

CURRICULUM VITAE OF D. MITCHELL WILKES

Educational Background

July 1984 to September 1987: Georgia Tech, Atlanta, Georgia, Ph.D. in Electrical Engineering, September 1987, Major area: Digital Signal Processing.

January 1983 to June 1984: Georgia Tech, M.S.E.E., Major areas of concentration: Digital Signal Processing, Communications, and Control Theory.

June 1979 to August 1981: Florida Atlantic University, Boca Raton, Florida, B.S.E.E.

Employment History

June 1994 to present: Department of Electrical Engineering and Computer Science, Vanderbilt University. Associate Professor of Electrical Engineering, Associate Professor of Computer Engineering.

September 1987 to June 1994: Department of Electrical Engineering, Vanderbilt University. Assistant Professor of Electrical Engineering.

June 1984 to September 1987: Georgia Tech. Research Assistant in the School of Electrical Engineering.

January 1983 to June 1984: Georgia Tech. Teaching Assistant in the School of Electrical Engineering.

August 1981 to December 1983: Mitel Inc., Boca Raton, Florida. Design and Development Engineer.

March 1980 to August 1980: Burrough's Corp., Hollywood, Florida. Cooperative education student-engineer.

Peer-Reviewed Journal Publications

1. Hashim NW, Wilkes DM, Salomon R, Meggs J, France DJ., "Acoustic Measures of Speech as Predictors of Depression Severity," *Medical & Biological Engineering & Computing*, submitted Oct. 2014, in review.
2. Wang, X., Wang, X.L., Ma, Y., and Wilkes, D.M., "A fast MST-inspired kNN-based outlier detection method," *Information Systems*, vol. 48:89-112, March, 2015. Doi:10.1016/j.is.2014.09.002.
3. R. Banalagay, B. Landman, D.M. Wilkes, et al., "Resource Estimation in High Performance Medical Imaging," *Neuroinformatics*, vol. 12, no.4, pp. 563-573, 2014.
4. W.G. Bennett, N.C. Hooten, R.D. Schrimpf, R.A. Reed, R.A. Weller, M.H. Mendenhall, A.F. Witulski, and D.M. Wilkes, "Experimental characterization of radiation-induced charge sharing," *IEEE Trans. Nuclear Science*, vol. 60. no. 6, pp. 4159-4165, Dec., 2013.

5. X. Wang, X.L. Wang, Cong Chen and D.M. Wilkes, "Enhancing minimum spanning tree-based clustering by removing density-based outliers," *Digital Signal Processing*, Vol. 23, No. 5, September, 2013, pp. 1523-1538.
6. B. T. Gibson, D. M. Wilkes, G. E. Cook, and A. M. Strauss. (2013). In-Process Detection of Faying Surface Sealant Application Flaws in Friction Stir Welding. *Journal of Aircraft*. doi: 10.2514/1.C031939
7. X. Wang, X.L. Wang, and D.M. Wilkes, "An automated vision based on-line novel percept detection method for a mobile robot," *Robotics and Autonomous Systems*, July, 2012, pp. 1279-1294
8. Hunter, J. E., Tugcu, M., Wang, X., Costello, C., and Wilkes, D. M., "Exploiting sparse representations in very high dimensional feature spaces obtained from patch based processing," *Machine Vision and Applications*, Springer, Mar. 2010. DOI: 10.1007/s00138-010-0263-2, <http://dx.doi.org/10.1007/s00138-010-0263-2>.
9. Gordon, S.M., Kawamura, K., and Wilkes, D.M., "Neuromorphically inspired appraisal-based decision making in a cognitive robot," *IEEE Trans on Autonomous Mental Development*, vol. 2, no. 1, pp. 17-39, Mar. 2010, 10.1109/TAMD.2010.2043530.
10. Fleming, P.A., Hendricks, C.E., Cook, G.E., Wilkes, D.M., Strauss, A.M., and Lammlein, D.H., "Seam-tracking for friction stir welded lap joints," *Journal of Materials Engineering and Performance*, vol. 19, no. 8, pp. 1128-1132, Nov., 2010.
11. Wang, X., Wang, X., and Wilkes, D.M., "A divide-and-conquer approach for minimum spanning tree-based clustering," *IEEE Trans Knowledge and Data Engineering*, vol. 21, no. 7, July, 2009.
12. Paul A. Fleming, Christopher E. Hendricks, D. M. Wilkes, George E. Cook, Alvin M. Strauss. "Automatic seam-tracking of friction stir welded T-joints." *International Journal of Advanced Manufacturing Technology*, March, 2009.
13. Fleming, P.A., Lammlein, D.H., Wilkes, D.M., Cook, G.E., Strauss, A.M., DeLapp, D.R., Hartman, D.A., "Misalignment detection and enabling of seam tracking for friction stir welding," *Science and Technology of Welding and Joining*, vol. 14, no. 1, pp. 93-96, January, 2009.
14. Wang, X., Tugcu, M., Hunter, J.E., and Wilkes, D.M., "Exploration of configural representation in landmark learning using working memory toolkit," *Pattern Recognition Letters*, vol. 30, no. 1, pp. 66-79, 2009.
15. Fleming, P., Lammlein, D., Wilkes, D.M., Fleming, K., Bloodworth, T., Cook, G.E., Strauss, A., DeLapp, D., Lienert, T., Matthew, B., and Prater, T., "In process gap detection in friction stir welding," *Sensor Review*, vol. 28, no. 1, 2008.
16. Herberg, J.S., Saylor, M.M., Ratanaswasd, R., Levin, D.T., Wilkes, M., "Audience-contingent variation in action demonstrations for humans and computers," *Cognitive Science: A Multidisciplinary Journal*, vol. 32, no. 6, pp. 1003-1020, 2008.
17. Matthies, D.S., Fleming, P.A., Wilkes, D.M., Blakely, R.D., "The C. elegans Choline Transporter CHO-1 Sustains Acetylcholine Synthesis and Motor Behavior in an

Activity-Dependent Manner,” *Journal of Neuroscience*, vol. 26, pp. 6200-6212, June 2006.

18. Cevikalp, H., M. Neamtu, and M. Wilkes, “Discriminative common vector method with kernels” *IEEE Trans. on Neural Networks*, vol. 17, no. 6, pp. 1550-1565, Nov. 2006.
19. Cevikalp, H., M. Neamtu, M. Wilkes, and A. Barkana, “Discriminative common vectors for face recognition,” *IEEE Trans. on Pattern Analysis and Machine Intelligence*, January, 2005.
20. Ozdas, A., R.G. Shiavi, D.M. Wilkes, M.K. Silverman, and S.E. Silverman, “Analysis of Vocal Tract Characteristics for Near-term Suicidal Risk Assessment.” Special 2003 Issue of *Methods of Information in Medicine*, January, 2004, pp. 36-38.
21. Asli Ozdas, Richard G. Shiavi, Stephen Silverman, Marilyn Silverman, and D.M. Wilkes, “Investigation of Vocal Jitter and Glottal Flow Spectrum as Possible Cue for Depression and Near-Term Suicidal Risk,” *IEEE Transactions on Biomedical Engineering*, September, 2004.
22. Park, J., P. Ratanaswasd, E.E. Brown Jr., T.E. Rogers, K. Kawamura, and D.M. Wilkes, Towards a Personal Robotic-aid System, *International Journal of Human-Friendly Welfare Robotic Systems*, Vol. 5, No. 2, pp. 2-12, June, 2004.
23. A. Sekmen, M. Wilkes, S. Goldman, and S. Sabatto, “Exploring importance of location and prior knowledge of environment on mobile robot control,” *Int. Journal of Human Computer Studies*, vol. 58, issue 1, pp. 5-20, January, 2003.
24. A. Al-Smadi and D.M. Wilkes, “Robust and Accurate ARX and ARMA Model Order Estimation of Non-Gaussian Processes,” *IEEE Trans. on Signal Processing*, vol. 50, no. 3, pp. 759-763, March, 2002.
25. K. Kawamura, A.B. Koku, D.M. Wilkes, R.A. Peters II, and A. Sekmen, “Toward Egocentric Navigation,” *Int. Journal of Robotics and Automation*, vol. 17, no. 4, 2002.
26. A. Sekmen, M. Wilkes, and K. Kawamura, “An application of passive human-robot interaction: Human tracking based on attentional distraction,” *IEEE Transactions on Systems, Man and Cybernetics, Part A*, vol. 32, no. 2, pp. 248-259., 2002.
27. Attakitmongcol, K., Hardin, D., and Wilkes, D.M., “Multiwavelets Prefilters II: Optimal Orthogonal Prefilters,” *IEEE Transactions on Image Processing*, Vol. 10, No. 10, pp. 1486-1487, 2001.
28. K. Kawamura, R.A. Peters II, D.M. Wilkes, W.A. Alford, and T.E. Rogers, " ISAC: Foundations in Human-Humanoid Interaction", *IEEE Intelligent Systems*, July/August 2000.
29. France, D. J., Shiavi, R. G., Silverman, S., Silverman, M., and Wilkes, D. M., “Acoustical Properties of Speech as Indicators of Depression and Suicidal Risk,” *IEEE Trans. On Biomedical Engineering*, Vol. 47, No. 7, pp. 829-837, 2000.
30. Wilkes, D.M., Alford, A., Cambron, M.E., Rogers, T.E., Peters II, R.A. and Kawamura, K., "Designing for Human-Robot Symbiosis," *Industrial Robot*, Vol. 26, No. 1, pp. 49-58, 1999.

31. Wilkes, D.M., Alford, A., Pack, R.T., Rogers, T., Peters II, R.A. and Kawamura, K., "Towards Socially Intelligent Service Robots," *Applied Artificial Intelligence*, Volume 12, No. 7-8, pp. 729-766, 1998.
32. A.A. (Louis) Beex, D.M. Wilkes, and M.P. Fargues, "The C-RISE Algorithm for Eigendecomposition of Hermitian Pencils," *IEE Proceedings Radar, Sonar and Navigation*, vol. 142, no. 3, pp. 97-104, June, 1995.
33. A. Al-Smadi and D.M. Wilkes, "Simplifying and Extending a Useful Class of Signals and Impulse Responses," *IEEE Trans. on Education*, vol. 38, no. 4, pp. 301-305, November, 1995.
34. D.M. Wilkes and H. Alnajjar, "Critical Distance and the Performance of Sensor Array Geometries," *IEE Proceedings Radar, Sonar and Navigation*, vol. 141, no. 6, pp. 333-336, December, 1994.
35. A. Kara, D.M. Wilkes, and K. Kawamura, "3D Structure Reconstruction from Point Correspondences between Two Perspective Projections," *Comp. Vision, Graphics, and Image Understanding: Image Understanding*, vol. 60, no. 3, pp. 392-397, November, 1994.
36. D.M. Wilkes, H. Alnajjar, G. Liang, and J.A. Cadzow, "Recursive Eigenspace Decomposition, RISE, and Applications," *Digital Signal Processing - A Review Journal*, vol. 4, no. 2, pp. 79-94, April, 1994.
37. G. Liang, D.M. Wilkes, and J.A. Cadzow, "ARMA Model Order Estimation Based on the Eigenvalues of the Covariance Matrix," *IEEE Trans. on Signal Processing*, vol. 41, no. 10, pp. 3003-3009, October, 1993.
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39. J. Sztipanovits, D.M. Wilkes, L.E. Lynd, and G. Karsai, "The Multigraph and Structural Adaptivity," *IEEE Transactions on Signal Processing*, vol. 1, no. 8, pp. 2695-2716, August, 1993.
40. D.M. Wilkes and J.A. Cadzow, "The Effects of Phase on High Resolution Frequency Estimators," *IEEE Transactions on Signal Processing*, vol. 41, no. 3, pp. 1319-1330, March, 1993.
41. G. Liang and D.M. Wilkes, "An Improved Hessian Matrix for Recursive Maximum Likelihood ARMA Estimation," *IEE Proceedings-F Radar and Signal Processing*, vol. 139, no. 3, pp. 212-220, June, 1992.
42. D.M. Wilkes, "A Reverse Formulation of the RISE Algorithm," *IEEE Transactions on Signal Processing*, vol. 40, no. 8, pp. 2105-2108, August, 1992.
43. J.A. Cadzow and D.M. Wilkes, "Enhanced Rational Signal Modeling," *Signal Processing*, vol. 25, no. 2, pp. 171-188, November, 1991.
44. D.M. Wilkes, "The RISE Algorithm for Recursive Eigenspace Decomposition," *IEEE Transactions on Signal Processing*, vol. 40, no. 3, pp. 703-707, March, 1992.

45. D.M. Wilkes, S.D. Morgera, F. Noor, and M.H. Hayes, "A Hermitian Toeplitz Matrix is Unitarily Similar to a Real Toeplitz-plus-Hankel Matrix," *IEEE Transactions on Signal Processing*, vol. 39, no. 9, pp. 2146-2148, September, 1991.
46. D.M. Wilkes and M.H. Hayes, "Block Toeplitz Approximation," *Signal Processing*, pp. 303-313, October, 1988.
47. D.M. Wilkes and M.H. Hayes, "An Eigenvalue Recursion for Toeplitz Matrices," *IEEE Transactions on Acoustics, Speech, and Signal Processing*, vol. ASSP-35, pp. 907-909, June, 1987.

Patents

P. Fleming, D. Lammlein, G.E. Cook, D.M. Wilkes, A.M. Strauss, D. Delapp, D.A. Hartman, "Lateral Position Detection and Control for Friction Stir System," U.S. Patent, No. US 7,850,057 B2, issued Dec. 14, 2010.

Peer-Reviewed Book Chapter

Wilkes, M., Erdemir, E., and Kawamura, K., "A Neuromorphically-Inspired Architecture for Cognitive Robots," in *Neuromorphic and Brain-based Robots: Trends and Perspectives*, Cambridge University Press, Dec. 2010.

Wilkes, D.M., Alford, A., Pack, T., Rogers, T.E., Brown Jr., E.E., Peters II, R.A., and Kawamura, K., "Intelligent Systems and Technologies for the Disabled," in *Intelligent Systems and Techniques in Rehabilitation Engineering*, CRC Press, March, 2000.

M.H. Hayes, D.M. Wilkes, and M.A. Clements, "Iterative Harmonic Decomposition of Nonstationary Random Processes: Theory and Application to Spectral Line Tracking," In *Mathematics in Signal Processing*, T. S. Durrani, Ed., Clarendon Press, Oxford, 1987.

Book Chapter

J.A. Cadzow and D.M. Wilkes, "Enhanced Sinusoidal and Exponential Data Modeling," in *SVD and Signal Processing II*. ed. by R. Vaccaro, Elsevier Publishers: Amsterdam, 1991.

US ARMY Published Report

J.A. Cadzow, D.M. Wilkes, R.A. Peters, X. Li, J.N. Patel, "Two-Dimensional Models for the Simulation of Infrared Backgrounds," Contractor Report BRL-CR-692, June 1992.

Other Publications and Presentations

1. B.P. Rogers, D.M. Wilkes, J.C. Gore, Z. Shi, V.L. Morgan, "A confound between static and dynamic connectivity," Conference on Resting State Brain Connectivity 2014, September 2014, Cambridge, MA.

2. ZY Shi, A Mishra, L Chen, DM Wilkes, VL Morgan, JC Gore, BP Rogers, "Apparent dynamic changes in resting-state connectivity in somatosensory cortex," Conference on Resting State Brain Connectivity 2014, September 2014, Cambridge, MA.
3. Bingshu Wang, Ruben M. Sandoval, Bruce A. Molitoris, Don Mitchell Wilkes, William Fissell, "In Vivo Measurement of Albumin Concentration Gradients within the Glomerular Capillary Wall," Presented at Kidney Week 2014, Nov. 2014, Philadelphia.
4. Rueben Banalagay, Ross Marshall Nesbit, Joseph J. Groszek, Don Mitchell Wilkes, William Fissell, "Intradialytic Antibiotic Concentrations Predict Pharmacokinetics Between Dialysis Treatments," Presented at Kidney Week 2014, Nov. 2014, Philadelphia.
5. N.N. Nik Hashim, D.M. Wilkes, R.M. Salomon and J.S. Meggs, "Analysis of timing pattern of speech as possible indicator for near-term suicidal risk and depression in male patients," *Proc. of Int. Conf. Sig. Proc. Sys.*, Kuala Lumpur, Malaysia, Dec., 2012.
6. Wilkes, D.M., Franklin, S., Erdemir, E., Gordon, S., Strain, S., Miller, K., and Kawamura, K., "Heterogeneous artificial agents for triage nurse assistance," *Proc. 2010 IEEE-RAS Int. Conf. Humanoid Robots*, pp. 130-137, Dec. 2010, Nashville.
7. Erdemir, E., Ozkan, M., Kawamura, K., Wilkes, D.M., Firat, M., and Polat, A., "Design and optimization of a fuzzy-neural hybrid controller for an artificial muscle robotic arm using genetic algorithms," *Proc. 2010 IEEE-RAS Int. Conf. Humanoid Robots*, pp. 530-535, Dec. 2010, Nashville.
8. Wilkes, D.M., "Research in the Intelligent Robotics Lab," presentation at Murray State University, Murray, Kentucky, Oct. 12, 2010.
9. Hunter, J. E., Wilkes, D. M., Levin, D.T., Heaton C., and M. M. Saylor, "Autonomous Segmentation of Human Action for Behaviour Analysis." *International Conference on Development and Learning (ICDL)*, Monterey, CA, August 9-12, 2008.
10. H. K. Keskinpala, T. Yingthawornsuk, D.M. Wilkes, R.G. Shiavi, R.M. Salomon, "Distinguishing High Risk Suicidal Subjects Among Depressed Subjects Using Mel-Frequency Cepstrum Coefficients and Cross Validation Technique". *Proc. 5th International Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications*: Florence, Italy, December 13-15, 2007.
11. M. Landau, T. Yingthawornsuk, D.M. Wilkes, R.G. Shiavi, R.M. Salomon, "Predicting Severity Of Mental State Using Vocal Output Characteristics". *Proc. 5th International Workshop on Models and Analysis of Vocal Emissions for Biomedical Applications*: Florence, Italy, December 13-15, 2007.
12. Keskinpala, H.K., Yingthawornsuk, T., Wilkes, D.M., Shiavi, R.G., Salomon, R.M., "Screening for High Risk Suicidal States Using Mel-CEPSTRAL Coefficients and Energy in Frequency Bands," *Proceedings of EUSIPCO 2007*, Poznan, Poland, September, 2007.
13. Yingthawornsuk, T., Keskinpala, H.K., Wilkes, D.M., Shiavi, R.G., Salomon, R.M., "Direct Acoustic Feature Using Iterative EM Algorithm and Spectral Energy for

Classifying Suicidal Speech,” *Proceedings of Interspeech 2007*, Antwerp, Belgium, August, 2007.

14. Fleming, P.A., Fleming, K.A., Lammlein, D., Wilkes, D.M., Bloodworth, T.S., Cook, G.E., Strauss, A.M., DeLapp, D. and Prater, T. "Automatic fault detection in Friction Stir Welding," *Materials Science and Technology Conference*, Detroit, Michigan, September 16-20, 2007.
15. Fleming, P.A., Bloodworth, T.S., Prater, T., Lammlein, D., Cook, G.E., Strauss, A., Wilkes, D.M., Delapp, D., Lienert, T.J., and Bement, M. "Automatic Fault Detection in Friction Stir Welding," presentation, *18th Aeromat Conference and Exposition*, Baltimore, Maryland, June 25-28, 2007.
16. Fleming, P.A., Bloodworth, T.S., Lammlein, D., Prater, T., Cook, G.E., Strauss, A., Wilkes, D.M., Delapp, D., Lienert, T.J., and Bement, M. "An investigation into tool wear detection in friction stir welding," presentation, *18th Aeromat Conference and Exposition*, Baltimore, Maryland, June 25-28, 2007.
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18. Tugcu, M., Wang, X., Hunter, J.E., Phillips, J., Noelle, D., and Wilkes, D. M., "A computational Neuroscience model of working memory with application to robot perceptual learning", *Third IASTED International Conference on Computational Intelligence (CI)*, Banff, Alberta, Canada, July 2-4 2007.
19. Herberg, J.S., Saylor, M.M., Levin, D.T., Ratanaswasd, P., & Wilkes, D.M., "The perceived intentionality of an audience influences action demonstrations," *Proceedings of the 5th Annual International Conference on Development and Learning*, 5, 34, 2006.
20. Levin, D.T., Saylor, M.M., Varakin, D.A., Gordon, S.M., Kawamura, K., & Wilkes, D.M., "Thinking about thinking in computers, robots, and people," *Proceedings of the 5th Annual International Conference on Development and Learning*, 5, 49, 2006.
21. Wilkes, D.M., M. Tugcu, J.E. Hunter, and D. Noelle, "Working Memory and Perception," *Proceedings of 14th Annual IEEE International Workshop on Robot and Human Interactive Communication (RO-MAN 2005)*, Nashville, TN, August 13-15, 2005, pp 686-691, 2005.
22. Skubic, M., D. Noelle, M. Wilkes, K. Kawamura, and J.M. Keller, A Biologically Inspired Adaptive Working Memory for Robots, *2004 AAAI Symposium Series*, Washington, D.C., October 21-24, 2004.
23. Cevikalp, H. and M. Wilkes, Face Recognition by using Discriminative Common Vectors, *17th Int. Conf. on Pattern Recognition (ICPR)*, Cambridge, UK, August 23-26, 2004.
24. Kawamura, K., D.M. Wilkes and J. Adams, Center for Intelligent Systems at Vanderbilt - An Overview, *IEEE Systems, Man and Cybernetics Newsletter*, Vol.1 (3) May 2003.

25. Suksakulchai, S., D.M. Wilkes and K. Kawamura, A Behavior-Monitoring Architecture for a Mobile Robot Enhancing Intelligence to Behavior-based Robotics, *IEEE International Symposium on Computational Intelligence in Robotics and Automation (CIRA)*, July 16-20, 2003, Kobe, Japan, pp. 157-162, 2003.
26. Keskinpala, T., D.M. Wilkes, K. Kawamura, and A.B. Koku, "Knowledge Sharing techniques for Egocentric Navigation", *Proceedings of the IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, Washington, DC, October 5-8, 2003, pp. 2469-2476, 2003.
27. Ozdas, A., R.G. Shiavi, D.M. Wilkes, M.K. Silverman, and S.E. Silverman, "Analysis of Vocal Tract Characteristics for Near-term Suicidal Risk Assessment". 4th International Workshop on Biosignal Interpretation: Como, Italy, June 24-26th 2002.
28. Kawamura, K., D.M. Wilkes, A.B. Koku, T. Keskinpala, "Perception-Based Navigation for Mobile Robots", Proc. of Multi-Robot System Workshop, Washington D.C, March 18-20, 2002.
29. K. Attakitmongcol, D. P. Hardin and D. M. Wilkes, "Optimal prefilters for the multiwavelet filter banks," *Proc. IEEE Int. Conf. Acoust., Speech, Sig. Processing*, vol. 6, Salt Lake City, UT, USA, pp. 3613-3616, May 7-11, 2001.
30. A. Sekmen, S. Sabatto, and M. Wilkes, "Two factors in mobile robot remote control: location and prior knowledge of the environment," accepted for IASTED International Conference on Robotics and Applications, Tampa, FL, 2001.
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32. A. Sekmen, A.B. Koku, and M. Wilkes, "Integration of sound source localization with a face tracker for human tracking," 5th World Multi-Conference on Systemics, Cybernetics, and Informatics (SCI'01), pp. 329-333, July 2001, Orlando, FL.
33. A. Sekmen, S. Zein-Sabatto, A.B. Koku, and M. Wilkes, "Important factors in the mobile robot user interface design," 5th World Multi-Conference on Systemics, Cybernetics, and Informatics (SCI'01), pp. 305-310, July 2001, Orlando, FL.
34. Kawamura, K., Wilkes, D.M., Suksakulchai, S., Bijayendrayodhin, and A., Kusumalukool, K., "Agent-Based Control and Communication of a Robot Convoy", *Proc. International Conference on Mechatronics Technology*, Singapore, June 2001.
35. Venkatachalam, S. Nordstrom, G. Peters, R. Wilkes, M. Alford, A., "Modeling of agent's behavior in human-robot interaction using model integrated computing," *Trans. IEEE SMC 2000*, Nashville, TN, October, 2000.
36. A. Sekmen, T. Rogers, and M. Wilkes, "Human tracking on sound localization and motion detection," *Proceedings of the 2000 IEEE International Conference on Systems, Man and Cybernetics*, pp. 888-893, October 2000, Nashville, TN.
37. Alford, A., Wilkes, M., and Kawamura, K., "System Status Evaluation: Monitoring the State of Agents in a Humanoid System", *Proceedings 2000 IEEE International Conference on Systems, Man and Cybernetics*, Nashville, October, 2000.

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40. Suksakulchai, S., Thongchai, S., Wilkes, D.M., and Kawamura, K., "Mobile Robot Localization using an Electronic Compass for Corridor Environment," *Proceedings 2000 IEEE International Conference on Systems, Man and Cybernetics*, Nashville, Tennessee, USA, October 8-11, 2000.
41. Kawamura, K., Alford, A., Hambuchen, K., and Wilkes, M., "Towards a Unified Framework for Human-Humanoid Interaction", *Proceedings of the First IEEE-RAS International Conference on Humanoid Robots*, September 2000.
42. Shu, S., Wilkes, D.M. and Kawamura, K., "Development of Reusable, Configurable, Extensible Holonic Manufacturing System, " *Proceedings of the 2000 IEEE International Conference on Systems, Man and Cybernetics*, Nashville, TN, v.3, pp.1679-1684, October 2000.
43. Kawamura, K., Peters II, R.A., Wilkes, D.M., Alford, W.A., and Rogers, T.E., "ISAC: Foundations in Human-Humanoid Interaction", *IEEE Intelligent Systems*, July/August 2000.
44. A. Sekmen, M. Cambron and M. Wilkes, "Three-dimensional target tracking using an adjustable infrared sensor configuration," *Proceedings of the 2nd International Conference on Recent Advances in Mechatronics*, pp. 203-206, May 1999, Istanbul, Turkey.
45. Alford, W.A., Rogers, T.E., Wilkes, D.M., and Kawamura, K., "Multi-Agent System for a Human-Friendly Robot," *Proceedings of the 1999 IEEE Int. Conf. On Systems, Man, and Cybernetics*, pp. 1064-1069, October 12-15, 1999, Tokyo, Japan.
46. Peters II, R.A., Wilkes, D.M., Gaines, D.M., and Kawamura, K., "A Biologically Motivated Software Architecture for an Intelligent Humanoid Robot," *Proceedings of IARP 99*, Jena, Germany, June 1999.
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49. Charoenseang, S., Srikaew, S.A., Wilkes, D.M., and Kawamura, K., "3-D Collision Avoidance for the Dual-Arm Humanoid Robot," *Proc. IASTED International Conference on Robotics and Manufacturing*, Banff, Canada, July 1998.

50. Srikaew, A., Cambron, M.E., Northrup, S., Peters II, R.A., Wilkes, D.M. and Kawamura, K., "Humanoid Drawing Robot," Proc. IASTED International Conference on Robotics and Manufacturing, Banff, Canada, July 1998.
51. Charoenseang, S., Srikaew, S.A., Wilkes, D.M. and Kawamura, K., "Integrating Vision Feedback and Force Feedback in 3-D Collision Avoidance for a Dual-Arm Humanoid Robot," Proc. 1998 International Conference on SMC, San Diego, October 1998.
52. D.M. Wilkes, R.T. Pack, W.A. Alford, and K. Kawamura, "HuDL, A Design Philosophy for Socially Intelligent Service Robots," to appear in the working notes of the AAAI Symposium on Socially Intelligent Agents, 1997.
53. A. Alford, D. M. Wilkes, K. Kawamura, and R.T. Pack, "Flexible Human Integration for Holonic Manufacturing Systems," to appear in Proceedings of the World Manufacturing Congress, New Zealand, November, 1997.
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2. P.I.: M. Wilkes, "Human-Robot Teams for Perimeter Surveillance," US ARMY SMDC, \$198,000, 7/22/02 – 7/21/03 (with Co.-P.I.'s: N. Sarkar and K. Kawamura).
3. P.I.: M. Wilkes, "Design of a security architecture for the short messaging protocol," Iris Wireless, Inc., \$32,471, 9/01/2001 – 4/30/2002 (with Co.-P.I.: A. Dozier).

4. Co-P.I.: M. Wilkes, "Research on Human-Robot Interaction," DARPA/SMDC, \$208,865, 6/28/2001 – 6/30/2002, (with P.I.: K. Kawamura and Co-P.I.: A. Peters)
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