1. Aditi Singh, Arvind Bansal, Cheng-Chang Lu, “Synchronous Colored Petri Net Based Modeling and Video Analysis of Conversational Head-Gestures for Training Social Robots,” Proceedings of the Future Technologies Conference 2021, Vol 2, (Lecture Notes in Networks and Systems, Vol 359,) pp. 476-495, Springer.
2. Chris lenart, Yuxin Yang, Zhiqing Gu, Karl Kosko, Richard Ferdig, Qiang Guan, Cheng-Chang Lu, “GazeXR: A General Eye-Tracking System Enabling Invariable Gaze Data in Virtual Environment,” HCI International 2021, July 2021.
3. Richard E. Ferdig, Enrico Gandolfi, Robert Clements, Chris Lenart, Annette Kratcoski and Cheng-Chang Lu, “Social Engagement in Layers of History: An XR experience of the May 4th Shootings,” 2020 Frameless Symposium, Nov 2020.
4. Preoyati Khan, Md Amjad Hossain, Robert Clements, Cheng-Chang Lu,“Distributed ImageJ(Fiji): A Framework for Parallel Image Processing,” accepted, IET Image Processing, April 2020.
5. Matthew Miller, Yuxin Yang, Karl Kosko, Richard Ferdig. Cheng-Chang Lu, Qiang Guan, “Emperia: Powering the future Education Training Systems with Device Agnostic Web-VR Apps,” HCI International 2020, July 2020.
6. Yuan Zhi, Ye Zhao, Fan Chen, Sean Reber, Cheng-Chang Lu, Yang Chen, “Detail-Preserving Compression for Smoke Based Flow Visualization”, Journal of Visualization, Nov 2019.
7. Ferdig, R.E., Lorch, P.D., Pytash, K.P, Mulvey, B., Kosko, K., Lu, C.C., Geschke, J.M., & Vasarhelyi, J., “The use of mobile applications for informal science learning in parks”. Video presentation for the *2017 NSF Stem For All Video Showcase;* available online at: http://stemforall2017.videohall.com/presentations/964 May 2017.
8. Omar Alaql, Kambiz Ghazinour , Cheng-Chang. Lu, "Classification of Image distribution for Image Quality Assessment," 2016 International Conference on Computational Science and Computational Intelligence, Dec 2016.
9. Omar Alaql, Kambiz Ghazinour , Cheng-Chang Lu “ Classification of Image Distortions Based On Features Evaluation, “ IEEE International Symposium on Multimedia, Dec 2016.
10. Ferdig, R.E., Pytash, K.E., Kosko, K.W., Gandolfi, E., & Mathews, R. with Bedesem, P., Harjusola-Webb, S., Sansosti, F., Lu, C.C, Kratcoski, A., Mulvey, B., and Boyle, S. (2016). Use and perceptions of mobile applications and technologies by those interested in special education. Kent, OH: Kent State University.
11. Enrico Gandolfi, Richard E. Ferdig, Peña Bedesem, Cheng-Chang Lu, Guest Editors, "Mobile learning and Special Education", International Journal on Interaction Design & Architecture(s) - IxD&A, July 2016.
12. Omar Alaql and Cheng-Chang Lu. “Text Line Extraction for Historical Document Image using Steerable Directional Filters,” 2014 International Conference on Audio, Language and Image Processing, July 2014.
13. Mehdi Ghayoumi and Cheng-Chang Lu. “Improving Exemplar based Implanting Method with a Fuzzy Approach,” 2014 International Conference on Audio, Language and Image Processing, July 2014.
14. Wayne Cheng, Yufan Liu and Cheng-Chang Lu, “MRI Based Attenuation Correction and Medical Image Registration on GPU,” The 4th International Congress on Image and Signal Processing, Shanghai, China, Oct 2011.
15. Mingming Lu, Qiyu Zhang, Wayne Cheng, Cheng-Chang Lu, “Retrieval of Multimedia Objects using Color Segmentation and Dimension Reduction Features,” International Conference on Image and Graphics, Xi’an, China, Sep 2009.
16. Wayne Cheng and Cheng-Chang Lu, “Acceleration of Medical Image Registration using GPU in Computing Normalized Mutual Information,” International Conference on Image and Graphics, Xi’an, China, Sep 2009.
17. Yujun Guo, Wayne Cheng, Cheng-Chang Lu, ``Non-Rigid Mammogram Registration using Demons Algorithm,'' IASTED International Conference on Signal and Image Processing, Honolulu, Hawaii, August 2007.
18. Dee Wu, Yujun Guo, Cheng-Chang Lu, Jasjit S. Suri, "Improvement to Functional Magnetic Resonance Imaging (fMRI) Methods Using Non-Rigid Body Image Registration Methods for Correction in Presence of Susceptibility Artifact Effects," IEEE Engineering in Medicine and Biology Society Conference, pp. 1018-1020, August 2006, New York.
19. Yujun Guo, Cheng-Chang Lu, "Multi-modality Image Registration Using Mutual Information Based on Gradient Vector Flow," International Conference on Pattern Recognition 2006, Hong Kong, pp..697-700, August 2006.

20. Yujun Guo, Cheng-Chang Lu, "Multi-modality Image Registration Using Gradient Vector Flow Intensity," International Workshop on Medical Imaging and Augmented Reality 2006, Shanghai, China, pp.277-284, August 2006
21. Yujun Guo, Radhika Sivaramakrishna, Cheng-Chang Lu, Jasjit S. Suri, Swamy Laxminarayan, "Breast Image Registration Techniques: a Survey." Medical & Biological Engineering & Computing, Vol. 44, No.1-2, pp. 15-26, March 2006.
22. Qiyu Zhang and Cheng-Chang Lu, ``An Effective Scheme for Content Based Image Retrieval Systems,'' *Proceedings of 2005 World Congress in Applied Computing, VISION'05*, Las Vegas , June 2005.
23. Chi-Hsiang Lo, Yujin Guo, Cheng-Chang Lu, and Chi-Hua Tung, ``Future of Image Registration: A Multi-Resolution Approach to Medical Image Registration Using Binning Technique," *Hand Book of Medical Image Analysis: Volume III - Registration Models: Part A, pp. 535-554*, Springer/Kluwer, 2005.
24. Xiao-Hong Zhu, Cheng-Chang Lu, and Yang-Ming Zhu, ``Stereo and Temporal Retinal Image Registration by Mutual Information maximization," *Hand Book of Medical Image Analysis: Volume III - Registration Models: Part A, pp. 151-184*, Springer/Kluwer, 2005.
25. Zhen Ye and Cheng-Chang Lu, ``A Wavelet Domain Hierarchical Hidden Markov Model," *Proceedings of 2004 IEEE International Conference on Image Processing*, full text on CDROM, October 2004.
26. Zhen Ye, Zhongmin Lin, and Cheng-Chang Lu, ``A Fast 3D Region Growing Approach for CT Angiography Applications," *Proceedings of 2004 SPIE Medical Imaging Conference*, full text on CDROM, February 2004.
27. Zhen Ye and Cheng-Chang Lu, ``A Complex Wavelet Domain Markov Model for Image Denoising," *Proceedings of 2003 IEEE International Conference on Image Processing*, full text on CDROM, September 2003.
28. Chi-Hsiang Lo, Yujin Guo, and Cheng-Chang Lu, ``A Binarization Approach of CT-MR Registration Using Normalized Mutual Information," *Proceedings of IASTED International Conference on Signal and Image Processing*, pp. 496-501, August 2003.
29. Chi-Hsiang Lo and Cheng-Chang Lu, ``Multi-resolution CT-MR Brain Image Registration Using Normalized Mutual Information," *Proceedings of 2003 International Conference on Imaging Science, Systems, and Technology*, pp. 3-7, June 2003.
30. Chi-Hsiang Lo, Yujin Guo, and Cheng-Chang Lu, ``Results of Retrospective Image Registration Evaluation,'' Software Implementation with Results at www.vuse.vanderbilt.edu/~image/registration, Jan 2003.
31. Zhen Ye and Cheng-Chang Lu, ``Wavelet-Based Unsupervised SAR Image Segmentation Using Hidden Markov Tree Models," *Proceedings of 2002 International Conference on Pattern Recognition*, full text on CDROM, August 2002.
32. Zhen Ye and Cheng-Chang Lu, ``Unsupervised Multiscale Classification Using Wavelet-Domain Hidden Markov Tree Model," *Proceedings of 2002 IEEE International Conference on Acoustic, Speech, and Signal Processing*, full text on CDROM, May 2002.
33. Zhen Ye and Cheng-Chang Lu, ``Unsupervised Multiscale Focused Objects Detection Using Hidden Markov Tree," *Proceeding of the 4th International Conference on Computer Vision, Pattern Recognition & Image Processing*, pp. 812-815, March 2002.
34. Zhen Ye and Cheng-Chang Lu, ``An Unsupervised Multiresolution Textured Image Segmentation Using Wavelet-Domain Classification," *Proceedings of the 2001 International Conference on Imaging Science, Systems, and Technology*, pp. 287 -293, June 2001.
35. Jeffery Childs, Cheng-Chang Lu and Jerry Potter, ``Some novel improvements in the Quickstep Gaussian decomposition algorithm," *Proceedings of IASTED, Computer Graphics and Imaging*, pp. 125-130, November 2000.
36. Jeffery Childs, Cheng-Chang Lu and Jerry Potter, ``A fast, space-efficient algorithm for the approximation of images by an optimal sum of Gaussians," *Proceedings of Graphics Interface*, pp. 153-162, May 2000.
37. Jeffery Childs, Cheng-Chang Lu and Jerry Potter, ``Intrinsic Boundaries in Gaussian Decomposition," *Proceedings of Computer Graphics and Imaging*, pp. 64-68, October 1999.
38. Cheng-Chang Lu and Yong Ho Shin, ``A Simulation of Variable Block Size Vector Quantization of Images", *International Journal of Modeling and Simulation*, vol. 19, no.3, pp. 250-254, July 1999.
39. Chia-Hsu Kuo and Cheng-Chang Lu, ``Novel Algorithms for Improving Dynamic Huffman Coding," *Proceedings of 1997 Multimedia Technology and Applications Symposium*, pp.118-126, December 1997.

40. Cheng-Chang Lu and Paul Stephan, ``Adaptive Pruned Tree-Structured Vector Quantization for use in Image Processing," *Proceeding of Signal and Image Processing, IASTED SIP-97*, pp.282-284, December 1997.
41. Chia-Hsu Kuo, Mu-King Tsai and Cheng-Chang Lu, ``An Efficient Repetition Finder for Improving Dynamic Huffman Coding", *IEEE Transactions on Communications*, vol.COM-45, no.11, pp.1363-1366, November 1997.
42. Cheng-Chang Lu and Yong Ho Shin, ``Parallel Implementations of Huffman Coding Using Associative Memory," *International Journal of Modelling and Simulation*, vol. 16, no.2, pp. 67-72, April 1996.
43. Chia-Hsu Kuo and Cheng-Chang Lu, ``Conditional Entropy Coding using High-Order Statistics," *Proceeding of Signal and Image Processing*, IASTED SIP-95, pp.410-413, November 1995.
44. M.K. Tsay, C.H. Kuo, Cheng-Chang Lu, M.K. Chiu, ``Compression of Gray Scale Images Using Alphabet Reduction Models," *International Journal of Modelling and Simulation*, vol. 15, no.3, pp. 107-112, July 1995.
45. Cheng-Chang Lu, ``Application of Short-Kernel Filter Pairs for Temporal Filtering of Image Sequences," *IEEE Transactions on Consumer Electronics*, vol.CE-41, no.1, pp. 49-52, February 1995.
46. Cheng-Chang Lu and James George Dunham, ``Shape Matching Using Polygon Approximation and Dynamic Alignment," *Pattern Recognition Letters*, vol. 14, pp. 945-949, December 1993.
47. Cheng-Chang Lu and Yong Ho Shin, ``A Self-Organization Network for Vector Quantization of Images," *International Journal on Optical Memory and Neural Networks*, vol. 2, no. 1, pp. 51-58, September 1993.
48. Cheng-Chang Lu, Norhanim Omar and Y.Q.Zhang, ``A Modified Short-Kernel Filter Pair for Perfect Reconstruction of HDTV Signals," *IEEE Transactions on Circuits and Systems for Video Technology*, vol.3, no.2, pp. 162-164, April 1993.