

JENAY M. BEER

CURRICULUM VITAE

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EDUCATION

PhD Candidate, Georgia Institute of Technology (expected graduation: Fall 2013)

Fulfilling requirements for Ph.D. in Engineering Psychology, Proposed October 2012
Understanding Older Adults' Perceived Usefulness of an Assistive Home Robot

Qualifying Exams, Georgia Institute of Technology (passed with no revisions, Spring 2012)

Toward a Psychological Framework for Levels of Robot Autonomy in HRI

M.S. Engineering Psychology, Georgia Institute of Technology (2007-2010)

Recognizing Facial Expressions of Virtual Agents, Synthetic Faces and Human Faces: The Effects of Age and Character Type on Emotion Recognition

B.A. Psychology, University of Dayton, OH (2002-2006), *Magna Cum Laude*

INDUSTRY EXPERIENCE

Willow Garage, HRI Research Intern, Menlo Park, CA, (Summer 2010)

- Conducted semi-structured interviews with community dwelling older adults to assess their perceived benefits/concerns, technology acceptance, and willingness to use a remote presence system (Texai).
- Empirically evaluated human performance of piloting a remote presence system (Texai) with semi-autonomous assisted teleoperation.

HONORS, AWARDS, & FUNDING

Foley Scholarship Finalist, 2011 and 2012

- 1 of 4 finalists for Foley Scholarship. Foley Endowment established to support innovative research in shaping technology for a broad range of challenges in modern society.

APF Honored Guest, American Psychological Foundation Fundraising Event, 2012

- Honored guest for fundraising event in Palm Beach Florida (February, 2012)

APA Student Travel Award, special designation APF Ungerleider/Zimbardo Travel Scholarship, 2011

- Awarded for travel to APA 2011 Conference, special designation awarded to 7 (from over 100 applicants), Publicized in *APA Monitor* and APF Newsletter; award: \$300

APA Science Directorate Travel Grant for Datablitz, 2011

- Awarded for travel to APA 2011 Conference Datablitz Event, a fast-paced event in which selected graduate students present their research findings; award: \$700

HRI Young Pioneers Workshop Travel Funding, 2011

- Awarded funding from the NSF for travel to HRI Young Pioneers Workshop held in conjunction with the HRI conference; award: \$800

APA Science Student Council Early Graduate Student Researcher Award, 2010

- Awarded to 3 (from over 50 applicants) to receive competitive award for "outstanding graduate student research completed before dissertation"; award: \$1000

JOURNAL PUBLICATIONS

- Fausset, C.B., Bujak, K.R., Kline, K.A., **Beer, J.M.**, Smarr, C., Adams, A., McBride, S.E., & Burnett, J.S. (2012). Leaving the lecture hall: Conducting HF/E outside the classroom. *Ergonomics in Design*, 20(3), 23-26.
- Cullen, R. H., Smarr, C.-A., Serrano-Baquero, D., McBride, S. E., **Beer, J. M.**, & Rogers, W. A. (2012). The smooth (tractor) operator: Outcomes of a knowledge engineering project. *Applied Ergonomics*. Advance online publication. doi: 10.1016/j.apergo.2012.04.002
- McBride, S. E., **Beer, J. M.**, Mitzner, T. L., & Rogers, W. A. (2011). Challenges for home health care providers: A needs assessment. *Physical & Occupational Therapy in Geriatrics*, 29(1), 5-22.
- Crutcher, R. J., & **Beer, J. M.** (2011). An auditory analog of the picture superiority effect. *Memory & Cognition*, 39, 63-74.
- Beer, J. M.**, Ezer, N. (2008). Human-robotic interactions: The development of “helping robots” for the older population. *Signpost: Journal of Dementia and Mental Health Care for Older People*, 13(2), 31-33.
- McBride, S. E., **Beer, J. M.**, & Olson, K. E. (2008). Automation and aging: The future is now. *Signpost: Journal of Dementia and Mental Health Care for Older People*, 13(2), 26-28.

IEEE | ACM CONFERENCE PROCEEDINGS (peer reviewed)

- Prakash, A., **Beer, J. M.**, Deyle, T., Smarr, C.-A., Chen, T. L., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2013). Older adults’ medication management in the home: How can robots help? *To be published in Proceedings of the 8th ACM/IEEE International Conference on Human-Robot Interaction (HRI’13)*; pp. 283-290. [acceptance rate 21%]
- Beer, J. M.**, Smarr, C.-A., Chen, T. L., Prakash, A., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012). The domesticated robot: Design guidelines for assisting older adults to age in place. *Proceedings of the 7th ACM/IEEE International Conference on Human-Robot Interaction (HRI’12)*; pp. 335-342. [acceptance rate 25%]
- Beer, J. M.**, & Takayama, L. (2011). Mobile remote presence systems for older adults: Acceptance, benefits, and concerns. *Proceedings of 7th ACM/IEEE International Conference on Human-Robot Interaction (HRI)*. [acceptance rate 22%] [*nominated for best paper = top 6%]
- Takayama, L., Marder-Eppstein, E., Harris, H., & **Beer, J. M.** (2011). Assisted driving of a mobile remote presence system: System design and controlled user evaluation. *Proceedings of the International Conference on Robotics and Automation: ICRA 2011*, Shanghai, CN.
- Wiltgen, B., **Beer, J. M.**, McGreggor, K., Jiang, K., & Thomaz, A. (2010). The interplay of context and emotion for non-anthropomorphic robots. *Proceedings of the 19th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN.)*. (pp. 658-663). New York, NY: Institute of Electrical and Electronics Engineering Inc.

HFES CONFERENCE PROCEEDINGS (peer reviewed)

- Beer, J. M.**, Prakash, A., Smarr, C.-A., Chen, T. L., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012). “Commanding your robot”: Older adults' preferences for controlling home robots. *Proceedings of the Human Factors and Ergonomics Society 56th Annual Meeting* (pp. 1263-1267). Santa Monica, CA: Human Factors and Ergonomics Society.
- Smarr, C.-A., Prakash, A., **Beer, J. M.**, Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012). Older adults' preferences for and acceptance of robot assistance for everyday living tasks. *Proceedings of the*

Human Factors and Ergonomics Society 56th Annual Meeting (pp. 153-157). Santa Monica, CA: Human Factors and Ergonomics Society.

- McBride, S.E., **Beer, J.M.**, Mitzner, T.L. & Rogers, W. A. (2012). Challenges of training older adults in a home healthcare context. *Proceedings of the Human Factors and Ergonomics Society 56th Annual Meeting* (pp. 2492-2496). Santa Monica, CA: Human Factors and Ergonomics Society.
- Beer, J. M.**, Springman, J. M., McBride, S. E., Mitzner, T. L., & Rogers, W. A. (2011). Needs assessment for certified nursing assistants providing personal care. *Proceedings of the Human Factors and Ergonomic Society 55th Annual Meeting*. (pp. 291-295). Santa Monica, CA: Human Factors and Ergonomics Society.
- Beer, J. M.**, McBride, S. E., Adams, A. E., & Rogers, W. A. (2011). Applied experimental psychology: A capstone course for undergraduate degree programs. *Proceedings of the Human Factors and Ergonomic Society 55th Annual Meeting*. (pp. 535-539). Santa Monica, CA: Human Factors and Ergonomics Society.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2010). Recognizing emotion in virtual agent, synthetic human, and human facial expressions. *Proceedings of the Human Factors and Ergonomic Society 54rd Annual Meeting*. (pp. 2388-2392). Santa Monica, CA: Human Factors and Ergonomics Society.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2009). Emotion recognition of virtual agents: The effects of age and emotion intensity. *Proceedings of the Human Factors and Ergonomic Society 53rd Annual Meeting*. (pp. 131-135). Santa Monica, CA: Human Factors and Ergonomics Society.
- Mitzner, T. L., **Beer, J. M.**, McBride, S. E., Rogers, W. A., & Fisk, A. D. (2009). Older Adults' Needs for Home Health Care and the Potential for Human Factors Interventions. *Proceedings of the Human Factors and Ergonomic Society 53rd Annual Meeting*. (pp. 718-722). Santa Monica, CA: Human Factors and Ergonomics Society.

TECHNICAL REPORTS

- Smarr, C.-A., Mitzner, T. L., **Beer, J. M.**, Prakash, A., Kemp, C. C., & Rogers, W. A. (2013). *Considerations for designing assistive robots for the older adults of 2020* (HFA-TR-1301). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
- Beer, J. M.**, Rogers, W. A., & Fisk, A. D. (2012). *Toward a psychological framework for levels of robot autonomy in human-robot interaction* (HFA-TR-1204). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
- Mitzner, T. L., Smarr, C., **Beer, J. M.**, Chen, T. L., Springman, J. M., Prakash, A., Kemp, C. C., & Rogers, W. A. (2011). *Older adults' acceptance of assistive robots for the home*. (HFA-TR-1105). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
- Beer, J. M.**, Prakash, A., Mitzner, T. L., & Rogers, W. A. (2011). *Understanding robot acceptance* (HFA-TR-1103). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
- McBride, S. E., **Beer, J. M.**, Smarr, C., Cullen, R. H., Serrano Baquero, D., Rogers, W. A., & Fisk, A. D. (2010). *Operator understanding of and response to obstacles when mowing in groves* (HFA-TR-1005). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
- Cullen, R. H, McBride, S. E., **Beer, J. M.**, Smarr, C., Serrano Baquero, D., Rogers, W. A., & Fisk, A. D. (2009). *Understanding orchard mowing: Knowledge engineering project* (HFA-TR-0908). Atlanta,

GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.

Cullen, R. H, Serrano-Baquero, D., **Beer, J. M.**, McBride, S. E., Smarr, C., Rogers, W. A., & Fisk, A. D. (2009). *Developing a working model: A interim report of grove mowing operations* (HFA-TR-0902). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.

Adams, A., **Beer, J. M.**, Bujak, K. R., Kline, K., McBride, S., & Smarr, C. (2009). *Usability Assessment of <http://psychology.gatech.edu>* (HFES-TR-0902). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors Ergonomics Society Georgia Tech Student Chapter.

Bujak, K. R., Adams, A., Baranak, A. S., **Beer, J. M.**, Burnett, J. S., DeBlasio, J. M., Fausset, C. B., Jeon, M., McBride, S. E., Olson, K. E., Smarr, C., & Zheng, R. (2009). *Website Analysis: John Deere* (HFES-TR-0901). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors Ergonomics Society Georgia Tech Student Chapter.

INVITED PRESENTATIONS

Beer, J. M. (2012). *Meet your grandparents' assistant: The domesticated robot*. Invited presentation to TEDx Georgia Tech. Atlanta, GA. (<http://youtu.be/5ppyWqFdc1Q>)

Beer, J. M., Olson, K. E., & Smarr, C.-A. (2012). *Human-robot interaction and aging*. Invited presentation to Aldebaran Robotics. Boston, MA.

Beer, J. M. (2011). *Assistive mobile manipulation for older adults at home: The Georgia Tech PR2 Project*. Invited presentation at the University of Freiburg, Autonomous Intelligent Systems Group. Freiburg, Germany.

Beer, J. M. (2011). *The intersection of psychology and robotics*. Invited presentation as early graduate award recipient at DataBlitz held in conjunction with the Annual Meeting of the American Psychological Association, Washington D.C., USA.

CONFERENCE PRESENTATIONS

Mitzner, T. L., **Beer, J. M.**, McBride, S. E., & Rogers, W. A. (2013, March). From the front lines of home health care: Potential solutions to provider challenges. Presentation at the International Symposium on Human Factors and Ergonomics in Health Care: Advancing the Cause, Baltimore, MD.

Beer, J. M., Fisk, A. D., & Rogers, W. A. (2013, March). *Developing a framework of robot autonomy*. Poster presented at the Human-Robot Interaction Conference (HRI 2013), Tokyo, Japan.

Prakash, A., **Beer, J. M.**, Deyle, T., Smarr, C.-A., Chen, T. L., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2013, March). *Older adults' medication management in the home: How can robots help?* Paper presented at the Human-Robot Interaction Conference (HRI 2013), Tokyo, Japan. [presented by J. Beer].

Barg-Walkow, L. H., McBride, S. E., **Beer, J. M.**, Mitzner, T. L., & Rogers, W. A. (2013, March). *Understanding home healthcare providers' challenges in providing task education*. Poster presented at the International Symposium on Human Factors and Ergonomics in Health Care: Advancing the Cause, Baltimore, MD. [presented by L. Barg-Walkow]

Beer, J. M., Prakash, A., Smarr, C.-A., Chen, T. L., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012, October). *"Commanding your robot": Older adults' preferences for controlling home robots*.

- Paper presented at the Human Factors and Ergonomics Society 56th Annual Meeting. Boston, MA.
- Smarr, C.-A., Prakash, A., **Beer, J. M.**, Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012, October). *Older adults' preferences for and acceptance of robot assistance for everyday living tasks*. Paper presented at the Human Factors and Ergonomics Society 56th Annual Meeting. Boston, MA. [presented by C.-A. Smarr]
- McBride, S.E., **Beer, J.M.**, Mitzner, T.L. & Rogers, W. A. (2012, October). *Challenges of training older adults in a home healthcare context*. Paper presented at the Human Factors and Ergonomics Society 56th Annual Meeting. Boston, MA. [presented by S. McBride].
- Beer, J. M.**, Smarr, C.-A., Prakash, A., Chen, T. L., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012, April). *Older Adult Preferences for Controlling a Home-Based Robot*. Poster presented at the 14th Biennial Cognitive Aging Conference. Atlanta, GA.
- Mitzner, T. L., **Beer, J. M.**, Smarr, C.-A., Kemp, C. C., & Rogers, W. A. (2012, March). *Mobile manipulators: An emerging class of robots for health and medicine*. Poster presented at the 2012 Symposium on Human Factors and Ergonomics in Health Care: Bridging the Gap. Baltimore, MD. [presented by T. Mitzner].
- Beer, J. M.**, Smarr, C.-A., Chen, T. L., Prakash, A., Mitzner, T. L., Kemp, C. C., & Rogers, W. A. (2012, March). *The domesticated robot: Design guidelines for assisting older adults to age in place*. Paper presented at the Human-Robot Interaction Conference (HRI 2012), Boston, MA.
- Beer, J. M.**, Springman, J. M., McBride, S. E., Mitzner, T. L., & Rogers, W. A. (2011, September). *Needs assessment for certified nursing assistants providing personal care*. Paper presented at the Human Factors and Ergonomics Society 55th Annual Meeting. Las Vegas, NV.
- Beer, J. M.**, McBride, S. E., Adams, A., & Rogers, W. A. (2011, September). *Applied experimental psychology: A capstone course for undergraduate psychology degree programs*. Paper presented at the Human Factors and Ergonomics Society 55th Annual Meeting. Las Vegas, NV.
- Beer, J. M.**, McBride, S. E., Mitzner, T. L., Springman, J. M., & Rogers, W. A. (2011, August). *Challenges in Patient Education: Teaching Older Adults Home Health Care Tasks*. Paper presented at the Annual Meeting of the American Psychological Association, Washington D.C., USA.
- Smarr, C.-A., Serrano-Baquero, D., Cullen, R. H., McBride, S. E., **Beer, J. M.**, & Rogers, W. A. (2011, August). *Using Knowledge Engineering to Understand Communication Processes in the Mowing of Citrus Groves*. Abstract presented at the Annual Meeting of the American Psychological Association. Washington, D.C. [presented by C.-A. Smarr].
- Smarr, C., Serrano-Baquero, D., Cullen, R. H., McBride, S. E., **Beer, J. M.**, & Rogers, W. A. (2011, August). *Using Knowledge Engineering to Understand Communication Processes in the Mowing of Citrus Groves*. Paper presented at the Annual Meeting of the American Psychological Association. Washington, D.C., USA. [presented by C.-A. Smarr].
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2011, March). *Can you recognize your robot's expression? Age-related differences in emotion recognition*. Poster presented at the Human-Robot Interaction Conference (HRI), Young Pioneers Workshop, Lausanne, CH.
- Takayama, L., Marder-Eppstein, E., Harris, H., & **Beer, J. M.** (2011, May). *Assisted driving of a mobile remote presence system: System design and controlled user evaluation*. Paper presented at the International Conference on Robotics and Automation (ICRA), Shanghai, China. [presented by L. Takayama].

- Beer, J. M.**, & Takayama, L. (2011, March). *Mobile remote presence systems for older adults: Acceptance, benefits, and concerns*. Paper presented at the Human-Robot Interaction Conference (HRI), Lausanne, CH.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2010, September). *Recognizing emotion in virtual agent, synthetic human, and human facial expressions*. Paper presented at the 54th Annual Human Factors and Ergonomic Society Meeting, San Francisco, CA.
- Wiltgen, B., **Beer, J. M.**, McGreggor, K., & Jiang, K. (2010, September). *The interplay of context and emotion for non-anthropomorphic robots*. Paper presented at the 19th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Viareggio, Italy.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2010, April). *Age and emotion recognition: A comparison of virtual robotic agent, synthetic human, and human facial expressions*. Poster presented at the 2010 Cognitive Aging Conference, Atlanta, GA.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2009, November). *Recognizing social cues when interacting with virtual agents: What leads to misattributions?* Paper presented at the Gerontological Society 62nd Annual Meeting, Atlanta, GA.
- Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2009, October). *Emotion recognition of virtual agents: The effects of age and emotion intensity*. Paper presented at the 53rd Annual Human Factors and Ergonomics Society Meeting, San Antonio, TX.
- Mitzner, T. L., **Beer, J. M.**, McBride, S. E., Rogers, W. A., & Fisk, A. D. (2009, October). *Older Adults' Needs for Home Health Care and the Potential for Human Factors Interventions*. Paper presented at the 53rd Annual Human Factors and Ergonomics Society Meeting, San Antonio, TX. [presented by T. Mitzner].
- Mitzner, T. L., **Beer, J. M.**, McBride, S. E., Rogers, W. A., & Fisk A. D. (2009, August). *Difficulties encountered by home healthcare providers: A human factors investigation*. Abstract presented at the Annual Meeting of the American Psychological Association, Toronto, ON, Canada. [presented by T. Mitzner].
- Crutcher, R. J. & **Beer, J. M.** (2006, November). *An auditory picture superiority effect*. Poster presented at the 47th annual meeting of the Psychonomic Society. Houston, Texas. [presented by R. Crutcher].
- Beer, J. M.** & Crutcher, R. J. (2006, May). *An auditory superiority effect: Sounds are better than words*. Poster presented at the 78th annual meeting of Midwestern Psychological Society. Chicago, IL.
- Beer, J. M.**, Cook, C. E., & Davis-Berman, J. L. (2006, April). *Needs assessment: Student interest in a Bachelors of Social Work at the University of Dayton*. Poster presented at the 18th annual Stander Symposium. University of Dayton, OH.
- Beer, J. M.** & Crutcher, R. J. (2005, April). *Recall of sounds and words: Evidence for an auditory superiority effect*. Poster presented at the Stander Symposium. University of Dayton, OH.

BROWNBAG | OTHER PRESENTATIONS

- Beer, J. M.** (2012, November). Why a robot needs a psychologist. Presentation to Georgia Tech Engineering Psychology Brown Bag. Atlanta, GA.
- Smarr, C.-A., **Beer, J. M.**, Prakash, A., Chen, T. L., Rogers, W. A., Kemp, C. C., & Mitzner, T. L. (2011, November). *Older adult preferences for home-based robot assistance*. Poster presentation to the

Program Committee of the 7th ACM/IEEE International Conference on Human-Robot Interaction. Atlanta, GA.

- Beer, J. M.**, Smarr, C.-A., & Prakash, A. (2011, September). Robots in the Aware Home: Helping older adults age in place. Presentation at the Georgia Institute of Technology Aware Home Research Initiative Seminar. Atlanta, GA.
- Beer, J. M.** & McBride, S. E. (2011). *Robots, automation, and machines; Oh my! Life and research as a graduate student at Georgia Tech*. Invited presentation at the Gwinnett School of Mathematics, Science, and Technology Speaker Series. Gwinnett, GA.
- Beer, J. M.**, Smarr, C., Chen, T., Mitzner, T. L., Rogers, W. A., Kemp, C. C. (2010, October). Robotics to Assist Older Adults at Home. Poster presented at Humana: Aging-in-Place Technologies Workshop. Atlanta, GA.
- Smarr, C., **Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2010, October). *Age and Recognizing Emotion Displayed by a Virtual Agent*. Poster presented at Humana: Aging-in-Place Technologies Workshop. Atlanta, GA.
- Beer, J. M.**, Smarr, C., Chen, T., Mitzner, T. L., Rogers, W. A., Kemp, C. C. (2010, October). *Robotics to Assist Older Adults at Home*. Poster presented at 2010 GVU Demo Days. Atlanta, GA.
- Smarr, C., **Beer, J. M.**, Fisk, A. D., & Rogers, W. A. (2010, October). *Age and Recognizing Emotion Displayed by a Virtual Agent*. Poster presented at 2010 GVU Demo Days. Atlanta, GA.
- Cullen, R. H., **McBride, S. E.**, Beer, J. M., Smarr, C., Serrano-Baquero, D., Rogers, W. A., & Fisk, A. D. (2010, October). *Knowledge engineering in an orange grove*. Poster presented at 2010 GVU Demo Days. Atlanta, GA.
- Beer, J. M.** (2010). *Recognizing emotion in virtual agent, synthetic human, and human facial expressions*. Presentation at the Georgia Tech GVU Brown Bag. Atlanta, GA.
- Beer, J. M.** & Smarr, C. (2010). *Human-robot interaction for an aging population*. Presentation at the Georgia Tech Cognitive Aging Brown Bag. Atlanta, GA.
- Beer, J. M.** (2010). *Supporting successful aging with remote presence systems*. Presentation to Willow Garage, Menlo Park, CA.
- Beer, J. M.** (2010). *Human factors and aging: Designing for the aging population*. Presentation to Willow Garage, Menlo Park, CA.
- Beer, J. M.**, & Smarr, C. (2010). *iCat Robot Demonstration*. Demonstration at the 50th Anniversary of the Georgia Tech School of Psychology Student Day. Atlanta, GA.
- Beer, J. M.** (2009). *Does my robot show Emotion?* Invited presentation at the Gwinnett School of Mathematics, Science, and Technology Speaker Series. Gwinnett, GA.
- Beer, J. M.**, McBride, S. M., & Mitzner, T. L. (2009). *A needs assessment of home healthcare*. Invited presentation at the Georgia Tech Healthcare Robotics Lab. Atlanta, GA.
- Beer, J. M.** (2009). *Recognizing facial expression of virtual agents, synthetic faces, and human faces*. Engineering psychology colloquium presentation to the School of Psychology, Georgia Tech. Atlanta, GA.
- McGreggor, K., **Beer, J. M.**, Wilgen, B., Jiang, K., & Thomaz, A. (2009). *The interplay of context and emotion for non-anthropomorphic robots*. Presentation at the Georgia Tech Aware Home Seminar. Atlanta, GA.

- Beer, J. M.** (2009). *Recognizing facial expression of virtual agents, synthetic faces, and human faces*. Presentation at the Georgia Tech Cognitive Aging Brown Bag. Atlanta, GA.
- Beer, J. M.,** Fisk, A. D., & Rogers, W. A. (2009). *Recognizing Social Cues When Interacting with Virtual Agents*. Presentation at the Georgia Tech Cognitive Aging Brown Bag. Atlanta, GA.
- McBride, S. M., **Beer, J. M.,** & Mitzner, T. L. (2009). *A needs assessment of home healthcare*. Presentation at the Georgia Tech Aware Home Seminar. Atlanta, GA.
- Beer, J. M.** (2009). *Emotion recognition of a virtual robotic agent*. Presentation at the Georgia Tech Aware Home Seminar. Atlanta, GA.
- Beer, J. M.** (2009). *Emotion recognition of a robotic virtual agent's facial expressions*. Presentation at the Georgia Tech GVU Brown Bag. Atlanta, GA.
- Beer, J. M.** (2008). *The effect of robot expression on performance and attitude*. Presentation to the Aware Home Faculty Meeting at Georgia Institute of Technology. Atlanta, GA.

CONFERENCE | JOURNAL REVIEWER

- Human-Robot Interaction Conference (HRI) - 2013
- Journal of Human-Robot Interaction (JHRI) – 2012
- Robotics: Science and Systems Conference (RSS) – 2012
- Computer Human Interaction Conference (CHI) – 2012
- International Conference on Robotics and Automation (ICRA) – 2011

TEACHING EXPERIENCE

Instructor

Engineering Psychology, Georgia Tech (Fall 2012)

- Undergraduate psychology course
- Major duties included: developed and provided course lectures, managed in-class group activities, created assignments/exams, determined final grades.

Introductory Psychology (team taught), Georgia Tech (Fall 2010)

- Undergraduate introductory course. Primary instructor: Dr. Diane Leader.
- Major duties included: developed materials and lectured intro psychology topics: “Biological Basis of Learning” and “Developmental Psych: Adulthood & Aging”.

Applied Experimental Psychology Lab, Georgia Tech (Taught 3 Semesters: Spring, 2010-2012)

- Undergraduate senior capstone course. Course Instructor: Dr. Wendy A. Rogers.
- Major duties included: prepared materials and provided lectures, oversaw class projects, and graded lab reports.

Guest Lecturer

Engineering Psychology, Georgia Tech (Spring 2013)

- Undergraduate Engineering Psych Course (Human Factors). Lectured on “Robotics”
- Instructor: Dr. Anna Adams

Human-Computer Interaction Research Methods Laboratory, Georgia Tech (Fall 2012)

- Graduate HCI Research Methods Course. Lectured on “Focus Groups”
- Lab Instructor: Katherine Olson

Human-Computer Interaction Research Methods, Georgia Tech (Fall 2012)

- Graduate HCI Research Methods Course. Lectured on “Emotive Robots”
- Instructor: Dr. Arthur D. Fisk

Developmental Psychology, Georgia Tech (Spring 2012)

- Undergraduate developmental course. Lectured on “Aging in Place”

- Instructor: Dr. Andrew Kelly
- Introductory Psychology**, Georgia Tech (Spring 2011; 2012)
- Undergraduate introductory course. Lectured on “Emotion Recognition and Agents”
 - Instructor: Dr. Arthur D. Fisk.
- Applied Experimental Psychology**, Georgia Tech (Spring 2011)
- Undergraduate capstone course. Led seminar-style discussion “Aging and Emotion”
 - Instructor: Dr. Wendy A. Rogers
- User Interface Design**, Georgia Tech (Spring 2009)
- Undergraduate computer science course. Lectured on “Human Factors and Aging.”
 - Instructor: Mr. Christopher Plau

PROFESSIONAL SERVICE AND EXPERIENCE

Usability Assessment/Consulting

Kiosk Usability Team Member – Usable Health; HFES Student Chapter (2012)

- Assisted with cognitive walkthrough of Usable Health Ordering Kiosk.

Website Usability Team Member – John Deere & Company; GT HFES Student Chapter (2009)

- Member in multi-disciplinary team conducting usability analysis of John Deere & Company website (http://www.deere.com/en_US/deerecom/usa_canada.html). Assisted in persona development, and cognitive walkthrough.

Website Usability Project Leader – Human Factors and Aging Laboratory (2009-current), and HFES Georgia Tech Student Chapter (2008-2010)

- Project leader and usability advisor for the update and overhaul of the Human Factors and Aging (www.hfaging.org), CREATE Center (www.create-center.org), and School of Psychology (<http://psychology.gatech.edu/>) websites. Advising web content organization and web usability standards.
- Multiple usability techniques were administered, which included user testing, content management, debugging, user analysis, accessibility assessment, information architecture analysis (content cards), web surveys, analysis of Google Analytics data, and user testing.

Graduate Research Assistant – Georgia Institute of Technology (2007-current)

- Assist with research conducted in the Human Factors & Aging Laboratory. Major duties include: designing experiments, testing participants, conducting literature reviews, coding and analyzing data, and preparing and presenting findings.

Webmaster – Human Factors and Aging Laboratory and CREATE CENTER (2007-current), and HFES GT Student Chapter (2009-2010)

- Responsible for content development, management, and maintenance of the website www.hfaging.org, www.create-center.org, <http://psychology.gatech.edu/hfes/>.

Education Outreach – HFES Georgia Tech Student Chapter (November 2008; 2010)

- Volunteered in Human Factors education and demonstration for Fernbank Natural History Museum Scout event.

MEMBERSHIPS

Human Factors and Ergonomic Society – Student Member (2007-current)

Human Factors and Ergonomic Society GT Student Chapter – Member (2007-current)

- Secretary (2010-2011)
- Webmaster (2009-2010)

American Psychological Association – Student Member (2009-2011)

- Div. 21 Applied Experimental & Engineering Psychology

Gerontological Society of America – Student Member (2009-2010)

CERTIFICATIONS, TRAINING AND WORKSHOPS

Stanford Virtual Crash Course in Design Thinking – Georgia Tech (March, 2013)

- Learn basic principles of Design Thinking and start to adapt them into personal and professional routines

Georgia Institute of Technology Institutional Review Board – Georgia Tech (Fall 2007 - current)

- Protection of Human Research Subjects course, certified to test human subjects

CREATE certification - (Fall 2007 – current)

- Center for Research and Education on Aging and Technology Enhancement (CREATE), certified to test participants and score data (Fall 2007 – Current) including mini-mental, trail making, digit symbol, vision and hearing tests.

Human-Robot Interaction Conference, Young Pioneers Workshop – HRI (March, 2011)

- Full day workshop held in conjunction with the HRI 2011 conference
- Competitive workshop of selected group of graduate researchers, and prominent academia and industry figures within the field of Human-Robot Interaction
- Workshop included presentations, panel discussion, and a hands-on session in which groups investigated how to design a HRI experiment

Engineering Psychology Workshop Series: The Wonders of Excel – Georgia Tech (Fall 2010)

- Topics were related to data management and manipulation in Excel that have been found to be helpful in dealing with psychological data including (1) basic built-in features such as sorting, filtering, conditional formatting, and formulas, as well as (2) using and writing macros for automatic calculations and data manipulations.

GRADUATE COURSEWORK

Engineering Psychology (Human Factors):

Engineering Psychology I (Controls)
Engineering Psychology II (Displays)
Human-Centered Design
Comprehension in Dynamic Environments
Psychomotor & Cognitive Skills
Educational Psychology – Cog Issues

Psychology:

Sensation & Perception
Cognitive Psychology
Developmental Psychology
Biopsychology
Professional Problems

Other:

Human Robotic Interaction
Teaching Practicum
Professional Problems

Quantitative:

Research Design
Statistical Analysis I (ANOVA)
Statistical Analysis II (MRC)
Multivariate Statistics

MEDIA COVERAGE & DISSEMINATION

TEDx Georgia Tech (2012, April). Meet your Grandparents' Assistant: The Domesticated Robot. **TEDx Channel YouTube.** <http://youtu.be/5ppyWqFdc1Q>

Preston, J. (2012, April). Domestic Robot Design for Older Adults Enables "Aging in Place". **GVU News.** <https://gvu.gatech.edu/node/5688>

GVU Foley Scholar (2011 & 2012). 2011 Foley Scholars. **GVU Website.** <https://gvu.gatech.edu/foley2011> and <https://gvu.gatech.edu/2012-foley-scholars>

Davis, B. (2010, October). Robots at the water cooler and at home: Using telepresence robots to make the workplace, homelife more flexible. *AUVSI's Unmanned Systems Mission Critical*
http://issuu.com/auvsi/docs/mission_critical_fall_mag

Willow Garage Blog (2010, October). Mobile Remote Presence for Older Adults. *Willow Garage YouTube*. <http://www.willowgarage.com/blog/2010/10/26/mobile-remote-presence-older-adults>

Artificial Emotion (2009, December). *Industrial Engineer Magazine*, December Issue.

Burrass, J. (2009, October). Elderly Interpret Certain Emotional Expressions of Robots Differently, Researchers Find. *PBAonline, WABE, NPR News*.

Terrasso, D. (2009, October). Is My Robot Happy to See Me? *Georgia Tech Digital Lounge*.
<http://www.digitallounge.gatech.edu/digitallife/index.html?id=3469>

Hornyak, T. (2009, October). Can You Read Your Robot's Emotional State? *CRAVE, CNETnews Blog*.
http://news.cnet.com/8301-17938_105-10378403-1.html