**Russell J. Branaghan, Ph.D.**

Chair, Department of Technology, Entrepreneurship and Innovation Management

Associate Professor, Applied Psychology

Arizona State University

150 D Santa Catalina Hall, 7271 E. Sonoran Arroyo Mall

Mesa, AZ 85212

(480) 727-1390, russ.branaghan@asu.edu

**Research Interests**

Human Factors, Cognitive Engineering, Health-Care, Public Safety, User Interface Design, Consumer Psychology

Education

- Ph.D., Cognitive Psychology, (Human Factors). New Mexico State University, 1994

- M.A., Experimental Psychology, New Mexico State University, 1988

- B.A., Psychology, Bowling Green State University, 1986

**Professional Experience**

- Chair, Department of Technology, Entrepreneurship and Innovation Management, Arizona State University (August 2012-present)

- Assistant to Associate Professor, Applied Psychology, Arizona State University, August, 2006-present)

- Visiting Professor of Human Factors, Master of Product Development Program, McCormick School of Engineering, Northwestern University, 2001 – 20012.

- Sr. Vice President, Big Red Rooster, Columbus, OH, 2003- 2006. Sold company to IDL, and then sold IDL to Matthews Corporation.

- Sr. Vice President and Partner, Lextant Corporation, Columbus, OH. 2001- 2003.

- Lecturer, Department of Industrial Design, Ohio State University, Columbus, OH, 2001

- Vice President and Partner, Consumer Research and Strategy, Fitch Inc., Columbus, OH, 1997-2000. Sold company to Lighthouse Ventures. Then sold Lighthouse to WPP (a marketing communications conglomerate that includes Ogilvy & Mather, J. Walter Thomson, Landor, and Young & Rubicam).

- President, The Branaghan Design Group, Westerville, OH 1994-1997. Sold company to Fitch.

- Human Factors Engineer, IBM, Research Triangle Park, NC, 1993-1994

- Senior Human Factors Engineer, Hewlett-Packard, Vancouver, WA 1991-1993

- Cognitive Psychology Instructor, Department of Psychology, New Mexico State University, 1990

- Research Assistant, Computing Research Laboratory, New Mexico State University, 1989-1991

- Human Factors Engineering Intern, Honeywell, Golden Valley, MN, 1988-1989

- Human Factors Consultant, Decision Sciences Consortium, Alexandria, VA, 1987

- Research Assistant, Department of Psychology, New Mexico State University, 1986-1987

- Research Assistant, Biopsychology Laboratory, Bowling Green State University, 1985-1986. Advisor: Dr. Jaak Panksepp.

**Honors and Awards**

- Faculty Mentor Award – College of Technology and Innovation, Arizona State University, 2012.

- Human Factors Master Instructor, invited to lead "Teaching Human Factors" workshop at the Human Factors and Ergonomics Society Conference, San Antonio, TX. One of two professors chosen nationally based on student vote, 2009

- Faculty of the Year, Master of Product Design and Development Program, McCormick School of Engineering, Northwestern University, 2006

- Best Paper. Human Factors Issues in the Design of Handheld Devices. Systems Design and Packaging Conference, Santa Clara, CA, 2001

**Grants and Contracts**

1. Principal Investigator, $155,000 (2011 – 2012). *Human Factors of Endoscope Reprocessing*, sponsored by The Veterans' Health Administration.

2. Co-Principal Investigator, $280,000 (2010-2011). *Simulation Environment for Remotely Piloted Aircraft Sensor Operators to Train Improvised Explosive Device Emplacement Detection*, sponsored by The Science Foundation of Arizona. With Nancy Cooke.

3. Principal Investigator, $278,062 (2009 – 2011). *Human Factors Approaches for Reducing Medical Instrument Reprocessing Errors*, sponsored by The Veterans' Health Administration.

4. Principal Investigator, $54,400 (2008). *Priorities, modes, and timing of information presentation: Improving situational awareness for police officers*, sponsored by Motorola Corporation: With John Takamura and Prasad Boradker in ASU Industrial Design.

5. Principal Investigator $1,500 (2007). *Observational Research and Interviews in Context with Caterers,* gift to ASU from Pactiv Corporation.

6. Co-Principal Investigator, $184,000 (2008). *Driving Simulation in Human Factors, sponsored by* National Science Foundation equipment grant. With Rob Gray and Roger Schvaneveldt.

7. Co-Principal Investigator, $50,000 (2007) *User research toward the re-design of a portable gasoline generator, sponsored by* Sycamore Holdings. With John Takamura and Prasad Boradker in ASU Industrial Design.

8. Contractor, $148, 345 (5% effort), 2009 – 2011. *The Software Enterprise: A Reinforcing Pedagogical Model for Software Engineering*, sponsored by National Science Foundation. With Kevin Gary.

**Publications** (Student co-authors in bold)

*Peer Reviewed Journal Articles*

1. **Jolly, J.**, **Hildebrand, E. A.**, & Branaghan, R. J. (2012). Research, design and validation of a cognitive aid to support the reprocessing of flexible endoscopes. *Human Factors.* In Press.

2. **English, D.** & Branaghan, R. J. (2011). An empirically derived taxonomy of pilot violation behavior. *Safety Science*. In Press. doi: 10.1016/j.ssci.2011.08.009.

3. Branaghan, R. J., **Covas, C., Jackson, K.,** Eidman, C. (2011). Using Expert Knowledge Structures to Redesign an Instructor-Operator Station. *Journal of Applied Ergonomics*. *In Press*.

4. **Jolly, J. D.**, **Hildebrand, E. A.,** Branaghan, R, J., **Wu, Q., Garland, T.B.,** Epstein, D., Babcock-Parziale, J., Brown, V. (2011). Patient Safety and Endoscope Reprocessing: A Usability Test of the Reprocessing Procedure. *Human Factors and Ergonomics in Manufacturing and Service Industries*.

5. Sanchez, C., & Branaghan, R. J. (2011). Turning to Learn Screen orientation and reasoning with small devices. Computers in Human Behavior, 27, 793-797.

6. Branaghan, R. J., & **Hildebrand, E. A.** (2011). Brand Personality, Self Congruity, and Preference: A Knowledge Structures Approach. *Journal of Consumer Behaviour*, 10, 1-8.

7. **Tossell, C.,** Schvaneveldt, R. W., & Branaghan, R.J. (2010). Assessing a New Method to Elicit Knowledge Structures. *Cognitive Technology*. 15 (2), 11-19.

8. Branaghan, R. J., Takamura, J., Palmer, M. T., **Hildebrand, E. A., & Sevier, D**. (2010). Activities, Information and Police Work: Implications for User Interface Design. *Journal of Cognitive Engineering and Decision Making*, 4, 2, 113-128.

9. Branaghan, R. J. & Gray, R. (2010). Non-conscious Activation of an Elderly Stereotype Leads to Slower Driving. *Perceptual and Motor Skills*, 110, 2, 1-13.

10. Branaghan, R. J. & Sanchez, C. (2009). What to Show Users While they Wait: User Preferences and Ratings of Reasonableness. *Human Factors*, 51, 528-538.

11. Sanchez, C. & Branaghan, R. J. (2009). The Interaction of Map Resolution and Spatial Abilities on Route Learning. *International Journal of Human Computer Studies*, 67, 475-481

12. Branaghan, R. J., McDonald, J. E., & Schvaneveldt, R. W. (1991). Identifying high level UNIX tasks. SIGCHI Bulletin, 23, 73-74.

*Peer Reviewed Conference Proceedings*

1. Branaghan, R. J., Cooke, N. J., & Staszewski, J. (2012). Aerial Detection of Improvised Explosive Device Threat. In Proceedings of the Annual Convention of the American Psycholological Association, August, 2012, Orlando, FL.

2. Branaghan, R.J., **Hildebrand, E. A., Jolly, J., & Wu, Q.** (2012). The trouble with reusable medical equipment: The case of flexible endoscopes. In Proceedings of the Symposium on Human Factors and Ergonomics in Health Care. March, 2012, Baltimorem MD.

3. **Hildebrand, E. A,** Branaghan, R. J., **Neuman, B. L., Jolly, J., Garland, T. B., Taggart,** M., Epstein D., Babcock-Parziale, J., & Brown, V. (2011). Expertise in Endoscope Reprocessing. In Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society, September, 2011, Las Vegas, NV.

4. **Sinocruz, J. Q., Hildebrand, E. A**., Neuman, B. L., & Branaghan, R. J. (2011). Human Factors Implications for Standard Operating Procedure Development and Usability in Endoscope Reprocessing. In Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society, September, 2011, Las Vegas, NV.

5. Branaghan, R. J., Beringer, D. B. & Schvaneveldt, R. W. (2011). Prioritizing weather elements for commercial pilots and dispatchers: Implications for user-interface design. In Proceedings of the 16th International Symposium on Aviation Psychology, May 5, 2011, Dayton, Ohio.

6. Sanchez, C. & Branaghan, R. J. (2010). Learning from Small Devices; Deficits in Problem Solving Performance but not Factual Recall. In Proceedings of 54th Meeting of the Human Factors Society.

7. **Jackson, K. Covas, C.**, Branaghan, R. J., & Eidman, C. (2010). Menu Design Based on Expert Knowledge Structures: A Validation Study. In Proceedings of 54th Meeting of the Human Factors Society.

8. **Hildebrand, E., Jolly, J.,** & Branaghan, R. J. (2010). Human Factors Challenges in Reprocessing and Sterilizing Endoscopes. In Proceedings of 54th Meeting of the Human Factors Society.

9. Gray, R. & Branaghan, R. J. (2009). Changing driver behavior through unconscious stereotype activation. *Driver Assessment 2009 Proceedings*. University of Iowa Public Policy Center.

10. Branaghan, R. J. & Gray, R. (2008). Non-conscious Activation of an Elderly Stereotype Leads to Slower Driving. In Proceedings of 52nd Meeting of the Human Factors Society.

11. Branaghan, R. J. & Sanchez, C. (2008). Feedback, Subjective Time Estimates, and User Satisfaction. In Proceedings of 52nd Meeting of the Human Factors Society.

12. Sanchez, C. & Branaghan, R. J. (2007). The Interaction of Map Resolution and Spatial Abilities on Route Learning. In Proceedings of the 51st Meeting of the Human Factors Society.

13. Branaghan, R. J., (1997). Testing the Usability of Online and Paper Documentation. UPA 97' tutorial notes. Dallas: The Usability Professionals Association.

14. Sanders, Elizabeth, B.-N. & Branaghan, R. J. (1998). Participatory Expression in Design. In Broadening Participation, Proceedings of the 5th Biennial Participatory Design Conference (pp. 199-200).

15. Simeral, E. & Branaghan, R. J. (1997). A Comparative Analysis of Heuristic and Usability Evaluation Methods. Proceedings of STC 97', Society for Technical Communications, Toronto, Ontario. pp 307-309.

16. Branaghan, R. J., & Alstad, C. A. (1996). Conducting Effective Documentation Usability Tests. Tutorial Notes for UPA 96', conference of the Usability Professionals Association, Copper Mountain, CO.

17. Branaghan, R. J., Metz, S. V. & Isle, B. A. (1989). Control of devices in the home by disabled persons: Human factors guidelines and public access protocol. In Proceedings of Rehabilitation Engineering Society of North America (RESNA): Technology for the Next Decade. Washington, D.C.: RESNA.

## *Book*

1. Branaghan, R. J., (Editor) (2000). Design by People for People: Essays on Usability. Chicago: The Usability Professionals Association.

## *Edited Book Chapters*

1. Branaghan, R. J. (2010). What's so special about stories? The cognitive basis of contextually rich learning. In D. Andrews, T. Hull, & K. DeMeester (Ed.) Storytelling as Instruction. Boston: Sense Publishers.

2. **Wu, Q.,** Branaghan, R. J., **Hildebrand, E.,** & Epstein, D. (2010). Exploring Human Factors issues in Reprocessing Errors. In G. Salvendy & W. Karwowski (Ed.) Advances in Human Factors. New York: Taylor & Francis.

3. Branaghan, R. J. (2001). From ease of use to experience design. In R. Branaghan (Ed.) Design by People for People: Essays on Usability. Chicago: Usability Professionals Association.

4. Branaghan, R. J. (2001). Ease of learning and efficiency of use: Usability needs to focus on both. In R. Branaghan (Ed.) Design by People for People: Essays on Usability. Chicago: Usability Professionals Association.

5. Branaghan, R. J. (1990). Pathfinder networks and multidimensional spaces: Relative strengths in representing strong associates. In R. W. Schvaneveldt (Ed.). Pathfinder Associative Networks: Studies in Knowledge Organization. Norwood, NJ: Ablex Press.

## *Peer Reviewed Conference Presentations*

1. **Hildebrand, E. A,** Branaghan, R. J., **Neuman, B. L., Jolly, J., Garland, T. B., Taggart,** M., Epstein D., Babcock-Parziale, J., & Brown, V. (2011). Expertise in

Endoscope Reprocessing. In Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society, September, 2011, Las Vegas, NV.

2. **Sinocruz, J. Q., Hildebrand, E. A**., Neuman, B. L., & Branaghan, R. J. (2011). Human Factors Implications for Standard Operating Procedure Development and Usability in Endoscope Reprocessing. In Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society, September, 2011, Las Vegas, NV.

3. Branaghan, R. J., Beringer, D. B., & Schvaneveldt, R. W. (2011). In Proceedings of 16th International Symposium on Aviation Psychology, May 2-5, 2011, Dayton, OH..

4. Sanchez, C. & Branaghan, R. J. (2010). Learning from Small Devices; Deficits in Problem Solving Performance but not Factual Recall. In Proceedings of 54th Meeting of the Human Factors Society.

5. **Covas, C., Jackson, K.,** Branaghan, R. J., & Eidman, C. (2010). Eliciting and Representing Knowledge Structures of Expert Pilots: Guidance for Menu Design. In Proceedings of 54th Meeting of the Human Factors Society.

6. **Jackson, K., Covas, C.,** Branaghan, R. J., & Eidman, C. (2010). Menu Design Based on Expert Knowledge Structures: A Validation Study. In Proceedings of 54th Meeting of the Human Factors Society.

7. Hildebrand, E., **Jolly, J.,** & Branaghan, R. J. (2010). Human Factors Challenges in Reprocessing and Sterilizing Endoscopes. In Proceedings of 54th Meeting of the Human Factors Society.

8. **Wu, Q.,** Branaghan, R. J., Hildebrand, E., & Epstein, D. (2010). Exploring Human Factors issues in Reprocessing Errors Proceeding of the 3rd International Conference on Applied Human Factors and Ergonomics. Taylor & Francis.

9. Gray, R. & Branaghan, R. J. (2009). Changing driver behavior through unconscious stereotype activation. *Driver Assessment 2009 Proceedings*. University of Iowa Public Policy Center. In press.

10. Branaghan, R. J., Schvaneveldt, R. W., Lamonica, J. & Beringer, D. (2008). Weather in the Cockpit. Paper presented at the FAA Human Factors in NextGen – Future of Aviation conference, Arlington, TX.

11. Branaghan, R. J. & Gray, R. (2008). Thinking Old Leads to Driving Slow. Paper presented at the annual conference of the Association for Psychological Science.

12. Sanchez, C. A. & Branaghan, R. J. (2008). Map Resolution, Spatial Ability, and Route Reproduction Paper presented at the annual conference of the Association for Psychological Science.

13. Branaghan, R. J. & Gray, R. (2008). Non-conscious Activation of an Elderly Stereotype Leads to Slower Driving. In Proceedings of 52nd Meeting of the Human Factors Society.

14. Branaghan, R. J. & Sanchez, C. (2008). Feedback, Subjective Time Estimates, and User Satisfaction. In Proceedings of 52nd Meeting of the Human Factors Society.

15. Branaghan, R. J. & Becker D. V. (2007). Associative Networks Reflect Learning of Brain Anatomy Concepts. Presented at the Annual conference of the American Psychological Society, Washington, DC.

16. Branaghan, R. J. & **Taylor, A.** (2007). Using Associative Networks to Represent Brand Personalities. Presented at the Annual Conference of the American Psychological Association, San Francisco.

17. Sanchez, C. & Branaghan, R. J. (2007), also listed under conference proceedings above). The Interaction of Map Resolution and Spatial Abilities on Route Learning. Paper presented at the 51st Meeting of the Human Factors Society, Baltimore, MD.

18. Branaghan, R. J. (2006). What's so special about stories? A review of the relevant cognition literature. Paper presented at Storytelling as an Instructional Method Workshop. Mesa, AZ.

19. Branaghan, R. J. (2004). Research that Matters: Discovering what Consumers Think and Feel. IEG Sponsorship Conference, Chicago, IL.

20. Branaghan, R. J. (2004). Seek First to Understand: Identifying New Product Opportunities through In-Home Consumer Research. Housewares Conference, Chicago, IL.

21. Branaghan, R. J. (2003) Consumer Understanding Methods in Retail Design. Global Shop, Chicago, IL.

22. Branaghan, R. J. (2002). Introducing Ethnographic Methods for Retail Design. Annual Meeting of the National Retail Federation, New York City, NY.

23. Branaghan, R. J. (2001). Human Factors and the Wireless Web. Paper presented at the 20th, Consumer Psychology and Advertising Conference. Seattle, WA.

24. Branaghan, R. J. (2001). The Future of User-Interface Technology. Presentation given at the International CES (Consumer Electronics Show) in Las Vegas, NV. January 8, 2001.

25. Branaghan, R. J. (2001) Human Factors Issues in the Design of Handheld Devices (Best paper award). High Density interconnect and Systems Packaging Conference, Santa Clara, CA.

26. Sanders, Elizabeth, B. -N. & Branaghan, R. J. (1998). Participatory Expression in Design. Session presented at the 5th Biennial Participatory Design Conference, Seattle, WA.

27. Branaghan, R. J. (1997). Finding, Selecting and Recruiting Representative Usability Test Participants. Paper presented at the Society of Technical Communications Conference. Toronto, ON.

28. Branaghan, R. J., McDonald, J. E. & Schvaneveldt, R. W. (1991). Deriving high level cognitive tasks from the protocols of UNIX experts. Paper presented at CHI '91, New Orleans, LA.

29. Branaghan, R. J., Cox, D., Moreland, P., Paanenan, P., Smilowitz, E. & Sward, D. (1990). Modeling student knowledge of cognitive psychology terms. Paper presented at the 36th Annual Meeting of the Southwestern Psychological Association, Dallas, TX.

30. Branaghan, R. J. & Johansen, L. (1990). Assessing degree of student knowledge using empirically derived knowledge representations. Poster presented at CHI '90, Seattle, WA.

31. Branaghan, R. J., Metz, S. V. & Isle, B. A. (1989). Control of devices in the home by disabled persons: Human factors guidelines and public access protocol. Paper presented at Annual Meeting of the Rehabilitation Engineering Society of North America, New Orleans, LA.

32. Branaghan, R. J. & Schvaneveldt, R. W. (1988). Prediction of paired-associate learning using multidimensional scaling and Pathfinder algorithm. Paper presented at the Annual Meeting of the Rocky Mountain Psychological Association, Salt Lake City, UT.

33. Branaghan, R. J. & Panksepp, J. (1986). Fear-induced suppression of play in juvenile rats: Neurochemical correlates. Paper presented at the First Annual Conference for progress in the Bio-behavioral Sciences, Toledo, OH.

## *Invited Presentations*

1. Branaghan, R. J. (2011). Putting Stereotypes to Good Use: Unobtrusive Priming Yields Safer Driving. Invited Presentation to Department of Psychology at New Mexico State University, Las Cruces, NM, October, 2011.

2. Branaghan, R. J. (2011). Evaluating Human Factors in Endoscope Reprocessing. Veterans Health Administration Conference on Reprocessing Reusable Medical Equipment. St. Louis. MO, May 25, 2011.

3. **Covas-Smith, C. M., Jackson, K.,** Branaghan, R. J. & Eidman, C. (2010). Menu Design Based on Expert Knowledge Structures: A Validation. *Arizona State University and University of Arizona Cognitive Science Conclave*, Arizona State University, Tempe, AZ, November 6, 2010

4. Branaghan, R. J. (2009). Human Factors Master Instructor workshop at the 2009 Human Factors and Ergonomics Society Conference, San Antonio, TX. (One of two professors chosen nationally based on student vote).

5. Branaghan, R. J. (2009), Hours of Boredom Punctuated by Moments of Terror: Designing Information Systems for Police Officers. Invited Presentation to the American Association of Chiefs of Police, San Diego, CA.

6. Branaghan, R. J. (2009) Human Factors in Product Design. Thunderbird School of Management, Phoenix, AZ.

7. Branaghan, R. J. (2005) Life Satisfaction and the Psychology of Work. Invited presentation given at the Annual Training Conference of the Ohio Rehabilitation Association, Akron, Ohio.

8.  Branaghan, R. J. (2005) Consumer Inspired Innovation, May 7th, 2005. Ohio State University Fisher College of Business Entrepreneurship Spectacular.

9.  Branaghan, R. J. (2004). Pilot-Centered Design of Avionics. Invited presentation to the Industrial Design Society of America (IDSA). New York.

10. Kemnitzer, R., Branaghan, R. J., Wilcox, S (2004), Design, Consumer Research and Innovation. Invited presentation to the American Society of Mechanical Engineers conference in Orlando, FL.

11. Branaghan, R, J. (2004). Consumer Research and New Product Development. Invited presentation to the National Retail Federation, Orlando, FL.

12. Branaghan, R. J. (2004). Seek First to Understand: Identifying New Opportunities Through Consumer In-Home Research. International Housewares Show, Chicago, IL, March 15.

13. Palmer, M. T., & Branaghan, R. J. (2004). User Research Methods for Handheld Devices. Presentation at Core 77, Institute of Design, Illinois Institute of Technology, Chicago, IL.

14. Branaghan, R. J. (2004). User Research Methods in the Design of Handheld Devices. ACM SIGCHI meeting, Columbus, OH.

15. Branaghan, R. J. (2003).  Empirically-Derived Mental Models, ACM SIGCHI meeting, Columbus, OH.

16. Branaghan, R. J. (2002).  Methods for Testing the Usability of Online Documentation and Help Systems. Society for Technical Communications, Columbus, OH.

17. Branaghan, R. J. and Palmer, Mark (2000). Form Exaggerates Function: Design Lessons from Evolutionary Psychology. Presentation to the Space Coast Human Factors Society, Cocoa Beach, FL.

*Colloquia and Training Classes*

1.  Kellogg School of Management, Northwestern University. Human Factors in Product Development, March, 2011, Chicago, IL

2.  Kellogg School of Management, Northwestern University. Human Factors in Product Development, October, 2010, Chicago, IL

3.  Kellogg School of Management, Northwestern University. Human Factors in Product Development, March, 2010, Chicago, IL

4.  Kellogg School of Management, Northwestern University. Human Factors in Product Development, October, 2009, Chicago, IL

5.  Kellogg School of Management, Northwestern University. Human Factors in Product Development, April, 2009, Chicago, IL

6.  Thunderbird School of Management. User Research Methods for Participatory Design. October, 2008, Glendale, AZ

7. Engineering, March 2007, Evanston, IL Cognitive Engineering Research Institute. Engineering brown bag. Facilitator.

8. Kellogg School of Management, Northwestern University. An Introduction to Human Factors Engineering, March 2007, Evanston, IL

9. Morrison School of Management and Agribusiness. Consumer Psychology and Brand Personality, February, 2007.

10. Kellogg School of Management, Northwestern University. An Introduction to Human Factors Engineering, October 2006, Evanston, IL

11. Cognitive Engineering Research Institute. How Implicit is the Implicit Association Test? With Jennifer Donahue. Brown Bag. November, 2007.

12. Cognitive Engineering Research Institute. Using Associative Networks to Represent Brand Personalities. Brown Bag Presentation. September, 2006, Mesa, AZ.

13. Arizona State University. User Centered Design of a Handheld Data and Voice Communications Device. March, 2006.

14. Microsoft Corporation. User Centered Design of a Handheld Data and Voice Communications Device. March, 2006

15. Kellogg School of Management, Northwestern University. An Introduction to Human Factors Engineering, April 2006, Evanston, IL

16. Invensys. User Centered Design, March 2002, Columbus, OH.

17. Bank One. An Introduction to User-Interface Design. October 1999, Chicago, IL.

18. Usability Professionals' Association Annual Conference, Phoenix, AZ. Cultivating a Climate for Creativity and Design. July, 2004.

19. Maersk. Effective User-interface Design, February 1999, Copenhagen, Denmark.

20. Nationwide Insurance. Effective User-Interface Design. September 1995, Columbus, OH.

21. Universidad Autonoma de Guadalajara. An Introduction to User-interface Engineering, October 1998, Guadalajara, Mexico.

## *Technical Reports*

1. Branaghan, R. J., & Schvaneveldt, R. W. (2011). Pathfinder Tool for Learning Assessment and Diagnostics of Training Effectiveness. AFRL Technical Report 5-1-2011.

2. Branaghan, R. J., Schvaneveldt, R. W., & Beringer, D. (2009). Airline Systems Operations Centers: Baseline Assessment of the Use of Weather Information FAA Technical Report DTFAAC-09-P-03642.

3. Schvaneveldt, R. W., Branaghan, R. J., Lamonica, J. & Beringer. D. (2008). Weather information priorities in various phases of flight, with special attention to weather information in NextGen. FAA Technical Report.

4. Branaghan, R. J., (1997).  Usability Analysis of the International Space Station Flight Simulator.  NASA Technical Report SST-624, NASA Johnson Space Center.

5. Branaghan, R. J., & Metz, S. V. (1989).  The human factors of direct access.  Poster presented at the 33rd annual meeting of the Human Factors Society, Denver, CO.

6. Root, R., & Branaghan, R. J. (1989).  Human factors support for the image processing subsystem of the OCR / Remote Video Code System:  Pacing and Feedback Pilot Study.  Honeywell, CSDD document.  Golden Valley, MN.

7. Branaghan, R. J., Metz, S. V. & Richardson, R. M. (1988).  Human factors evaluation of the Honeywell Home Automation control panel.  Honeywell, CSDD document G89201.  Golden, Valley, MN.

8. Bullemer, P., Bloom, C., & Branaghan, R. J. (1988). Startup Advisor for General Electric Gas Turbines.  Honeywell, CSDD document G88372-8136.  Golden Valley, MN.

**PhD Students**

1. Emily A. Hildebrand

2. Jonathan Jolly

**M.S. Theses Advised**

1. Shree Jariwala (MS expected, May, 2013).

2. Claudia Guerrero (2012). Claudia is an Intern, Human Factors at Intel Corporation, Chandler, AZ.

3. Bryant Foster (2012). Bryant is now a User Experience Researcher at Google.

4. Kuzel, Michael (2012).  Mike is a Principal Engineer at Exponent, Phoenix, AZ.

5. David English (2012). Dave is a Captain for Jet Blue Airlines.

6. Christy Caballero (MS expected, December, 2011). *Using the rule-following task to uncover implicit brand associations*. Christy is now Human Factors Engineer at Boeing

7. Cheryl Goldman-Cristiano. Research. Cheryl is a Research Assistant at the Air Force Research Laboratory. (MS expected December 2011).

8. Jessica Voge (MS expected December 2012). Jessica is a Research Psychologist at the Air Force Research Laboratory, Wright Patterson Air Force Base, Dayton, OH.

9. Jonathan Jolly (May 2011). Jon is a Research Assistant at the Human Factors Patient Safety Center of Inquiry at the Phoenix VA Hospital. He is also a student in ASU's Simulation, Modeling and Applied Cognitive Science (SMACS) PhD program.

10. Taylor, Amanda (2010) Amanda is now a Research Scientist for Sandia Research Corporation, Mesa.

11. Wu, Qiawen (2010) Qiawen is now a Research Scientist at the Cognitive Engineering Research Institute, Mesa.

12. Sevier, Daniel (2009). Dan is now a Human Factors Engineer at Motorola, Plantation, FL.

13. Hildebrand, Emily (2009). *A comparison of multidimensional scaling, Pathfinder networks and threshold networks for representing brand personalities*. Arizona State University Master's Thesis. Emily is now Director of the Patient Safety Center of Inquiry for Human Factors at the Veteran's Administration Hospital in Phoenix, AZ.

14. Donahue, Jennifer (2009). Jen is now Human Factors Engineer at Boeing, Mesa.

**MS Thesis Committee Member**

1. T.B. Garland (2012). Tegan is a user interface researcher at JO Morgan Chase.

2. Steven Banas (MS, 2011). Steve is a research associate at the Cognitive Engineering Research Institute, Mesa.

3. Daniel Sevier (MS, Industrial Design, 2011). Dan is now a Human Factors Engineer at Motorola in Plantation, FL.

4. Brooke Neumann (MS, 2010). Brooke is now a Research Scientist in the Patient Safety Center of Inquiry for Human Factors at the Veteran's Administration Hospital in Phoenix, AZ.

5. Rick Moore (MS, 2008). Rick is now a Research Scientist at the Air Force Research Laboratory, Dayton OH.

6. Rayka Mohebbi (MS, 2008). Rayka is now a Research Scientist at the Air Force Research Laboratory, Dayton, OH.

7. Stacie Straughn (MS, 2008). Stacie is now at home with a new baby.

8. Takao Sasaki (MS, 2008). Taka is now a doctoral student in Biology at ASU, Tempe.

9. Sandee Scott (MS, 2009). Sandee is a Clinic Manager at CD Medical, Mesa.

10. Zach Goolsbee (MS, 2009). Zach is now a high school teacher in Dallas, Texas.

11. Aishwarya Sivaraman (Applied Computer Science, MS 2009). Now at Intel, Portland, OR.

12. Peng Yeng (Industrial Design, MS, 2009). Peng in now a Product Manager at MyGame Networks, in Beijing.

13. Greg Burkett (Industrial Design, MS, 2009). Now Human Factors Engineer and Design Researcher at IDEO Product Development, Boston, MA.

**Undergraduate Research Mentoring (PSY 394/494, supervised research)**

1. Elizabeth Buxton - Feedback and duration estimation in human-computer interfaces

2. Kenny Jackson – Structural knowledge in flight. Now user-centered design engineer at OrangeSoda.com, American Fork, UT.

3. Blake Davis – Driving, priming and signal detection

4. Sharon Fallon - Automatic cognition and driving

5. Alysha Naumann – Symbolic distance and the 99 cent pricing effect

6. Jodi Shannon – Feedback and duration estimation in human-computer interfaces. Completed her Masters Degree in Education at ASU, and is now a teacher in Mesa.

7. Mistey Taggart - Symbolic distance and the 99 cent pricing effect. Now, Research assistant at Cognitive Engineering Research Institute.

8. Cheryl Goldman-Cristiano - Driving, priming and signal detection. Now pursuing MS in Applied Psychology at ASU, and Research assistant at Air Force Research Laboratory.

9. Jessica Voge - Now pursuing MS in Applied Psychology at ASU. and Research assistant at Air Force Research Laboratory.

10. Lourdes Reyes

11. Danielle Holland – Now Behavioral Scientist at Sea Life Park, Hawaii.

12. Monica Nguyen – Now research associate at Air Force Research Laboratory, Wright Patterson Air Force Base, Dayton, OH.

13. Corey Nicholson

**Service**

*Professional Service*

Editorial Board: *Human Factors*

Journal reviewer

- *Human Factors*

- *Business and Psychology*

- *Journal of Cognitive Engineering and Decision Making*

- *International Journal of Computer-Human Studies*

- *Behavior and Information Technology*

- *Journal of the Society for Information Display*

Human Factors and Ergonomics Society

- Member of the Program Committee for the First Symposium on Human Factors and Ergonomics in Health Care. March 12-14, 2012, Baltimore, MD.

- Chair of the Product Design Technical Group

- Associate Program Chair of the Healthcare Technical Group for HFES 2012 in Boston, MA.

Usability Professional's Association

- Member of the Board of Directors. Usability Professionals Association (2000-2003)

- Chair of the publications committee, Usability Professionals Association (2000-2003)

- Editor of Common Ground Usability Professionals Association (2000-2003)

- Founding Editor of User Experience Magazine (2002).

Association for Computing Machinery (ACM) Special Interest Group in Computer-Human Interaction (SIGCHI)

- President and Programming Chair, Central Ohio Chapter of SIG CHI - Special Interest Group in Computer-Human Interaction.

Society for Consumer Psychology

- Academic Advisory Board, Society for Consumer Psychology Conference on Persuasive Technology and Design:  Enhancing Sustainability and Health. Conference. The Fischer College of Business, The Ohio State University, June 2-5, 2011.

Cognitive Engineering Research Institute

- Member of Institutional Review Board for Cognitive Engineering Research Institute, Mesa, AZ

*University Service*

Arizona State University

- Curriculum and Academic Programs Committee (CAPC), 2010.

- Conversation leader for the Potential Future Faculty program at ASU Poly (March, 2007).

- ASU representative to the Innovation Value Institute, a collaboration of university and business entities including Intel, Microsoft and United Health Care (2006-2008).

College of Technology and Innovation

- Chair of Committee to develop an interdisciplinary degree in Human Centered Design.

- Faculty Assembly Executive Council (2010 to 2011)

- Chair of Admissions Committee, PhD program in Simulation, Modeling and Applied Cognitive Science (SMACS)

- Faculty Evaluation / Development System Committee

- Industry Advisory Board (2010 to 2011)

- Committee to develop a Professional Master's degree.

- Reviewer of Faculty Seed Grant (SSE) proposals

College Applied Arts & Sciences

- Committee of Review (2007-2009)

Department of Technological Entrepreneurship, and Innovation Management

- Aviation Management Technology Faculty Search Committee

- Technology and Entrepreneurship Management Instructor Search Committee

- Cognitive Science and Engineering Faculty Search Committee

- Executive Committee, Ph.D. program in Simulation, Modeling and Applied Cognitive Science.

Cognitive Science and Engineering (Applied Psychology) Program

- Director of Graduate Studies, ASU Applied Psychology Department (Fall, 2009 to present)

- Web master for ASU Applied Psychology Department (2006-2009)

- Coordinated design of new Applied Psychology logo

**Selected Consulting Clients, 1997-2012 (products in bold went to market)**

*Health and Medical*

- Cardinal Health. Human Factors of robotic endoscopic surgery.

- Guidant. Observational research of cardio-electro physiologists for the design of the **Ventak programmer for pacemaker and defibrillator** optimization.

- Medtronic. Human factors evaluation and product design of instruments to conduct open heart surgery on a beating heart.

- Ohio Health. Definition of a cultural model for employee selection training and facility design.

- Ohio State University. Human factors evaluation and design of **Medical Center website**.

*Aviation and Aerospace*

- Air Force Research Laboratory

- Goodrich Aviation. Ethnographic research with general aviation pilots for the design and human factors evaluation of **new cockpit displays**.

- Federal Aviation Administration (FAA). Studying the informational needs of pilots and dispatchers for the Next Gen Air Traffic Management System.

- Hughes Training. Design and human factors evaluation of software for the **International Space Station flight simulator**.

- NASA. Usability evaluation and redesign, of the **International Space Station Flight Simulator**. Trained managers and employees to integrate usability and human factors into the design process. Several projects are following these design processes.

*Computing and Office Products*

- Compaq. (now Hewlett-Packard). Usability evaluation of various **ink-jet printers and Compaq personal computers.**

- Gateway. Evaluation of the consumer out of the box experience including product, packaging, documentation, quick start software, etc.

- Hewlett-Packard. Many projects for consumer products, Internet news delivery, **inkjet printers**, training materials, usability tests and out of the box experience redesign.

- Iomega. Design, branding and naming of **Iomega Zip, Jazz and Ditto drives**.

- Lexmark. Design of **inkjet printers** for use with the Compaq line.

- Microsoft. Many projects including human factors and user interface design on **Microsoft Money, Microsoft Flight Simulator, EnCarta World Atlas, Picture It, Hallmark Greetings, Hive, Monster Truck Madness.**

*Telecommunications, Internet, Web*

- AOL. Usability and human factors evaluations of **Netscape, AOL and Pointcast**.

- AT&T Wireless. Ethnographic research and shopping process redesign of stores.

- Disney. Ethnographic and quantitative research for the design of children's' learning and entertainment products and hand-held devices, including the **Disney phone**.

- Marconi. The design of a new video-conferencing product.

- Motorola. Many projects involving qualitative and quantitative research on cell phones, push to talk functionality, scanners, products for public safety, etc. This work has continued for several years.

- Sprint. The design of earcons (auditory icons) for use in wireless web applications. Also, the analysis and redesign of the web experience for downloading **premium content** such as games and ring tones.

- US WEST (now Qwest). Many projects including the design of a comprehensive suite of service management applications and company wide user interface standards for Macintosh and World Wide Web applications.

- Nortel. User interface evaluation and design for phone systems.

### *Finance*

- Bank One. Usability and human factors evaluations of internal Bank One software.

- Nationwide. User-interface design of software for internal use.

- National City. Consumer and ethnographic research.

### *Retail*

- Albertsons. Ethnographic research of shopper behavior within grocery stores. Quantitative research on consumer response to store exterior redesign.

- Goodyear. Ethnographic research of store flow and redesign based on path analysis.

- Nike. Many projects, especially a large scale ethnographic consumer study of teens in the Asian market leading to a complete redesign of **Nike stores** throughout Asia.

- Pep Boys. Many projects, especially the redesign of **Pep Boys stores** based on video-ethnographic and graph-theoretic path analysis.

- Things Remembered. Video-ethnography and store redesign.

### *Miscellaneous*

- Cadence. Usability and human factors evaluation.

- Carhartt. Ethnographic research for the design of **new outdoor work clothing and new branding** programs.

- Elmer's. Studying children's' learning processes and the benefits of arts and crafts, **scrap booking,** painting, collaging, etc.

- Georgia Pacific. Design and evaluation of **EnMotion hands-free paper towel dispenser**.

- Hobart. Conjoint analysis and simulator development for pizza and sandwich prep tables.

- Hunter Fan. Product and installation process redesign.

- Invensys. Field research with HVAC technicians and diagnostic product redesign.

- Maersk. User interface, human factors and usability training for software engineers.

- Peacock Nine. Advising on the Design and operation of their consulting company. Involvement in **market segmentation research for Loyola Press**.

- PepsiCo. Consumer research to identify new beverage products and packaging design, especially among baby boomers.

- Symix. Provided user-interface design and evaluation for **Enterprise Resource Planning software**.

- United Way. Usability evaluation and design of **web pledging experience**.