

## CURRICULUM VITAE

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### Education:

| <u>Institution</u>  | <u>Concentration</u>  | <u>Degree/Date</u> |
|---|---|--------------------|
| Virginia Polytechnic Institute and State University, Blacksburg, VA | Industrial Engineering & Operations Research<br>Human Factors Engineering | Ph.D., 1989        |
| California State University, Northridge                             | Psychology, Applied Experimental  | M.A., 1985         |
| California State University, Northridge                             | Psychology  | B.A., 1983         |

### Professional Experience:

| <u>Institution</u>                                  | <u>Position</u>                     | <u>Dates</u>          |
|---|-------------------------------------|-----------------------|
| Wright State University                             | Director, Human-Centered Innovation | Nov 2009 - Present    |
| Wright State University                             | <sup>1</sup> Professor of BIE       | Sept 2000 – Present   |
| Wright State University                             | Professor of Surgery                | Nov 2007 - Present    |
| HumanWise, Inc.                                     | President                           | Feb 2000 – Present    |
| Wright State University, Dayton                     | Associate Professor                 | Sept 1994 – Oct 2000  |
| Wright State University, Dayton                     | Assistant Professor                 | Sept 1989 – Oct 1994  |
| Virginia Polytechnic Institute and State University | Graduate Research Assist            | Sept 1985 – Sept 1989 |
| TRW, Redondo Beach                                  | Member of Technical Staff           | July 1984 – Aug 1985  |

### Professional Licenses

Private Pilot June 2002

### Professional Awards and Recognition

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<sup>1</sup> First female assistant professor of engineering at WSU, first female Full Professor at WSU

| <u>Title of Award or Recognition</u>   | <u>Organization</u>                 | <u>Date</u> |
|--|-------------------------------------|-------------|
| -Top Ten Women of Miami Valley   | Cox Media                           | 2011        |
| -Outstanding Engineers and Scientist Award in Human Factors Engineering                              | Affiliates Society Council          | 2010        |
| -Front page DDN Business Journal Easter Sunday “New Era of flight safety will have roots in region.” | Dayton Daily News                   | 4/2010      |
| -“Wright State Goes After Air Traffic Overhaul”.   | Dayton Business Journal             | 1/2010      |
| -Research Excellence Award   | CECS, WSU                           | 2002        |
| -Nominated Brage Golding Distinguished Prof of Research  | WSU                                 | 2002        |
| -Honor Society Member  | Tau Beta Pi                         | 2002        |
| -Best Paper Award, Simulation & Modeling   | AIAA Modeling and Simulation        | 2001        |
| -Award Honoring Innovative use Of Instructional Technology   | Center for Teaching & Learning, WSU | 2001        |
| -Channel 7 News Broadcast  | Channel 7 News                      | 2000        |
| -Dayton Daily News Article   | Dayton Daily News                   | 2000        |
| -Profile in WSU Community Magazine   | WSU                                 | 2000        |
| -Nominated Arnold D. Tuttle Award  | Aerospace Medical Assoc             | 1999        |
| -Outstanding service award   | Department BIE, WSU                 | 1997        |
| -Honor Society Member  | Alpha Pi Mu                         | 1991        |
| -Honor Society Member  | Psi Chi                             | 1988        |

## **Scholarship/Publications**

### **Journals**

1. Vijayakumar, B., P. Pratik, Scott, R.A., Barnes, A., and Gallimore, J.J. (In Review). A Dual Bin-Packing Approach to Scheduling Surgical Cases at a Publicly-Funded Hospital. *Journal European Journal of Operational Research*.
2. McKinley, A., and Gallimore, J.J. (In revision) Human Performance Processing in Dynamic Environments, *Aviation, Space and Environmental medicine*.
3. Elder, N., McEwen, T., Flach, J., and Gallmore, J.J., Harini Pallerla (2010). The management of test results in primary care: Does an electronic medical record make a difference? *Family Medicine*, 42(5), 327-333.
4. Elder, N. McEwen, T., Flach, J., and Gallimore, J.J. (2009). The management of test results in family medicine offices. *Annals of Family Medicine*, 24(3), pp.349-355.
5. Jenkins, J. C., and Gallimore, J.J. (2008). Configural display design features to promote pilot situation awareness in helmet-mounted displays. *Aviation, Space and Environmental Medicine*, 79, 397-407
6. Elder, N., McEwen, T., Flach, J., and Gallimore, J.J. (2008). Creating safety in the testing process in primary care offices. *Advances in Patient Safety: New Directions and Alternative Approaches*, Agency for Health Care Research and Quality, Vol 2. <http://www.ahrq.gov/qual/advances2/index.html>

7. Liggett, K.K. and Gallimore, J.J. (2002). The effects of frame of reference and HMD symbology on control reversal errors. *Aviation, Space, and Environmental Medicine*;73:102-111.
8. Gallimore, J.J. and Stouffer J. (2001) Developing an Algorithm for Automatic Control of Luminance in Cockpits. *International Journal of Aviation Psychology*, 11(2):149-168.
9. Gerace, J. and Gallimore, J.J. (2001) Evaluation of Visual Display Techniques for Assembly Sequence Planning. *Human Factors and Ergonomics in Manufacturing* 11(3):213-231.
10. Gallimore, J.J., Patterson, F.R., Brannon, N.G., and Nalepka, J.P. (2000). The opto-kinetic cervical reflex during formation flight. *Aviation, Space and Environmental Medicine* 2000;71:812-821
11. Gallimore J. J., Brannon, N. G., Patterson, F.R., and Nalepka, J.P. (1999). Effects of FOV and aircraft bank on pilot head movement and reversal errors during simulated flight. *Aviation, Space and Environmental Medicine*, 70(12):1152-60.
12. Stanney, K.M., Salvendy, G., Deisigner, J., DiZio, P., Ellis, S., Ellison, E., Fogleman, G., Gallimore, J., Hettinger, L., Kennedy, R., Lackner, J., Lawson, B., Maida, J., Mead, A., Mon-Williams, M., Newman, D., Piantanida, T., Reeves, L., Riedel, O., Singer, M., Stoffregen, T., Wann, J., Welch, R., Wilson, J., Witmer, B. (1998). Aftereffects and sense of presence in virtual environments: Formulation of a research and development agenda. Report sponsored by the Life Sciences Division at NASA Headquarters. *International Journal of Human-Computer Interaction*, 10(2), 135-187.
13. Patterson F. R., Cacioppo, A. J., Gallimore, J.J., Hinman, G.E., and Nalepka, J.P. (1997). Aviation spatial orientation in relationship to head position and attitude interpretation. *Aviation, Space and Environmental Medicine*, 68(6), 463-471.
14. Brown, M.E. and Gallimore, J.J. (1995). Visualizing of 3-D Structures During Computer-Aided Design. *International Journal of Human-Computer Interaction*, 7, 37-56.
15. Philips C.A., Gallimore, J. J., and Hendershot, D. M. (1995). Walking while utilizing a sensory feedback system with an electrical muscle stimulation gait orthosis. *Medical Engineering and Physics*, 17, 507-513.
16. Gallimore, J. J. and Brown M.E. (1993) Visualization of 3-D Computer-Aided Design Objects. *International Journal of Human-Computer Interaction*, 5, 361-382.
17. Gallimore, J.J. and Brown, M.E. (1993) Effectiveness of the C-Sharp: Reducing Ergonomic Problems at VDT Workstations. *Applied Ergonomics*, 24, 327-336.
18. Gallimore, J. J., Farley, W.W., and Snyder, H.L. (1991). Effects of spatial luminance nonuniformities on visual-task performance and subjective uniformity. *Displays*, 12, 147 - 155.

### **Papers Published in Full Official Proceedings**

1. Cloud-Buckner, J., Gallimore, J.J., and Scott, R. (2010). Theoretical Discussion of CAMOCS and RIAS Communication Models to Support Healthcare Information Technology Development. In *Proceedings of the 54<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society, San Francisco, CA. Sept 2010*. Santa Monica: HFES.
2. Underwood, S., and Gallimore, J.J. (2010). One Versus Two-Handed Six Degree-of-Freedom Compensatory Tracking in 3D and the Effects of Practice. In *Proceedings of the 54<sup>th</sup> Annual Meeting of the Human Factors and Ergonomics Society, San Francisco, CA. Sept 2010*. Santa Monica: HFES.
3. Underwood, S., Shinkle, J., and Gallimore, J.J. (2010). Operator Display Issues: Examples from Hydrocracking. *Advances in Ergonomics Modeling and Usability Evaluation*. Tareq Z. Ahram, (Editor) CRC Press Pages 246–254.

4. Gallimore, J.J., Barnes, A.L., and Scott, R.P. (2010). Virtual Environments. In Simulation Update: A Review of Simulation-Based Strategies for Healthcare, Education and Training. Department of Veterans Affairs, Education Employee System, pp. 76-96.
5. Gallimore, J. Reis' G., Warren' J., Fendley' M. and Naga, J. (2010). Compensatory Tracking of a 3D Object Using 3D Technology. *International Conference on Applied Human Factors and Ergonomics.*
6. McKinley, R.A., Gallimore' J.J., Tripp, L. (2010) A predictive model of cognitive performance under acceleration stress. (In Press). *International Conference on Applied Human Factors and Ergonomics*
7. Barnes, A., Gallimore, J.J., and Scott, R. (2010) Designing a virtual patient for communication. *3rd International Conference on Applied Human Factors and Ergonomics*
8. D'Angelo, M. Kotowski, S., Reynolds, D.B., Narayanan, S., and Gallimore, J.J. (2010) virtual reality: from training to rehabilitation -Analysis of Amputee Gait Using Virtual Reality Rehabilitation Techniques. *3rd International Conference on Applied Human Factors and Ergonomics*
9. Jenkins, J.C., and Gallimore, J.J. (2008). A Flight Test Evaluation of the Arc Segment Attitude Reference for Use as a Primary Flight Reference in Helmet-Mounted Displays. *Proceedings of the Human Factors and Ergonomics Society's 52nd Annual Meeting*, New York City, September 22-26.
10. Cloud-Buckner, J., Gallimore, J.J., and Wong, P.K. (2008). Issues in Alerting: Medication Order Entry in Real Practice. *Proceedings of the 12 WSEAS International Conference on Computers*, July 23-25, 2008 Greece
11. Woodley, R.S., Gosnell, M. Prabhala, S., and Gallimore, J.J. (2007). Agents with personality: Human operator assistants. In *Proceedings of the Summer Computer Simulation Conference*. July 15-18. San Diego, CA, pp 1139-1146.
12. Gallimore, J.J., and Wong, P.K. (2007). Implementation of electronic systems for prescribing and delivering medication in hospitals: Issues in real practice. In *Proceedings of the Human Factors and Ergonomics Society Meeting, 51<sup>st</sup> Annual Meeting*, Baltimore, MD 1 – 5, October, pp. 740-744.
13. Gallimore, J.J., Woodley, R., Noll, W. and Barnes, A.L. (2007). Concepts for an agent-based visualization tool. In *Proceedings of the SPIE Symposium on Defense & Security Display Technologies & Applications for Defense, Security, & Avionics*, April 9-13, 2007.
14. Jenkins, J.C., and Gallimore, J.J. (2007). The use of configural displays to promote pilot situation awareness. In *Proceedings of the SPIE Symposium on Defense & Security Display Technologies & Applications for Defense, Security, & Avionics, Enhanced and Synthetic Vision 2007*, Jacques G. Verly, Jeff J. Guell, Editors, 65590H (Apr. 27, 2007)
15. Gallimore, J.J., Matthews' E., Cagle' R., Faas, P., Seyba, J., and Whited, V. (2007). Integrating Sensor Data with System Information Via Interactive Visualizations. In *Proceedings of the 12th International Conference on Human-Computer Interaction*, Vol 8, LNCS\_4557, ISBN: 978-3-540-73344-7.
16. Woodley, R. and Gallimore, JJ. (2007). Concepts for an Agent Based Visualization & Characterization Tool. In *Proceedings of the International Conference on Integration of Knowledge Intensive Multi-Agent Systems*, 300-305.
17. Fass, P., Seyba, J., Young, I., Gallimore, J.J., Quill, L., Matthews, E., Cagle, R. (2006). Collaborative Logistics on the Military Flightline, International Symposium on Collaborative Technologies and Systems Conference; May 2006, 215-219.
18. Tidball, B.E., Prabhala, S. and Gallimore, J., (2006) Making Faces: Exploring Perceptions of Personality Based on Emotional Expressions. In *Proceedings of the Human Factors and Ergonomics Conference, 50<sup>th</sup> Annual Meeting*. San Francisco, 16-20 October, 885-888.

19. Gallimore, J.J., and Prabhala, S. (2006). Creating Collaborative Agents with Personality for Supervisory Control of Multiple UCAVs. Human Factors and Medicine Panel Symposium on Human Factors of Uninhabited Military Vehicles as Force Multipliers. Biarritz, France, 9-11 October, 2006. CD-ROM
20. Gallimore, J.J., Quill, L., Cagle, R., Gruenke, J., Hosman, C., Matthews, E., Faas, P., Seyba, J. and Young, I. (2006). User Feedback on RFID and Integrated Flightline Data for Maintenance Decisions. Proceedings of the Institute of Industrial Engineers Annual Conference. May, 2006 Orlando. CDROM
21. Ganapathy. S., Prabhala, S., Narayanan, S., Hill, R.R., and Gallimore, J.J. (2006). Generation of Alternatives Using Interactive Optimization Techniques for Supervisory Control of Unmanned Aerial Vehicles System. Proceedings of the Institute of Industrial Engineers Annual Conference. Orlando, Florida, 20-24 May, 2006 CDROM.
22. Roberts, W.K, and Gallimore, J.J. (2005). Progress towards a Physiological Model of Cybersickness during Virtual Environment Interaction. *Proceedings of the Human Factors and Ergonomics Society 49<sup>th</sup> Annual Meeting*. September 26-30. Orlando, FL. pp 2230-2234.
23. Prabhala, S. and Gallimore, J.J. (2005). Perceptions of Personality in Computer Agents: Effects of Culture and Gender. Proceedings of the Human Factors and Ergonomics Society 49<sup>th</sup> Annual Meeting. September 26-30, Orlando, FL, 2005. pp 716-720
24. Prabhala, S., Gallimore, J.J., and Lucas, J. (2005). Effects of Automation on Command and Control of Multiple UCAVs. Proceedings of the Wright State University Engineering Graduate Student Symposium, Dayton, OH, CD-ROM Publication.
25. Prabhala, S. and Gallimore, J.J. (2005). Developing Computer Agents with Personalities. Proceedings of the 11<sup>th</sup> International Conference in Human Computer Interaction, AUGCOG Conference July 22-27, Las Vegas, NV 2005 CD Rom publication and to be published in a book proceedings.
26. Prabhala, S., Ganapathy, S., Gallimore, J.J., S. Narayanan, and Hill, R.R. (2005). Interactive Optimization for Unmanned Aerial Vehicle Routing. *Proceedings of the Summer Computer Simulation Conference*. July 23-28. Philadelphia, PA, 2005, pp. 90-95.
27. Gallimore, J.J., Maki A., Faas, P., Seyba, J., Quill, L., and Matthews, E. (2005). The Need For A Human-in-the Loop Simulation Testbed for Logistics Decision Support Research. Summer Simulation Conference, 2005, pp. 84-89.
28. Prabhala, S. and Gallimore, J. (2005) Can Humans Perceive Computer Agent's Personalities? Proceedings of the Institute of Industrial Engineers Annual Conference. May 14-18, Atlanta, Paper 317.
29. Prabhala, S. and Gallimore J.J. (2004) Investigation of Error Rates When Controlling Multiple Uninhabited Combat Aerial Vehicles. Proceedings of the Winter Simulation Conference, pp. 1026-1031.
30. Stephens, M., Gallimore, J., and Albery, W. (2003). Spectral Analysis of Electroencephalographic Response to Spatial Disorientation. Proceedings of the International Symposium on Aviation Psychology (pp. 1131-1136).
31. Wesler, M, Marshak W., and Gallimore, J. (2003) Mobile-computing display type: Situation awareness and performance issues. Proceedings of the Interservice/Industry Training, Simulation, Education Conference, NTSA/NDIA: Orlando, FL, December 2003, (pp. 1174-1184).
32. Prabhala, S., Gallimore, J., and Narayanan, S. (2003). Human Effectiveness Issues in Simulated Uninhabited Combat Aerial Vehicles. Proceedings of the 2003 Winter Simulation Conference, New Orleans (pp. 1304-1038).
33. Narayanan, S., Dave, R., Ganapathy, S., Narakesari, S., Hill, R. Gallimore, J. (2003). Case Studies on Object-Oriented Models And Simulations For Analyzing Complex Systems.

- Proceedings of the 32<sup>nd</sup> International Conference on Computers and Industrial Engineering, Vol. 2, pp. 827 – 832.
34. Liggett, K. and Gallimore, J.J. (2001) The OKCR and Pilot Performance During Transitions Between Meteorological Conditions Using HMD Attitude Symbology. In Proceedings of the Human Factors and Ergonomics Society 45<sup>th</sup> Annual Meeting, (pp. 115-119) Santa Monica, CA HFES
  35. Stephens, M., Gallimore, J., and Albery, W. (2002) Spectral Analysis of Electroencephalographic Response to Spatial Disorientation. Proceedings of the 12<sup>th</sup> International Symposium on Aviation Psychology: Dayton OH. (pp. 1131-1136).
  36. Lucas, J. R. Gallimore, J.J. and Prabhala, S. (2001). Using Decision Structures to Analyze Complex Semi-Autonomous Systems. Proceedings of the International Conference on Computer-Aided Ergonomics and Safety, July 30-Aug 1, 2001, Maui, Hawaii
  37. Gallimore, J.J., Lucas, J.R. and Narayanan, S. (2001). Human Operator Issues for Uninhabited Aerial Vehicles. Proceedings of the American Institute of Aeronautics and Astronautics Modeling and Simulation Technologies Conference and Exhibit, Aug 6-9, 2001, Montreal, Canada, Paper No: 2001-4192: pp 1-6.
  38. \*Gallimore, J.J., Liggett, K.K. and Patterson, F.R. (2001). The Opto-Kinetic Cervical Reflex in Flight Simulation. Proceedings of the American Institute of Aeronautics and Astronautics Modeling and Simulation Conference and Exhibit, Aug 6-9, 2001, Montreal, Canada, Paper No: 2001-4191: pp 1-7.
  39. Lucas, J.R. and Gallimore, J.J. (2000). Evaluation of human performance in a simulated UCAV control station. In *Proceedings of the Summer Computer Simulation Conference (SCSC)*, July 17 - July21, 2000. pp 672-677.
  40. Wesler, M., Lucas, J., Gallimore, J.J., and Marshak, W.P. (1999). Managing Uninhabited Aerial Vehicle (UAV) Information Employing a Reduced Area / Depth Separated Display. *Proceedings of the Human Factors and Ergonomics Society 43rd Annual Meeting*, (pp. 91-95) Santa Monica, CA: Human Factors and Ergonomics Society.
  41. Gallimore, J.J., Brannon, N.G., and Patterson F.R. (1998). The Effects of Field-of-View on Pilot Head Movement During Low Level Flight. In *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting*, Chicago, IL (pp. 6-10).
  42. Gallimore, J.J., Stouffer, J.M., Brannon, N.G., and McCracken J. (1998). Developing Automatic Luminance Controls for Liquid Crystal Displays in Military Cockpits. In *Proceedings of the Ninth International Symposium on Aviation Psychology*, Columbus OH. pp. 294-297.
  43. Gallimore, J.J., McCracken, J.R., and Gerace, J. (1995). Hardware and human factors issues for military automatic brightness controls. In *Proceedings of the Human Factors and Ergonomics Society 39th Annual Meeting*, San Diego, CA. (pp. 89-93).
  44. Brown, M.E., and Gallimore, J. J. (1994) Visualization of CAD objects using a stereoscopic display. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, (pp. 1295-1299) Santa Monica, CA: Human Factors and Ergonomics Society.
  45. Gallimore, J.J., Mitta, D. and Gerace, J. (1994). Recognizing the need for human factors in advanced manufacturing. In *Proceedings of the 3rd Industrial Engineering Research Conference*, May 18-19, 1994, Atlanta, GA, (pp. 360 - 365).
  46. Gallimore, J. J. (1994). Human factors considerations in the design of an assembly planning system. In *Proceedings of the 12th Triennial Congress of the International Ergonomic Association*, August 15-19, Toronto, Canada. Vol 4, (pp 83-85).

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\* Best Paper Award

47. Gallimore, J.J., and Crabtree, J. (1994). Automatic generation of assembly plans: human factors considerations. In *Human Performance in Automated Systems: Current Research and Trends* (M. Mouloua and R. Parasuraman Eds). pp. 282-286. New Jersey: Lawrence Erlbaum Associates, Publishers.
48. Snyder, H.L., Decker, J.J. Lloyd, C.J.C., and Dye, C. (1990) Effect of image polarity on VDT task performance. In *Proceedings of the Human Factors Society 34th Annual Meeting* (pp. 1447-1451). Santa Monica, CA: Human Factors Society.
49. Snyder, H.L., Decker, J.J. Lloyd, C.J.C., and Dye, C. (1990) Effect of image polarity on VDT task performance. In *Proceedings of the Human Factors Society 34th Annual Meeting* (pp. 1447-1451). Santa Monica, CA: Human Factors Society.
50. Decker, J. J., Dye, C. J., Kurokawa, K., and Lloyd, C. J. C. (1988). Effects of display failures and symbol rotation on visual search using dot-matrix symbols. In *Proceedings of the Human Factors Society 32nd Annual Meeting* (pp. 1386-1390). Santa Monica, CA: Human Factors Society.

### **Book Chapters**

1. Prabhala, S., Gallimore, J.J., and Lucas, J.R. (2011). Evaluating Human Interaction with Automation in a Complex UCAV control station Simulation Using Multiple Performance Metrics. In *Human-in-the-Loop Simulations* (Eds. Rothrock, L. and S. Narayanan). pp. 239-258, Springer: London.
2. Ganapathy, S., Prabhala, S., S. Narayanan, Hill, R.R., and Gallimore, J.J. (2011). Interactive Model-Decision Making for Time Critical Vehicle Routing. In *Human-in-the-Loop Simulations* (Eds. Rothrock, L. and S. Narayanan). pp. 203-220, Springer: London.
3. Prabhala, S., Ganapathy, S., S. Narayanan, Gallimore, J.J., and Hill, R.R. (2007). Model-Based Simulation to Examine Command and Control Issues with Remotely Operated Vehicles. In *Simulation and Modeling: Current Technologies and Applications*, edited by A.A. El-Sheikh, A. Al-Ajeeli, and E. M. Abu-Taieh.
4. Narakesari, S., Narayanan, S., Gallimore, S. and Draper, M. (2003). Multimodal Interfaces for Supervisory Command and Control. In *Human Centered Computing: Cognitive, Social, and Ergonomic Aspects*, D. Harris, V. Duffy, M. Smith, & C. Stephanidis (Eds.), Vol. 3, pp. 300 – 304.
5. Gallimore, J.J., Chen J., and Chen, C.L.P. (1996) Computer-based aiding for Assembly Planning. In *Manufacturing Agility and Hybrid Automation -I.*, (R. Koubek and W. Karwowski Eds) p 628-631. Louisville, KY: IEA Press.
6. Narayanan, S, and Gallimore, J.J. (1996). Computer-based aiding for pruning search space in manufacturing planning. In *Manufacturing Agility and Hybrid Automation -I.*, (R. Koubek and W. Karwowski Eds) p 632-635. Louisville, KY: IEA Press.

### **Published Book Reviews**

1. Gallimore, J.J., (1991). Computer graphics: Principle and Practice. Book Review, *International Journal of Human-Computer Interaction*, 3 (2), 239-240.
2. Gallimore, J.J. and Nelson, T.J. (1999). Book review of *Display Systems: Design and Applications* *Journal for the Society of Information Display*, 7, 307.

### **Technology Reports (Completed Contracts)**

1. Matthews, E., Cagle, R., Gruenke, J., Gallimore, J. J. ,Quill, L., Iannacchione, R. (2007). Smart Systems for Logistics Command and Control (SSLC2) Spiral One. AFRL Technical

- Report, AFRL-HE-WP-TR-2007-0005. Gracar Corp, Dayton, OH and HumanWise, Inc., Bellbrook, OH
2. Matthews, E., Cagle, R., Saintignon, D., Baumbarger, B., Johnson, S., Gallimore, J.J. (2007)
  3. Smart Systems for Logistics Command and Control (SSLC2), Spiral Three. (2007) AFRL Technical Report, AFRL-RH-WP-TR-2007-0111. MacAuley Brown, Dayton OH, and HumanWise, Inc., Bellbrook, OH.
  4. Ricaurte, E.M. and Gallimore, J.J. (2006). FAA Civil Aerospace Medical Institute Aerospace Accident-Injury and Autopsy Database System AA-IADS. Final Project Report FAA Award No, 04-G-034. Prepared for Department of Transportation, Federal Aviation Administration, Civil Aerospace Medical Institute, CAMI
  5. Harshbarger, J. and Gallimore, J (1993). Automatic Brightness Control (ABC) for electronic cockpit display instruments. Final Report (MFR-93-004/VIF254-501). MTL Systems, Inc. 3482 Dayton-Xenia Rd, Dayton, OH.
  6. Gallimore, J.J. Brown, M.E., Clarkston, T.P, and Petachi, P. (1991). Human factors evaluation of the PK Vision Saver. Technical Report for PK Vision Enterprises, Wright State University, Dayton, OH.
  7. Gallimore, J.J. (1991). Review of psychologically based image quality metrics. Technical Report (AL-TR-1991-0152). Air Force Systems Command, Armstrong Laboratory, Wright Patterson Air Force Base, OH
  8. **Decker**, J.J., Kelly, P.L., Kuokawa, K., and Snyder, H.L. (1991). The effects of character size, modulation, polarity, and font on reading and search performance in matrix-addressable displays (Tech Memorandum 6-91). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  9. **Decker**, J.J., Lloyd, C.J.C., Kurokawa, K., and Snyder, H.L. (1991). The effects of symbol rotation and matrix size on visual search performance. (Tech Memorandum 8-91). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  10. **Decker**, J.J., Dye, C.J., Lloyd, C.J.C., and Snyder, H.L. (1991). The effects of display failures and symbol rotation on visual search and recognition performance. (Tech Memorandum 4-91). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  11. **Decker**, J.J., Pigion, R.G., and Snyder, H.L. (1987). A literature review and experimental plan for research on the display of information on matrix-addressable displays. (Tech Memorandum 4-87). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  12. Kurokawa, K., **Decker**, J.J. and Snyder, H.L. (1991). The effect of rotation on legibility of dot-matrix characters. (Tech Memorandum 5-91). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  13. Lloyd, C.J.C., **Decker**, J.J., and Snyder, H.L. (1991). The effects of line and cell failures on reading and search performance using matrix-addressable displays. (Tech Memorandum 7-91). U.S. Army Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.
  14. Pigion, R.G., **Decker**, J.J., Hunter, M.W. and Snyder, H.L. (1986). A human factors evaluation of a Sun grey scale monitor – third testing (Tech Summary Report). Human Factors Laboratory, Virginia Polytechnic Institute and State University, VA, 24060

#### **Invited Lectures/Panelist/Workshops**

- “Human Factors Considerations for Visual Display Workstations”, Association of Women in Computing, 1990
- “Human Factors Considerations for Visual Display Workstations”. Yellow Springs Library Assoc., 1991

- Invited Panelist “Women in Graduate Engineering”, Upward Bound Conference, Columbus, 1991.
- Invited Panelist “Women in Engineering”, Regional Conference for the Society of Women Engineers, 1991
- Invited Workshop, “Workplace injuries”. Sinclair Community College for the Sinclair Conference, 1991
- “Human Factors Issues in Engineering Design and Manufacturing”. Human Factors and Ergonomics Group at Texas A&M.1992
- “Human Factors and Product Design”, Honors Seminars of Metropolitan Dayton, Inc. Feb, 1993.
- Invited Panelist, Human Factors in Manufacturing, 12<sup>th</sup> Triennial Congress of the International Ergonomic Association (IEA), Toronto Canada, 1994
- Research Presentation on aviation research to Board of Trustees, 2000
- Invited Presentation Mercy Health Systems – Executives, 2007
- Training Presentation Mercy Health System - Employees, 2007
- Ohio Department of Development, January 29, 2010
- Defense Planning and Analysis Society (DPAAS). February 14, 2010
- WSU Regional Summit – September 1, 2010
- Southern Ohio Chapter of the Human Factors and Ergonomics Society Meeting, September 15, 2010.
- Ohio Center of Excellence in Human-Centered Innovation (OHCI) Board of Trustees – September 24, 2010
- OHCI, AFIT Engineering - October 15, 2010
- OHCI, IEEE Local Society – October 19, 2010
- OHCI, Global Health Systems Department – November 19, 2010
- OHCI, Technology conference, Dayton May, 2011
- OHCI, Cincinnati, The Circuit Dec 2011

## **Grants & Contracts**

- Systems and Human Factors Engineering Analysis of the E\_Consult Primary Care, Dayton VAMC, IPA, Nov 2011- April 2013. \$83,760.00
- NextGen Flight Deck Human Factors Research, Cooperative Agreement with FAA. P.I. Gallimore, October 2010-August 2012, Co-Is Shingledecker and Tsang. \$652,000.
- Development of virtual humans for cultural competency training. Leonard Wood Institute, September 2010 – December 2012, Joint-PIs Gallimore with Skipper. \$534,060.00
- Wireless Driver Distraction, Transportation Research Center, Inc. for National Highway Transportation and Safety Administration, PI Gallimore, August 2010-May 2011, \$120,089.00.
- Backover Avoidance, Transportation Research Center, Inc. for National Highway Transportation and Safety Administration, PI Gallimore, April 2010 – Sept 2010, \$93,035.00.
- National VA SIMLEARN Conference Support, IPA Services, \$28,000, 8/2010.
- Development of a 3D Virtual Patient for training communication skills. Wright State University, 2008-2009, Co-PI with Dr. Scott \$45,000. (Led to \$532,000 external grant with LWI.)
- Women Veterans Health Strategic, Dayton Veterans MC, IPA, 2008-2009, \$10,000.
- Data, Information and Decisions to Display Mapping: Center for Operator Performance March 2009-June 2010, \$80,000.00

- CoolAID: C2-Tool for Actionable Information Display, Phase I STTR AF08-T002 with 21<sup>st</sup> Century Systems, Inc. Dr. Gallimore WSU P.I. November 2008 – June 2009. \$40,000.
- Human Factors Training Dayton Veterans Affairs Medical Center, October 2008 – June 2009
- Systems Engineering Analysis for Surgery Consultation Processes: Dayton Veterans Affairs Medical Center, June 2008 – August 2009, ~\$63,000.
- Color Usage for Graphic Displays in Process Control. Agency: Center for Operator Performance Period: Feb 2008 – Dec. 2008 \$31,726.00
- Meta-Information Visualization for Preparation and Prediction: Holistic Analysis, Visualization & Characterization Assessment Tool (HAVCAT). Phase I AFOSR STTR AF06-T031, with 21<sup>st</sup> Century Systems, Inc. Dr. Gallimore WSU P.I. September 2006 – May 2006, \$40,000.00
- Patient Safety and the Primary Care testing Process. Mentored Clinical Scientist Development Awards (K08) NIH: Nancy Elder, M.D. University of Cincinnati Prime. Dr. Gallimore, PI at WSU, 2005-2009. \$45,000.
- Visual illusions during formation flight. SDS International, Inc. June 04 – May 05 (SBIR for NAVAIR on Spatial disorientation). ~\$25,000.
- Development of specifications for an interactive aircraft accident data collection and analysis system. FAA, June 04 – May 06. Gallimore, P.I. (~\$40-50K)
- Ohio Board of Regents, 2002 Hayes Investment Fund Program, Ohio Research in advanced internet Utilization, simulation, and telerobotics Co-Investigator (Dr. Gilkey, PI) July 02-04 (equipment grant) \$ ?
- Pilot Spatial Orientation. Gallimore, Principle Investigator, S. Mohler, Co-I. AFRL/DAGSI Research Program. Joint proposal with Dr. Spenny & Dr. Liebst, Air Force Institute of Technology. July 01 –Sept 03. \$399,161.00 (Gallimore portion \$310,125.)
- Command and Control of Remotely Operator Vehicles. AFRL/DAGSI Grant (State of Ohio). Joint Principal Investigator with Dr. S. Narayanan, Co-P.I. Dr. C. Spenny (AFIT). July 00 – June 02. \$ 419,161.
- Investigation of visual cues for flight, IPA, Navy Aeromedical Research Lab (NAMRL). Principal Investigator, 7/1/99– 6/30/99. ~\$40,000.
- Investigation of field-of-view on the opto-kinetic cervical reflex (OKCR) in relation to spatial disorientation. Navy Aeromedical Research Lab (NAMRL). Principal Investigator, 2/1/97 – 9/30/97; 4/15/98 – 8/31/98. \$44,323
- Cognitive workload in a complex synthetic task environment: The role of functional display and control representations AFSOR. Co-Investigator 5/1/97-4/30/02. Total, \$778,361.00 Gallimore share ~\$61,000. (Exact amount not known as P.I. did not split out grant.)
- Virtual Environments, Human Performance, Technology, & Applications, Capital Investment Fund, Ohio Board of Regents, Gallimore Co-I, R. Gilkey, P.I., Equipment Grant. Three Years. 1995-1998. \$800,000.
- Research Challenge Award: The inside-out display philosophy. Wright State University. Co-Principal Investigator (Co-P.I. Pamela Tsang). 12/1/94 – 11/30/95. \$25,000.
- Three-dimensional visualizations and interactions for the design of large-scale manufactured objects. University Research Initiative, Office of Naval Research. Principal Investigator (Co-Principal Investigator, P. Chen), 10/1/92 – 9/30/95. \$729,914.00
- Automatic Brightness Control for the cockpit, Phase I. Wright Patterson Air Force Base and MTL Systems: Principal Investigator. 9/92 – 3/93. \$11, 261.00
- Evaluation of a new glare shield and vision device for Visual Display Workstation Terminals. PK Vision Enterprises. Principal Investigator. 5/91 – 11/91. \$7,779.00

- Three-dimensional Computer-Aided Design (CAD) Models Using Stereoscopic and Monocular Coding Techniques. NSF Grant, Research Initiation Award. Principal Investigator, 9/90 – 8/92. \$68,269.00
- Research Challenge Award: Effects of Attention Switching between Stereoscopic and Monocular Displays on Operator Performance and Perception. Wright State University. Principal Investigator, 1/90 – 9/91. \$35,000.00 (Start up)

### **Presentations**

- McKinley R.A., Clark, C.L., Simmons, C.J, Gallimore, J.J. (2005) "Tactile Cueing for Target Acquisition and Identification", 43rd SAFE Symposium, Salt Lake City, UT, October 26, 2005.

### **Professional Consulting Activities**

- USAF AFRL/RHCV. Lead scientific engineer to research how humans perceive and organize 3D information, to review the most relevant concepts on 2.5D and 3D visualizations and evaluation methods, and to develop guidelines for 2.5D and 3D displays that can be applied to the design and development of Command, Control, Intelligence, Surveillance and Reconnaissance (C2ISR) systems to best exploit human innate capabilities. This research conducted for AFRL Battlespace Visualization Laboratory. 2008- 2010
- Lifebridge Technologies. Human factors engineering consultant for the development of “New Heart Failure Treatment Capability for Remote Environments”, research funded by the U.S. Army 2008-Present
- Wilder and Associates. Development of user interface for Insurance information system. 2006-Present
- Phase I and II SBIR with Infoscitex. Development of a biometric orientation tracker. 2008-2010.
- Subcontractor to Northrup Grumman. Research Scientist at AFRL/HEAL to support research on user-interface design and collaboration. June 2006 – August 2006
- Subcontractor to Gracar, Research and Development of Smart Systems Logistics Command and Control for AFRL, Wright Patterson Air Force Base. Jan 2005 - Dec 2006 Lead Research Scientist. Development of visualization techniques for decision support. Develop requirements that employ technologies and techniques to autonomously collect and fuse critical data in order to create decision quality information and effectively present information to support tasks performed by flightline logistics and operations decision-makers.
- Workshop on Human Computer Interface Design and Usability Engineering For Booz Allen Hamilton, 2004
- Phase I SBIR with Protobox LLC: A Closed-Loop System for Effective Spatial Disorientation Training. Human Factors Engineering support including providing information on SD research, design of simulation training program.
- Phase II SBIR with SDS International Inc.: Helmet Mounted Display (HMD) Interface Design for Head-Up Display (HUD) Replacement. Human Factors Engineering support including symbology design, design of experimentation for testing, and data analysis.
- Phase I SBIR with Protobox, LLC: An Embedded Simulator Test Evaluation Monitor (ESTEEM) to Improve Distributed Mission Training. Human factors engineering support including literature review, interface design, design of experimentation and data analysis.
- Wallace-Kettering Neuroscience Institute. An Initial Human Factors Analysis of an Acute Stroke Care Process in a Hospital Setting. Human factors engineering analysis of the stroke

care process at Kettering Medical Center to pinpoint possible areas for process improvement in order to reduce the time to treat patients so that MRI techniques may be studied.

- Wright Patterson Air Force Base Hospital. Human factors support for the analysis of patient handoff between departments to reduce medical errors and enhance patient safety.
- Good Samaritan Hospital. Human factors engineering analysis of medication delivery in the ICU to reduce medication errors and enhance patient safety.
- Phase I and Phase II SBIR with MTL Systems, Inc. Automatic Brightness Controls for Military Cockpits. Lead human factors engineer to support for the development of an automatic brightness control including literature reviews, display measurement, experimental design, setup, procedures, runs, and data analysis, written documentation of results and development of the automatic control algorithm.
- Yellow Springs Instrument Co, Inc. Provide user centered design support and training to engineers toward the development of new product user interfaces.

### **Major Advisor for Ph.D. Students (6 completed)**

\*Kristen Liggett: Graduated 2000: The effect of helmet-mounted display symbology on the optokinetic cervical reflex, frame of reference, and pilot performance. Employed at AFRL, RHCV.

\*Michael Stephens: Graduated 2003; Electroneurophysiologic diagnosis of aircraft spatial disorientation. Self-Employed, Emergency Medical Physician.

William Kendal Roberts: Graduated 2004: Title A predictive model of cybersickness in human virtual environment interaction. Government Accounting Office (GAO).

\*Joseph Christopher Jenkins, Graduated May 2007: The Effect of Configural Displays on Pilot Situational Awareness in Helmet-Mounted Displays. Employed, U.S. Air Force, Lead for Human Interface on Joint Strike Fighter.

Sasanka Prabhala, Graduated May 2007: Title: Designing Computer Agents with Personality to Improve Human-Machine Collaboration in Complex Systems, Employed at Intel.

Andrew McKinley, Graduated 2009, Human Information Processing in Dynamic Environments, Employed, AFRL

### **Ph.D.s in Progress as Chair**

Jennifer Cloud-Buckner, Proposal Defense, 2010

April Barnes, Candidacy, March 2010 (Part time)

Chang-Geun Oh, Candidacy Spring 2011

Steven Harrell – Recently accepted

### **Ph.D. Dissertation Committee Membership**

Frederick R. Patterson, 1995 (Biomedical Sciences)

Michael Patzek, 2004

Phani Kidambi, 2010

Maurissa D'Angelo, 2010

Carissa Johnson, 2011

Michael Findley (before committee reset)

Margo Dekard (through candidacy)

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\* Awarded Stanley N. Roscoe Award for Best Dissertation in Aviation Human Factors.

### **Major Advisor Completed Theses (10)**

Michael Brown, 1990  
Janet Gerace, 1995  
Dave Sontag, 1995  
Eric Crouch, 1995  
Stuart Turner, 1995  
Stephanie Lind, 1995  
Tom Solz, 1999  
Mary Wesler, 2001  
Brian Tidball, 2006  
Nathanael Bridges, 2011

### **Master Thesis Committee Membership (28)**

|                                     |  |
|-------------------------------------|--|
| Michael Reynolds, 1990              | Leah Hennings, 1994                      |
| Denise Christine Yankel Heard, 1990 | Chase McCown, 1994                       |
| Christopher Calhoun, 1990           | Debra A. Urzi, 1994                      |
| Becky Unger, 1991                   | Kazuhito Shimada, 1995 (Aerospace Med)   |
| Steve Farmer, 1991                  | Ron Merryman, 1995                       |
| Steve Harper, 1991                  | Holly Bautsch, 1997                      |
| Daniel Mountjoy, 1991               | William Bailey, 1998                     |
| Craig Arndt, 1991                   | Heath Ruff, 2000                         |
| Vance Calvez, 1991                  | Patrick Moss, 2000                       |
| Donald Brinkman, 1993               | Amy Mathews, 2002                        |
| Cathy Swider, 1994                  | Tiffany Jill Harper, 2002                |
| Michael Salyer, 1994                | Somath Lokesh, 2004                      |
| Daryl Smith, 1994                   | Vamese Nallam, 2004                      |
| Bart J. Brickman, 1994 Psychology   | Eduard M. Ricaurte, 2005 (Aerospace Med) |
| Elizabeth Mazzae, 1994              | Bharathwaj Vijayakumar, 2001             |

### **Professional Service/Activities**

- Program Committee, ASME 2012 11<sup>th</sup> Biennial Conference on Engineering Systems Design and Analysis to be held in Nantz, France
- Program Committee Member 16<sup>th</sup> Annual International Symposium on Aviation Psychology 2011
- Trustee on the Board of the United States Air and Trade Show (USATS) Largest Air Show in North America (2000- 2009)
- Chair Education Committee for USATS (2002-2009)
- External reviewer for Full Professor cases
- Program Committee Member of 13<sup>th</sup> Annual International Symposium on Aviation Psychology 2003
- Hospitality Chair 12<sup>th</sup> Annual International Symposium on Aviation Psychology 2003
- Interviewed By Russian Radio (2002)
- Reviewer For HFES Society Accreditation of Human Factors Programs Program (2002)
- Delegate to Russia for Collaborations in Aviation and Aerospace Medicine Researchers (2002)
- Interviewed By Russian Radio (2002)
- Break out group leader for Conference “Quality in Health Care: It’s more than just trying harder” 2001
- Executive Council for Southern Ohio Chapter of HFES 1995-1998

- Member Department of Defense Flight Symbology Working Group (FSWG), 1998-2000.
- Chair (appointed) Education and Training Committee of the National HFES 1996-1998
- HFES Awards Subcommittee member 1998
- President Southern Ohio Chapter of HFES 1996-1997
- Board Member Journal of Cognitive Ergonomics (1996-2001)
- Program Chair Visual Performance Technical Group 1996 National HFES Conference
- Session Chair Fifth International Conference on Human Aspects of Advanced Manufacturing Agility & Hybrid Automation
- Member of Program Advisory Board for Fifth International Conference on Human Aspects of Advanced Manufacturing Agility & Hybrid Automation 1996
- Hosted 1996 North Central Student Leadership Conference for the American Society of Safety Engineers (ASSE)
- Assistant Program Chair Visual Performance Technical Group 1995 National HFES Conference
- Special Sessions Chair Human Factors and Manufacturing Technology 1994 Industrial Engineering Research Conference (IERC).
- Participant NSF workshop on Human Factors in Manufacturing, 1994.
- Session Co-chair Human Factors and Ergonomics Society 38<sup>th</sup> Annual Meeting.
- Session Co-Chair, Human Factors and Ergonomics Society 41st Annual Meeting.
- Secretary Treasurer of the Visual Performance Technical Group of the HFES (91-94)
- Secretary of the Southern Ohio HFES 1992-1993
- Editor Human Factors for the Proceedings of the 1993 Industrial Engineering Research Conference
- Session Chair Visual Performance Technical Group 1992
- Session Chair Consumers Product Group 1992
- Associate Editor Visual Performance Technical Group Newsletter (1991-1993)
- Special Editor Visual Performance Technical Group National Newsletter entitled "Motion Perception"
- Reviewer Aviation, Space and Environmental Medicine
- Reviewer International Journal of Cognitive Ergonomics
- Reviewer Telemedicine Journal
- Reviewer Journal of the Society for Information Display
- Reviewer Displays
- Reviewer Journal of Experimental Psychology: Applied
- Reviewer International Journal of Human-Computer Interaction
- Reviewer Journal of Human Factors and Ergonomics
- Reviewer Proceedings, Human Factors and Ergonomics Society.
- Reviewer IEEE Systems Man and Cybernetics

**\*\*Membership on WSU Committees**

**Department**

Faculty Search Committee, Chair (2010-2011)

Faculty Search Committee (1989-Present, member for every hire in ISE, HFE)

Curriculum Committee (1989-present, Chair for many years after program started)

Professional Development Committee (1994 – Present, member and chaired various times)

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\*\* I no longer have all the activity report records for early years to list all committees I have served on through the years.

Graduate Program Advisor for Incoming Students (2010-present)  
Department Coordinator for Women and Minorities, 1991-1996

### **College**

Professional Development Committee (2007, 2009- 2011, 2012)  
Academic Computing Committee (2008-2010)  
BIE Imminent Scholar Search Committee (2008 – 2011)  
Dean Search Committee (2004)  
Department Chair Three-year Review Committee  
Academic Mediation Committee, Chair (1993-1994)  
Academic Mediation Committee, Scribe (1991-1992)  
College Summer Engineering Program

### **University**

Student Affairs, 1990-1991  
Agenda Committee (1990-93)  
CATH Furniture Sub-Committee, Chair, 1992  
Parking Committee (94-95)  
Presidential Scholar Search Committee (2010-2011)

### **Other**

Student club advisor SWE 1993-1994  
Student club advisor Human Factors

### **Teaching**

- \*Engineering Health Systems (\* Courses are also offered as Distance)
- \*Supervisory Control of Remotely Operated Vehicles
- \*Human Factors in Engineering Design
- \*Human Factors Engineering of Visual Displays
- \*Human Factors in Computer System Design
- Systems Performance Modeling
- \*Advanced topics in Human Computer Interaction
- Human Factors in Virtual Reality
- Human Factors Engineering Workload Analysis
- Human Factors Engineering Advances in Visual Display Design
- Experimental Research and Evaluation in Human Factors Engineering
- Human Factors in Rehabilitation
- Industrial Ergonomics
- Engineering Design I
- Engineering Design II
- Engineering Design III

### **Association**

### **Status**

### **Dates**

|   |        |                   |
|---|--------|-------------------|
| Human Factors and Ergonomics Society (HFES) | Member | 1981 – present    |
| Association for Computing Machinery         | Member | 1985 – 1992,06-09 |
| Society for Information Display (SID)       | Member | 1989 – 1997       |
| Society Professional and Instrumentation    | Member | 1989 – 1992       |

|   |        |                 |
|---|--------|-----------------|
| Engineers (SPIE)                          |        |                 |
| Aerospace Medical Association (AsMA)      | Member | 1999 – 2007     |
| Aerospace Human Factors Association       | Member | 1999 – 2007     |
| Institute of Industrial Engineering (IIE) | Member | 1991,2001,04-07 |