

CURRICULUM VITAE

Pau-Choo Chung (詹寶珠)

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1. Personal Information

Birth: Taipei, Taiwan, 1959.

2. Educations

- 1991 Electrical Engineering, Texas Tech University, Ph.D.
- 1983 Electrical Engineering, National Cheng Kung University, M.S.
- 1981 Electrical Engineering, National Cheng Kung University, B.S.

3. Professional Experiences

- 2008~ Institute of Computer and Communication Engineering, National Cheng Kung University, Director
- 2008~ Department of Electrical Engineering, National Cheng Kung University, Vice Chairman
- 2005~ Department of Electrical Engineering, National Cheng Kung University, Distinguished Professor
- 2005~2008 Electrical Laboratories, National Cheng Kung University, Director
- 2005~2008 Center for Research of E-life Digital Technology, National Cheng Kung University, Director
- 2000~2005 Center for Research of E-life Digital Technology, National Cheng Kung University, Vice Director
- 1996~ Department of Electrical Engineering, National Cheng Kung University, Professor
- 1991~1996 Department of Electrical Engineering, National Cheng Kung University, Associate Professor
- 1987~1991 Department of Electrical Engineering, Texas Tech University, Research Assistant
- 1983~1986 Chung-Shan Institute of Science & Technology, Research Assistant

4. Fields of Specialty

- Neural Networks
- Digital Image Processing
- Medical Image Processing
- Fuzzy System
- Computer Vision

5. Major awards and honors

- IEEE Fellow for contributions to Neural Network Models for Biomedical Image Analyses, 2008.
- IEEE Distinguished Lecturer, Circuit and Systems Society, 2006~2007
- First-Grade Excellence Research Award, National Science Council, Taiwan, 2005
- Best Paper Award in Taiwanese Association for Artificial Intelligence, 2006
- Annual Best Paper Award in Chinese Journal Radiology 2001
- Best Paper Award in the 5th World multiconference on Systemics, Cybernetics, and Informatics, (SCI 2001) Florida, USA, 2001
- Best Paper Award in the Conference of Computer Vision, Graphics, and Image Processing, Taiwan ROC, August, 2001
- Best Research Young Innovator Award, National Science Council, 1999
- Best Paper Award in Computer Vision, Graphics, and Image Processing Conference, Taiwan ROC, 1999
- Best Paper Award in International Computer Symposium, Taiwan, December, 1998
- Best Paper Award in Computer Vision, Graphics, and Image Processing Conference, Taiwan ROC, August, 1997
- Best Paper Award in Computer Vision, Graphics, and Image Processing Conference, Taiwan ROC, 1996
- Acer Dragon Award (Best Ph.D. Thesis Award), Acer Foundation, 1995
- Acer Dragon Award (Excellence Master Thesis Award), Acer Foundation, 1994
- Best Paper Award in Computer Vision, Graphics, and Image Processing Conference, Taiwan ROC, 1993
- Excellence in Research Award of National Science Council, Taiwan, 1992~2000

6. List of Recent Selected Publications

- Pau-Choo Chung, Chin-De Liu, "A daily behavior enabled hidden Markov model for human behavior understanding", *Pattern Recognition*, vol. 41, 1589-1597, 2008
- Chun-Rong Huang, Pau-Choo Chung, Bor-Shyang Sheu, Hsiu-Jui Kuo, and Mikuláš Popper, "Helicobacter pylori Related Gastric Histology Classification Using Support Vector Machine Based Feature Selection," Accepted and to appear in *IEEE Transactions on Information Technology in Biomedicine*, 2008.
- Sheng-Chih Yang, Chuin-Mu Wang, Hsian-He Hsu, Pau-Choo Chung*, Giu-Cheng Hsu, Chun-Jung Juan, Chien-Shun Lo, "Contrast enhancement and tissues classification of breast MRI using Kalman filter-based linear mixing method", *Computerized Medical Imaging and Graphics*, accepted.
- Chun-Rong Huang, Chu-Song Chen, and Pau-Choo Chung, "Contrast Context Histogram - An Efficient Discriminating Local Descriptor for Object Recognition and Image Matching", *Pattern Recognition* Vol. 41, pp 3071-3077, 2008.
- Chieh-Ling Huang, Pau-Choo Chung, Ming-Hua Tsai, Yen-Kuang Yang and Yu-Chia Hsu, "Reliability Improvement for an RFID-based Psychiatric Patient Localization System", *Computer Communications*, Vol. 31, Issue 10, pp. 2039- 2048, 2008.
- Chieh-Ling Huang, E-Liang Chen, and Pau-Choo Chung "Fall Detection using Modular Neural Networks with Back-projected Optical Flow", *Biomedical Engineering - Applications, Basis and Communications*, Vol. 19, No. 6, pp. 415 - 424, 2007.
- Pau-Choo Chung, Chieh-Ling Huang and E-Liang Chen, "A Region-based Selective Optical Flow Back-Projection for Genuine Motion Vector Estimation", *Pattern Recognition*, Vol. 40, Issue 3, pp. 1066-1077, 2007. (SCI)
- Jiann-Shu Lee, Yung-Ming Kuo, Pau-Choo Chung, E-Liang Chen, "Naked image detection based on adaptive and extensible skin color model", *Pattern Recognition* 40 (2007) 2261-2270
- Chin-De Liu, Pau-Choo Chung, Yi-Nung Chung and Monique Thonnat, "Understanding of Human Behaviors from Videos in Nursing Care Monitoring Systems", *Journal of High Speed Network*, Vol. 16, pp. 91-103, 2007.. (SCI)
- Pau-Choo Chung, Chieh-Ling Huang and E-Liang Chen, "A Region-based Selective Optical Flow Back-Projection for Genuine Motion Vector Estimation", accepted for publication in *Pattern Recognition*, Volume 40, Issue 3, March 2007, pp. 1066-1077 (SCI)
- Chun-Rong Huang, Pau-Choo Chung, Tong-Yee Lee, Sheng-Chih Yang and San-Kan Lee, "Reconstruction and Rendering of Microcalcifications from Two Mammogram Views by Modified Projective Grid Space (MPGS)", *Computerized Medical Imaging and Graphics*, vol. 30, no. 2, pp. 123-133, 2006. (SCI)
- Sheng-Chih Yang, Hsian-He Hsu, Giu-Cheng Hsu, Pau-Choo Chung, Shu-Mei Guo, Chien-Shen Lo, Ching-Wen Yang, San-Kan Lee, Chein-I Chang, "3-D Localization of Clustered Microcalcifications Using Cranio-Caudal and Medio-Lateral Oblique Views", *Computerized Medical Imaging and Graphics*, Vol. 29, pp. 521-532, 2005. (SCI 1.158)
- Sheng-Chih Yang, Chuin-Mu Wang, Yi-Nung Chung, Giu-Cheng Hsu, San-Kan Lee, Pau-Choo Chung, Chein-I Chang, "A Computer-Aided System for Mass Detection and Classification in Digitized Mammograms", *Biomedical Engineering Applications, Basis, and Communications*, Vol. 17, No.5, pp. 215-228, 2005. (EI)
- Pau-Choo Chung, Chin-Wen Wu, and Yen-Lang Huang, "A JPEG2000 Error Resilience Method Using Uneven Block-sized Information Included Markers," *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 15, No.3, pp.420-424, March 2005. (SCI 1.942)
- Lee WT, Chu KC, Chung KC, Pan JY, Chung PC, "Scheduling delay minimization for non-UGS data in multi-channel HFC network", *IEICE TRANSACTIONS ON COMMUNICATIONS E88B (2): 623-631 FEB 2005* (SCI 0.436)
- Chun-Rong Huang, Chu-Song Chen, and Pau-Choo Chung, "Tangible Photo-Realistic Virtual Museum," *IEEE Computer Graphics and Applications*. Vol. 25, No.1, pp.15-17, 2005. (SCI 1.911)
- Tsai-Rong Chang, Pau-Choo Chung, Tzai-Wen Chiu and Paul Wai-Fung Poon, "A new method for adjusting neural response jitter in the STRF obtained by spike-trigger averaging", *Biosystems - Journal of Biological and Information Processing Science*, Vol. 79, pp.213-222, January 2005. (SCI 0.971)
- 楊勝智、詹寶珠、徐先和、鄭棕翰,「應用多頻譜影像處理技術於乳房核磁共振影像之組織分類」, *影像與識別*, Vol. 10, No.4, pp.24-36, 2004.
- Chien-Cheng Lee, Pau-Choo Chung, Yunghsiung Sam Han, Dyi-Rong Duh, and C. W. Lin, "A Practice of a Collaborative Multipoint Medical Teleconsultation System on Broadband Network," *Journal of High Speed Networks*
- Chun-Rong Huang, Chu-Song Chen, and Pau-Choo Chung, "An Improved Algorithm for Two-image Camera Self-Calibration and Euclidean Structure Recovery Using Absolute Quadric," *Pattern Recognition*, vol. 37, no. 8, pp. 1713-1722, 2004. (SCI 1.611)
- Chun-Rong Huang, Bor-Shyang Sheu, Pau-Choo Chung, and Hsiao-Bai Yang, "Computerized diagnosis of Helicobacter pylori infection and associated gastric inflammation from endoscopic images by refined feature selection using a neural network," *Endoscopy*, vol. 36, pp. 1-8, 2004. (SCI 3.227)
- Tsai-Rong Chang, E-Liang Chen, Paul Wai-Fung Poon, Pau-Choo Chung and Tzai-Wen Chiu, "Responses of central auditory neurons modeled with finite impulse response (FIR) neural networks," *Computer Methods and Programs in Biomedicine*, Vol. 74, pp.151-165, 2004. (SCI 0.724)