Conference on Audio and Video Based Personal Authentication (AVBPA), 2003
- Program Committee Member
The First International Conference on Machine Learning and Cybernetics (ICMLC), 2002.
- External Examiner
The Open University of Hong Kong, 2001-2004, 2004-2006, 2006-2009
- Program Co-chair
The Sixth International Computer Science Conference: Active Media Technology, 2001.
- Program Co-chair
The 2nd International Conference on Wavelet Analysis and its Applications, 2001.
- Committee Member

- *IT Contest 2001, Coorganized by ITSD, ACM and PolyU*
- Program Committee Member
The Second Asia Pacific Conference on Intelligent Agent, 2001.
- Guest Co-editor
International Journal of Pattern Recognition and Artificial Intelligence, 2000
- Program Committee Member
The 3rd International Conference on Multimodal Interface, Beijing, 2000.
- Organizing Chair, Local Arrangement Chair and Program Committee Member,
The First Asia Pacific Conference on Intelligent Agent, 1999.
- Program and Organizing Committee Member,
ACM-HK Postgraduate Student Conference, 1999.
- Organizing and Program Committee Member, Session Chairman,
The 2nd International Conference on Multimodel Interface (ICMI), 1999.
- Organizing Committee Member,
17th International Conference on Computer Processing of Oriental Languages (ICCPOL), 1997.
- Award of University Staff Fellowship 1995-96
- Judge of the Varsity Competition in Electronic Design 93/94, organized by HKUST and Zonta Club of the New Territories
- External examiner
Doctoral thesis: Zhongshan University (China), City University of Hong Kong, Hong Kong Polytechnic University, National Technology University of Singapore
Master thesis: Zhongshan University (China), National Technology University of Singapore, The University of Hong Kong, Hong Kong Polytechnic University, City University of Hong Kong
- Reviewer,
IEEE Trans. PAMI, IEEE Trans. SMC, IEEE Trans. Information Forensic and Security, IEEE Trans Multimedia,, IEEE Trans. Evolutionary Computation, Image and Vision computing, Journal of Electronic Imaging, International Journal of Pattern Recognition and Artificial Intelligence, Journal of Applied Signal Processing, Computer Vision and Image Understanding, Pattern Recognition Letters, Pattern Analysis and Applications, Knowledge-based Expert Systems and Many International Conferences.
- Listed in Who's who in the world 1998
- Invited talks and seminars at Institute of Automation - Academy of Sciences of China, Faculty of Computing and Mathematical Science, Zhongshan University China.

Major Administrative Duties at Hong Kong Baptist University

- Head of Computer Science Department 2011 - present
- Senate Member, 2004 – 2006, 2011 - present
- Undergraduate Regulations Committee (URC) [former Academic Regulations and Review Committee] Member 2004 – present
- IT committee 2011 - present
- Department-level staff review panel member 2005 – present
- Faculty-level staff review panel member 2006 – 2007, 2010 - present

- Academic and Professional Standards Committee (APSC) Member, 2005 – 2006
- Teaching Development Grant Committee Member 2005 - 2006
- Chinese Medicine & Science Specialist Panel Member 2006 – 2008
- Science Faculty Course Board Member 1993– 1998
- Science Faculty Examination Board Member 1998– 2007
- Course planning team member, *B.A. (Hons) in Visual Arts*, 2004 - 2005
- Course management team member, *B.A. (Hons) in Visual Arts*, 2005 – 2011
- Course Coordinator, *B.Sc. (Hons) in Computer Science*, 1998 – 2007
- Foundation Year Coordinator, 2007 – 2011
- Four-year Curriculum Departmental Representative, 2007 – 2011
- Computer Science Minor Program Coordinator, 2006 - 2011
- Chair of Course planning team, *B.Sc. (Hons) in Computer Science and Technology*, (offered in HKBU Zhuhai Campus), 2004 – 2005
- Student Exchange Coordinator 2002 - 2003
- Science Faculty Safety Committee Member 1993 - 1994
- Applied Computing Year II Tutor 1994 – 1998
- Computer Interfacing Laboratory Manger 1994 -1998

Publications

Journal Papers

1. Y C Feng and P C Yuen, "Binary discriminant analysis for generating binary face template", In press, *IEEE Transactions on Information Forensic and Security*, 2011.
2. W W Zou and P C Yuen, "Very low resolution face recognition problem", In press, *IEEE Transactions on Image Processing*, 2011.
3. B B Pan, J H Lai and P C Yuen, "Learning low-rank Mercer kernels with fast-decaying spectrum", *Neurocomputing*, Vol. 74, Issue 17, pp. 3028-3035, October 2011.
4. W S Chen, P C Yuen and X Xie, "Kernel machine-based rank-lifting regularized discriminant analysis method for face recognition", *Neurocomputing*, Volume 74, Issue 17, pp. 2953-2960, October 2011.
5. C Liu and P C Yuen, "A Boosted Co-Training Algorithm For Human Action Recognition", *IEEE Transactions on Circuit Systems and Video Technology*, Vol. 21, No. 9, pp. 1203 - 1213, 2011.
6. X Xie, W S Zheng, J H Lai, P C Yuen and C Y Suen, "Normalization of Face Illumination Based on Large- and Small- Scale Features", *IEEE Transactions on Image Processing*, Vol. 20, No. 7, PP.1807 - 1821. 2011.
7. W W Zou and P C Yuen, "Discriminability and Reliability Indexes: Two New Measures to Enhance Multi-image Face Recognition", *Pattern Recognition*, Vol. 43, No. 10, pp. 3483-3493, 2010.
8. X Wu, J H Lai and P C Yuen, "Video-Shot Transition Detection: A Spatio-Temporal Saliency Approach", *International Journal on Pattern Recognition and Artificial Intelligence*, Vol. 24, Issue 8, pp. 1295-1309, Dec, 2010.
9. W S Zhang, J H Lai and P C Yuen, "Penalized Pre-image Learning in Kernel Principal Component Analysis", *IEEE Transactions on Neural Network*, Vol. 21, No. 4, pp. 551-570, 2010.

10. Y C Feng, P C Yuen and A K Jain, "A Hybrid Approach for Generating Secure and Discriminating Face Template", *IEEE Transactions on Information Forensic and Security*, Vol. 5, No. 1, pp. 103 – 117, 2010.
11. C Liu and P C Yuen, "Human action recognition from boosting Eigenactions", *Image and Vision Computing*, Vol. 28, No. 5, pp. 825 – 835, 2010.
12. G Qiu and P C Yuen, "Interactive imaging and vision – ideas, algorithms and applications", *Pattern Recognition*, Vol. 43, No.2, pp. 431-433, 2010
13. X Z Liu, P C Yuen, G C Feng and W S Chen, "Learning Kernel in Kernel-based LDA for Face Recognition under Illumination Variations", *IEEE Signal Processing Letters*, Volume 16, Issue 12, pp.1019 – 1022, Dec, 2009.
14. C Liu, P C Yuen and G Qiu, "Object motion detection using information theoretic spatio-temporal saliency", *Pattern Recognition*, Vol. 42, No. 11, pp. 2897-2906, 2009.
15. W S Zheng, J H Lai, P C Yuen and S Li, "Perturbation LDA: Learning difference between the class empirical mean and its expectation", *Pattern Recognition*, Vol. 42, No. 5, pp. 764-779, 2009.
16. B Chen, P C Yuen, J H Lai and W S Chen, "Image segmentation and selective smoothing based on variational framework", *Journal of Signal Processing Systems*, Vol. 54, No. 1, pp. 145 - 158, 2009.
17. H T Zhao and P C Yuen, "Incremental Linear Discriminant Analysis for Face Recognition", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 38, No. 1 pp. 210 – 221, 2008.
18. J Huang, P C Yuen, W S Chen and J H Lai, "Choosing parameters for kernel subspace LDA for recognition of face images under pose and illumination variations", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 37, No. 4, pp. 847 - 862, 2007.
19. D Q Dai and P C Yuen, "Face recognition by regularized discriminant analysis", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 37, No. 4, pp. 1080 – 1085, 2007.
20. P C Yuen and C H Man, "Human face image searching system using sketch", *IEEE Transactions on Systems, Man and Cybernetics, Part A*, Vol. 37, No. 4, pp. 493 - 504, July 2007.
21. O Brdiczka, P C Yuen, S Zaidenberg, P Reignier and J L Crowley, "ASiMo: Automatic acquisition of situation models", *eMinds: International Journal on Human-Computer Interaction*, Vol. 1, No. 2, pp. 3-16, 2006.
22. J Huang, P C Yuen, W S Chen, J H Lai and X You, "Combining linear and nonlinear features for face recognition", *International Journal of Wavelets, Multiresolution and Information Processing*, Vol. 4, No. 4 pp. 659-676, Dec 2006.
23. J H Lai and P C Yuen, "Face and eye detection from head & shoulder images on mobile devices", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 20, Number 7, pp. 1053 – 1075, Nov 2006.
24. H T Zhao, P C Yuen and J Kwok, "A novel incremental principal component analysis and its application for face recognition", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 36, No. 4, pp. 873- 886, 2006.
25. W S Chen, P C Yuen, B Fang, J Huang, "Two-step single parameter regularization Fisher discriminant method for face recognition", *International Journal of Pattern Recognition and Artificial Intelligence*, (Special issue on the selected paper from ICIC 2005) Vol. 20, No. 2, pp. 189 – 208, 2006.
26. D Q Dai and P C Yuen, "Wavelet based discriminant analysis for face recognition", *Applied Mathematics and Computation*, No. 175, pp. 307 – 318, 2006.

27. W S Zheng, J H Lai and P C Yuen, "GA-Fisher: A new LDA-based face recognition algorithm with selection of principal components", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 35, No.5, pp. 1065 – 1078, 2005.
28. W S Chen, P C Yuen and J Huang, "A new regularized linear discriminant analysis methods to solve small sample size problems", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 19, No 7, pp. 917 – 935, 2005.
29. W S Chen, P C Yuen, J Huang and D Q Dai, "Kernel Machine-based One-parameter regularized Fisher discriminant method for face recognition", *IEEE Transactions on Systems, Man and Cybernetics, Part B*, Vol. 35, No. 4, pp 659-669, 2005.
30. J Huang, P C Yuen, W S Chen and J H Lai, "Component-based Subspace LDA Method for Face Recognition with One Training Sample", *SPIE Optical Engineering*, Vol 44, No.5, 2005.
31. K K Lau, P C Yuen and Y Y Tang, "Recovery of writing sequence of static images of handwriting using UWM", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 19, No. 5, pp. 603 – 630, 2005
32. K K Lau, P C Yuen and Y Y Tang, "Directed connection measurement for evaluating reconstructed stroke sequence in handwriting images", *Pattern Recognition*, Vol. 38, No. 4, pp. 323- 339, 2005
33. H Zhao, P C Yuen and J Yang, "Optimal subspace analysis for face recognition", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol 19, No. 3, pp. 375-394, 2005
34. J Huang, P C Yuen, J H Lai and C H Li, "Face recognition using local and global features", *Applied Signal Processing, Special issue on Biometric signal processing*, Vol. 4, pp. 530- 541, 2004.
35. J H Lai, P C Yuen and D G Deng, "Generalized spectroface for face recognition", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 18, No. 2, pp. 211-228, 2004.
36. D Q Dai and P C Yuen, "Regularized discriminant analysis and its application on face recognition", *Pattern Recognition*, Vol. 36, pp. 845-847, 2003.
37. C. S. Tong, P. C. Yuen, and Y. Y. Wong, "Dividing snake algorithm for multiple object segmentation", *SPIE Optical Engineering*, Vol. 41, No. 12, pp. 3177-3182, Dec 2002.
38. P C Yuen and J H Lai, "Face representation using independent component analysis", *Pattern Recognition*, No. 35, No. 6, pp. 1247-1257, 2002. (Top 25 most downloaded paper)
39. C H Li and P C Yuen, "Tongue image matching using color content", *Pattern Recognition*, Vol. 35, No. 2, pp. 407-419, 2002.
40. G C Feng and P C Yuen, "Multi cues eye detection on gray intensity images", *Pattern Recognition*, Vol. 34, No. 5, pp. 1033 - 1046, 2001.
41. J H Lai, P C Yuen and G C Feng, "Face recognition using holistic Fourier invariant features", *Pattern Recognition*, Vol. 34, No.1, pp. 95-109, 2001.
42. G C Feng and P C Yuen, "Recognition of head-&-shoulder face image using virtual frontal-view image", *IEEE Trans. Systems, Man and Cybernetics*, Vol. 30, No. 6, pp. 871 - 882, 2000.
43. C H Li and P C Yuen, "Regularized color clustering in medical image database", *IEEE Trans on Medical Imaging*, Vol. 19, No. 11, pp. 1150-1155, 2000.
44. G C Feng, P C Yuen and J H Lai, "View synthesis under perspective projection", *International Journal of Pattern Recognition and Artificial Intelligence*, Vol. 14, No. 5, August 2000.

45. G C Feng, P C Yuen and D Q Dai, "Human face recognition using PCA on Wavelet subband", *SPIE Journal of Electronic Imaging*, Vol. 9, No.2, 2000.
46. P C Yuen, G C Feng and J P Zhou, "A contour detection method: initialization and contour model", *Pattern Recognition Letters*, Vol. 20, pp. 141-148, 1999.
47. Y Y Wong, P C Yuen and C S Tong, "Segmented snake algorithm for contour detection", *Pattern Recognition*, Vol. 31, No. 11, pp. 1669-1679, 1998.
48. G C Feng and P C Yuen, "Variance projection function and its applications to eye detection", *Pattern Recognition Letters*, Vol. 19, pp. 899-906, 1998.
49. P C Yuen, G C Feng and Y Y Tang, "Chinese character similarity measurement using distance transform and ring projection", *International Journal of Artificial Intelligence and Pattern Recognition*, Vol. 12, No.2, pp. 209-221, 1998. (Also published in book edition by World Scientific in Machine Perception Artificial Intelligence Series)
50. Y Y Wong, P C Yuen and C S Tong, "Contour length termination criteria for snake model", *Pattern Recognition*, Vol. 31, No. 5, pp. 596-606, 1998.
51. P C Yuen and G C Feng, "A novel method for parameter estimation of digital arc", *Pattern Recognition Letters*, Vol. 17, pp. 929 - 938, 1996.
52. P C Yuen, Y Y Wong and C S Tong, "Contour detection using enhanced snakes algorithm", *IEE Electronics Letters*, Vol. 32, No. 3, pp. 202-204, 1996.
53. W F Lee, P C Yuen and C K Chan, "Brick-wall structured segmentation for interpolative vector quantization of images", *Image Communication*, 8, 99. 45-54, 1996.
54. P C Yuen and W M Tsang, "Localization of dominant points: A scale space approach", *Signal Processing*, Vol. 44, No. 3, pp. 341-352, 1995.
55. W M Tsang, P C Yuen and F K Lam, "Detection of dominant points on an object boundary: A discontinuity approach", *Image and Vision Computing*, Vol. 12, No. 9, pp. 547-557, Nov. 1994.
56. W M Tsang, P C Yuen and F K Lam, "Classification of partially occluded objects using 3-point matching and distance transform", *Pattern Recognition*, Vol. 27, No. 1, PP. 27-40, 1994.
57. W F Lee, P C Yuen and C K Chan, "A novel interpolative vector quantization technique for image coding", *IEE Electron. Lett.*, Vol. 29, No. 11, pp. 940-942, 1993.
58. W M Tsang and P C Yuen, "Recognition of partially occluded objects", *IEEE Trans. System, Man and Cybernet.*, Vol. 23, No. 1, pp. 228-236, 1993.

Edited Books

1. P C Yuen Y Y Tang and P S P Wong (Eds.), *Multimodal interface for human machine communication*, World Scientific, 2002.
2. Y Y Tang, C Wickerhauser, P C Yuen and C H Li (Eds.), *Wavelet Analysis and its Applications*, Springer-Verlag LNCS 2251, December 2001.
3. J Liu, P C Yuen, C H Li, J Ng, T Ishida (Eds.), *Active Media Technology*, Springer-Verlag LNCS 2252, December 2001.

Book Chapters

1. W W Zou and P C Yuen, "Face Super-resolution", *Emerging Topics in Computer Vision and its Applications*, pp. 27 - 47, 2011.
2. W S Zheng, J H Lai, X Xie, Y Liang, P C Yuen, and Y Zou, "Kernel methods for facial image preprocessing", *Pattern Recognition, Machine Intelligence and Biometrics*, In press, 2011.
3. Y C Feng and P C Yuen, "Biometric Template Protection: Towards a Secure Biometric System", *Handbook on Computer Vision and Pattern Recognition*, Fourth Edition, 2010.
4. W S Zheng, J H Lai and P C Yuen, "Linear dimension reduction techniques", *Encyclopedia in Biometric Recognition*, 899-904, Springer, 2010.
5. G C Feng, J H Lai and P C Yuen, "View synthesis under perspective projection", *Multimodal interface for human machine communication, selected paper from International Journal of Pattern Recognition and Artificial Intelligence*, 2002.
6. P C Yuen, Y Y Tang and P S P Wang, "Introduction to Multimodal Interface for human machine communication", *Multimodal interface for human machine communication*, 2002.
7. P C Yuen, G C Feng, J H Lai and D Q Dai, "Face processing and recognition technology", *Wavelet Analysis and its Applications*, International Press, In press, 2000.
8. P C Yuen, Z Y Kuang, W Wu and Y T Wu, "Tongue Texture Analysis using Opponent Colour Features for Tongue Diagnosis in Traditional Chinese Medicine", *Texture Analysis in Machine Vision*, (Ed. M. Pietikäinen). Series in Machine Perception and Artificial Intelligence - Vol. 40, pp. 179-188, World Scientific, November 2000.
9. K K Lau, P C Yuen and Y Y Tang, "A new function-based on-line signature verification method", *Frontiers in Handwriting Recognition*, pp. 559 - 568, World Scientific, 1999.
10. P C Yuen, G C Feng and Y Y Tang, "Printed Chinese character similarity measurement using ring projection and distance transform", *Advances in Oriental Document Analysis and Recognition Techniques*, Machine Perception Artificial Intelligence Series, World Scientific, 1998. (This is a selected paper from *International Journal of Artificial Intelligence and Pattern Recognition* for book edition).

Conference Papers

1. J H Ma and P C Yuen, "Linear dependency modeling for feature fusion", In press, *International Conference on Computer Vision (ICCV)*, Nov 2011.
2. W W Zou, R Chellapa and P C Yuen, "Face tracking in low resolution videos under illumination variations", In press, *Proceedings of IEEE International Conference on Image Processing (ICIP)*, Sept 2011.
3. Q Y Wang, P C Yuen and G C Feng, "Similarity learning for semi-supervised multi-class boosting", *Proceedings on IEEE International Conference on Acoustics, Speech and Singal Processing (ICASSP)*, May 2011.
4. Y Q Lai, P C Yuen and K W Lee, "Motion capture data completion and denoising by singular value thresholding", *Eurographics (EG)*, April, 2011.

5. W W Zou and P C Yuen, "Very low resolution face recognition problem", *Proceedings of International Conference on Biometric: Theory, Applications And Systems (BTAS)*, September, 2010.
6. W W Zou and P C Yuen, "Learning the relationship between high and low Resolution images in Kernel space for face super-resolution", *Proceedings of International Conference on Pattern Recognition (ICPR)*, August, 2010.
7. Y C Feng and P C Yuen, "Binary discriminant analysis for face template protection", In Press, *Proceedings of International Conference on Pattern Recognition (ICPR)*, August, 2010.
8. J H Ma, P C Yuen, W W Zou and J H Lai, "Supervised neighborhood topology learning for human action recognition", *ICCV Workshop on Machine Learning for Vision-based Motion Analysis (MLVMA09)*, September 2009.
9. P C Yuen, W W Zou, S B Zhang, K F Wong and H S Lam, "Finger gesture recognition through sweep sensor", *ACM Multimedia (ACM MM) Workshop on Interactive Media for Consumer Electronics*, October 2009.
10. W S Chen and P C Yuen, "Interpolatory mercer kernel construction for kernel direct LDA On face recognition", *Proceedings on IEEE International Conference on Acoustics, Speech and Singal Processing (ICASSP)*, April 2009.
11. Z Qu, G Qiu and P C Yuen, "Learning a Discriminative Sparse Tri-value Transform", *Proceedings of International Conference on Pattern Recognition (ICPR)*, 2008.
12. C Liu and P C Yuen, "Boosting EigenActions: A new algorithm for Human Action Categorization", *Proceedings of IEEE Internation Conference on Automatic Face and Gesture Recognition (FG)*, 2008.
13. X Xie, W S Zheng, J H Lai and P C Yuen, "Face illumination normalization on large and small scale features", *Proceedings of IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)*, June 2008.
14. C Liu, P C Yuen and G Qiu, "Generating novel information salient maps for foreground object detection in video", *Proceedings of International Congress on Image and Signal Processing*, May, 2008.
15. X Wu, P C Yuen, C Liu and J Huang, "Shot boundary detection: an information saliency approach", *Proceedings of International Congress on Image and Signal Processing*, May, 2008.
16. B Chen, P C Yuen, J H Lai and W S Chen, "A new statistical active contour model for noisy image segmentation", *Proceedings of International Congress on Image and Signal Processing*, May, 2008.
17. Y C Feng, P C Yuen and A K Jain, "A hybrid approach for face template protection", *Proceedings of SPIE Defense and Security Symposium*, April, 2008.

18. Y C Feng and P C Yuen, "Selection of distinguish points for class distribution preserving transform for biometric template protection", *Proceedings of International Conference on Biometric (ICB)*, August 2007.
19. Y C Feng and P C Yuen, "Class-distribution preserving transform for face biometric data security", *Proceedings on IEEE International Conference on Acoustics, Speech and Singal Processing (ICASSP)*, April 2007.
20. B Chen, J H Lai and P C Yuen, "Image denoising using hybrid model with edge preserving capability", *Proceedings of International Conference on Computational Intelligence and Security (CIS)*, Nov 2006.
21. O Brdiczka, P C Yuen, S Zaidenberg, P Reignier, J L Crowley, "Automatic Acquisition of Context Models and its Application to Video Surveillance", *Proceedings of International Conference of Pattern Recognition, (ICPR)*, August 2006.
22. W S Zheng, J H Lai and P C Yuen, "Weakly Supervised Learning on Pre-image Problem in Kernel Methods", *Proceedings of International Conference of Pattern Recognition, (ICPR)*, August 2006.
23. W S Chen, P C Yuen, J Huang and J H Lai, "Wavelet Kernel Construction for Kernel Discriminant Analysis on Face Recognition", *Proceedings of CVPR Workshop on Biometrics*, June 2006
24. Y C Feng and P CYuen, "Protecting Face Biometric Data on Smartcard with Reed-Solomon Code", *Proceedings of CVPR Workshop on Biometrics*, June 2006
25. W S Chen, P C Yuen, J Huang and J H Lai, "Face Classification based on Shannon Wavelet Kernel and Modified Fisher Criterion", *Proceeding of Automatic Face and Gesture Recognition Conference, (FG06)*, April, 2006.
26. Y Li, J H Lai and P C Yuen, "Multi-template ASM Method for Feature Points Detection of Facial Image with Diverse Expressions", *Proceeding of Automatic Face and Gesture Recognition Conference, (FG06)*, April, 2006.
27. X S Zhuang, D Qi Dai and P C Yuen, "Face recognition by inverse Fisher discriminant features", *Proceeding of IAPR International Conference on Biometric (ICB 06)*, Jan 2006.
28. W S Chen, P C Yuen, J Huang, B Fang, "Two-Step Single Parameter Regularization Fisher Discriminant Method for Face Recognition", *Proceeding of International Conference on Intelligent Computing (ICIC05)*, Aug 2005.
29. J Huang, W S Chen, P C Yuen J H Lai, "Combine Linear and Nonlinear Feature-based Algorithms for Face Recognition", *Proceeding of International Conference on Intelligent Computing (ICIC 05)*, Aug 2005.

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Research Projects/Grant

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11. P C Yuen, "Face recognition based on classifier combination", *Faculty Research Grant 99-00, Category II*, 2000 (completed).
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Supervised/Co-supervised Reseach Students

1. Mr. Y Y Wong (M.Phil. 1998)
2. Dr. G C Feng (PhD. 1999)
3. Mr. Henry C H Man (M.Phil. 2005)
4. Dr. K K Lau (Ph.D. 2005)

5. Dr. J Huang (Ph.D. 2006)
6. Mr. Y C Feng (M.Phil 2007)
7. Dr. C Liu (Ph.D. 2010)