

Stan Ahalt—Invited Presentations

1. Keynote Speaker: “Industrial and Social Computing,” ADCOM 2009, IISC, Bangaluru, India, Dec. 14, 2009.
2. Keynote Speaker: “The Ohio Supercomputer Center: Research Overview and Economic Competitiveness Activities,” Great Plains Network Annual Meeting, Kansas City, KS, May 28, 2009.
3. Invited Presentation: “Blue Collar Computing: Lessons Learned,” HPC Forum, Roanoke, VA, Apr. 20-22, 2009.
4. Invited presentation: “Data Intensive Computing Environments,” DICE Program Review, Cincinnati, OH, May, 2008
5. Keynote Speaker: “Blue Collar Computing,” *Royal Academy of Engineering*, Madrid, Spain, Oct. 2007
6. “The impact of the TFN on education in Ohio”, *Educational Technology Conference: eTech Ohio K-12 teacher's conference*, Columbus, OH, Feb. 2007
7. Keynote Speaker, “Blue Collar Computing,” *High Performance Computing Technology Pellissippi Conference*, May 2005
8. Invited speaker, “HPC as an Economic Driver,” *Federal Management of Change Conference (MOC)*, Philadelphia, PA, May 2005
9. Keynote speaker, “HPC as an Economic Engine: Blue Collar Computing” *SC2004*, Pittsburgh, PA, Nov. 2004
10. Invited presentation, “Blue Collar Computing,” Columbus Rotary Club, Aug. 30, 2004
11. Invited Speaker, “Barriers to Industry HPC usage,” *CoC/DARPA Workshop on HPC*, Jul., 2004
12. Invited Speaker, “High-Level Languages for HPC”, *DARPA HLL Workshop*, Santa Monica, CA, May 2004
13. S. Ahalt, “Supercomputing and Homeland Security,” *Summer Institute on Advanced Computation*, Invited Presentation, August 27-29, 2003
14. “Content-based Image and Video Compression,” S. C. Ahalt, X. Du, and H. Li, *Proceedings of SPIE Vol. 4727, Algorithms for Synthetic Aperture Radar Imagery, IX, Aerosense*, April 2002, Orlando, FL
15. “Kernel-based Discriminant Feature Extraction using Representative Data,” H. Li, J. L. Sancho Gomez, and S. C. Ahalt, *Proceedings of SPIE Vol. 4729, Signal Processing, Sensor Fusion, and Target Recognition XI, Aerosense*, April 2002, Orlando, FL
16. “Multiclass Kernel-based Feature Extraction,” Y. Zhao, H. Li, and S. C. Ahalt, *Proceedings of SPIE Vol. 4730, Data Mining and Knowledge Discovery: Theory, Tools, and Technology IV, Aerosense*, April 2002, Orlando, FL
17. “Modified Kernel-based Nonlinear Feature Extraction,” Junshui Ma, Simon Perkins, James Theiler and Stanley Ahalt, *Proceedings of the 2002 International Conference on Machine Learning and Applications (ICMLA'02)*, Las Vegas, NV, June 24-27, 2002)
18. Junshui Ma and Stan Ahalt, “Parameter Estimation Algorithms based on a Physics-based HRR Moving Target Model,” *Proceedings of Algorithms for Synthetic Aperture Radar Imagery VII, SPIE Aerosense*, April 2001, Orlando, FL
19. He, Chao / Dong, Jianyu / Zheng, Yuan F. / Ahalt, Stanley C. “Object Tracking using the Gabor Wavelet Transforms and the Golden Section Algorithm,” *ICRA2001* in Seoul, Korea
20. Junshui Ma, Honglin Li, and Stanley C. Ahalt, “Using Support Vector Machines as HRR Signature Classifiers,” *Proceedings of the 2001 SPIE Aerosense Conference*, Orlando, FL, April 15-19, 2001
21. Xun Du, Honglin Li, and Stanley C. Ahalt, “Content-Based Image Compression,” *Proceedings of the 2001 SPIE Aerosense Conference: Algorithms for Synthetic Aperture Radar Imagery VIII*, Orlando, FL, April 15-19, 2001

22. Invited speaker, European Project COST#276, *Conference on Multimedia Communications*, "Video Indexing and Annotation," November, 2001
23. "ART-2 and Multiscale ART-2 for On-Line Process Fault Diagnosis - Validation via Industrial Case Studies and Monte Carlo Simulation," *KEYNOTE PRESENTATION, 4th IFAC Workshop on On-Line Fault Detection & Supervision in the Chemical Process Industries*, June 7-8, 2001, Jeju Island, Korea
24. Invited workshop presentation: "Observing and Encoding Key Characteristics: The Challenge of Feature Discovery," July 29th, 1999, Laredo, Spain
25. Invited lecture: "Estimating the Orientation of Satellite Components from Ground Based Images," *Universidad de Carlos III de Madrid*, July 26th, 1999, Madrid, Spain
26. Invited lecture "Content-based Image Compression: Initial Results and Observations," *Universidad de Carlos III de Madrid*, July 27th, 1999, Madrid, Spain
27. Invited Lecture: "Load-forecasting using Non-linear Time-series Prediction," *REE (National Electric Corporation of Spain)*, June 12, 1996, Madrid, Spain
28. Invited Lecture: "Vector Quantization of Real-Time Video Sequences". *Telefonica (National Telephone Company of Spain)*, March 15, 1996, Madrid, Spain
29. Invited Lecture: "Vector Quantization of Real-Time Video Sequences". *Universidad La Coruña*, May 22, 1996, La Coruña, Spain
30. Invited Lecture: "Boundary Methods," *Universidad Automata de Madrid*, April 8, 1996, Madrid, Spain
31. Short Course: "Parallel Computing," *Universidad de Carlos III*, March 7-9, 1996, Madrid, Spain
32. Short course: "Parallel Computing and Military Electronics," *Society of Military Electronics*, September 6-8, 1995, Madrid, Spain
33. Invited lecture: "Statistical Properties of Vector Quantization for Image Compression," *The Ohio State University Statistics Department*, October 17, 1995, Columbus, OH
34. Invited presentation: "Vector Quantization using Artificial Neural Network Models," 7th *Tyrrhenian Workshop on Digital Communications*, September 10-14, 1995, Viareggio, Italy
35. Keynote Presentation: Stanley C. Ahalt, "Mapping Neural Networks to Supercomputers: Applications and Examples," *1994 Brazilian Conference on Supercomputing*, September 14-16, 1994, Porte Allegre, Brazil
36. Plenary Presentation: "Real-time Video Compression using Entropy-biased ANN Codebooks," *1995 SPIE Conference*, April 9, 1994, Orlando, FL
37. Invited Lecture: "Image Compression using Vector Quantization based on ANN Models," *Universidad Polytechnica de Madrid, E.T.S.I. de Telecomunicacion*, June 21, 1993, Madrid, Spain
38. Invited Tutorial: "Image Compression, ANN models and Vector Quantization," *EEC Research Programme WG.2 Workshop on Adaptive Algorithms*, June 16-18, 1993, Vigo, Spain
39. Plenary Presentation: "Robust Variable Bit-rate Coding using Entropy-biased Codebooks," *1993 SPIE Conference*, April 21, 1993, Orlando, FL
40. Invited Presentation: "Robust High-fidelity Coding based on Entropy Biased ANN Codebooks," *Neural Networks for Physicists Workshop, Theoretical Physics Institute*, August 21, 1992, University of Minnesota, Minneapolis, MN
41. Invited Lecture: "Video Data Compression using the FSCL Neural Network," November 7, 1991, *Kent State University*, Kent, OH
42. Invited Tutorial: "Speech and Image Rate Reduction using ANN Vector Quantization". *EEC Research Programme WG.2 Workshop on Adaptive Algorithms*, March 13-15, 1991, Vigo, Spain

43. Invited Lecture: "Speech and Image Rate Reduction using ANN Vector Quantization," *Universidad Polytechnica de Madrid, E.T.S.I. de Telecomunicacion*, March 11, 1991, Madrid, Spain
44. Invited panel member: "Neural Networks and Supercomputing," *Supercomputing World Conference*, San Diego, CA, July 1990
45. Invited Lecture: "Adaptive Vector Quantization," *Supercomputer Research Center*, December 6, 1989, Bethesda, MD
46. Invited Workshop Discussion Leader: *Neural Information Processing Conference*, December 1988, Denver, CO
47. Invited Lecture: "Neural Networks: Background and Applications," *Department of Optometry, The Ohio State University*, October 20, 1988, Columbus, OH
48. Invited Lecture: "Neural Networks: Background and Applications," *Department of Nuclear Engineering, The Ohio State University*, October 13, 1988, Columbus, OH