Cindy L. Bethel, Ph.D.

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Curriculum Vitae
as of 12/20/2017

EDUCATION

University of South Florida – Tampa, FL   Department of Computer Science and Engineering
Degree Conferred: August 7, 2009
Ph.D., Computer Science and Engineering
NSF Computing Innovation Postdoctoral Fellowship (*1 of 60 selected from 526 applications nationally*)
NSF Graduate Research Fellowship *(1 of 1,024 from over 20,000 applications nationally)*
IEEE Robotics and Automation Society Graduate Fellowship (*only one selected per year internationally*)
Co-Advisors: Robin R. Murphy, Ph.D. and Lawrence O. Hall, Ph.D.
Dissertation: *Robots without Faces: Non-Verbal Social Human-Robot Interaction*
Major emphasis: Human-Robot Interaction, Affective Computing, Robotics, and Artificial Intelligence
Minor emphasis: Psychology, Mathematics/Applied Statistics

University of South Florida – Tampa, FL   Department of Computer Science and Engineering
Degree Conferred: May 2004
B.S., Computer Science (*Summa cum Laude*) – 4.00/4.00 GPA
Honors Thesis Advisors: Dmitry Goldgof, Ph.D. and Lawrence O. Hall, Ph.D.
Honors Thesis: *Mining for Implications in Medical Data*

PROFESSIONAL DATA

Mississippi State University – Starkville, MS   August 2011 – Present
Department of Computer Science and Engineering
Billie J. Ball Endowed Professorship in Engineering   September 2017-September 2020
Associate Professor   August 2015 to Present
Assistant Professor   August 2011 – August 2015
Director – Social, Therapeutic, and Robotic Systems (STaRS) Laboratory
Research Fellow – Center for Advanced Vehicular Systems (CAVS) – Human Performance Group
Research Fellow – MSU Social Science Research Center (SSRC)
Affiliate Professor – Department of Psychology and the Computational Engineering Program
    Teaching:

- Honors Introduction to Programming in Python (CSE1284) – Fall Semesters 2011-2015
- Human-Computer Interaction (CSE 4663/6663) – Spring 2012, Spring 2014 (revised course), Spring 2016 (revised course), Spring 2017, Spring 2018
- Special Topics in Human-Robot Interaction (CSE4990/6990) – Spring 2013 (new course)
- Special Topics in Advanced HCI (CSE 8990) – Spring 2015 (new course including real-world projects for front-end and back-end development with industry partners)
- Special Topics in Advanced HRI (CSE 8990) – Fall 2016 (new course)

Research:

- Established the STaRS Lab
- Conduct research associated with human-robot interaction, robot-assisted therapy, interface design, affective computing, affective robotics, human factors, hybrid cognitive architectures, artificial intelligence, and psychophysiology.
- Interested in research applications associated with law enforcement (SWAT team support and forensic interviews/information gathering), military, robotic support for victims of trauma, and emergency response.

Yale University – New Haven, CT   September 2009 – August 2011
Postdoctoral Associate – *NSF Computing Innovation Postdoctoral Fellow*
Mentor: Brian Scassellati, Ph.D.

    Research:

- Use of robotics with children diagnosed with Autism Spectrum Disorders (specialized training for working with children with disabilities and protected populations)
- Use of robots for information gathering with preschool-age children (specialized training for working with young children for human studies)

University of South Florida – Tampa, FL   August 2001 – August 2009
Dissertation Research Project: *NSF Graduate Research Fellow and IEEE RAS Research Fellow*
Advisors: Robin R. Murphy, Ph.D. and Lawrence O. Hall, Ph.D.

Department of Computer Science and Engineering: *Investing in the Future Graduate Fellow and Teaching Assistant*
Courses: Program Design and Computers and the Impact on Society
Supervisors: Lawrence O. Hall, Ph.D. and Ed Kellner, M.S.

NSF Research Experience for Undergraduates: *Undergraduate Research Assistant*
Advisors: Dmitry Goldgof, Ph.D. and Lawrence O. Hall, Ph.D.

Department of Computer Science and Engineering: *Volunteer Undergraduate Research Assistant*
Advisor: Abraham Kandel, Ph.D., Department Chair

Industry Professional Experience – Ohio   September 1979 – July 2000

Parms & Company, Inc. – Columbus, OH   May 1996 – July 2000
Firm Administrator (Administrative Accountant for first six months then promoted)
Award: Received the 1999 Ophelia M. Parms Award of Excellence for Employee of the Year.
Supervisor: John Parms, Managing Partner

Bentley Construction Company – Westerville, OH   January – May 1996
Project Coordinator and Accountant
Supervisor: JoAnn Bentley, Owner

M+E Engineering, Inc. – Columbus, OH   April – December 1995
Human Resources Manager and Assistant Comptroller
Supervisor: Tim Foley, Chief Financial Officer

Awareness and Health Unlimited – Columbus, OH　　　　　　**March 1993 – March 1995**
General Manager (Human Resources Manager and Bookkeeper for first eight months)
Supervisor: Phillip Wilson, President

Precious Treasures by Cindy – Reynoldsburg, OH　　　　**September 1990 – December 1994**
Business Owner/Designer for Custom-made Jewelry and Art
Supervisor: Self Employed

Weldon, Inc. – Columbus, OH　　　　　　　　　　**October 1988 – July 1992**
Bookkeeper and Computer Operator
Supervisor: Simon Russell, President

Kroger, Inc. – Columbus, OH　　　　　　　　**September 1979 – August 1988**
Assistant Customer Service Coordinator (Front-end Supervisor)
Supervisor: Various

RESEARCH FUNDING AWARDED *(40 grants for a total of $8,956,130)*

08/16/2017 – 08/15/2018 – *Phase 2 – Vehicle Visualization Application* – Sponsored by International Auto Manufacturer. Investigator **(PI) Cindy L. Bethel,** Eric Collins (Senior Personnel). $131,790.

08/16/2017 – 08/15/2018 – *Phase 2 – Pallet Building Platform Independent Application* – Sponsored by International Auto Manufacturer. Investigator **(PI) Cindy L. Bethel.** $124,407.

10/01/2017 – 5/31/2018 - Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel,** David May, Eric Collins. $2,500.

05/01/2017 – 04/30/2018 – Title: *SimBRS WD-70 Intelligent Mobility – Experimental Testing at Various Autonomy Levels.* Sponsored by United States Army Tank Automotive Research, Development and Engineering Center (TARDEC). (PI) George L. Mason, **(SME) Cindy L. Bethel,** (Co-PI) Daniel Carruth, (Co-PI) Randy Jones, (Co-PI) Jim Gafford. $365,188.

05/01/2017 – 04/30/2018 – Title: *FedEx Project ISE-02.* Sponsored by FedEx Corporation. (PI) Lesley Strawderman, **(Co-PI) Cindy L. Bethel,** (Co-PI) Daniel Carruth, (Co-PI) Mahnas Jean Mohammadi-Aragh. $169,334.

04/28/2017 – 04/27/2020 – Title: *Proving Ground and Dismounted Troops Area 4: Computational Prototyping and Proving Ground Environment: Task 1 Human Interactions for the Computational Proving Ground.* Sponsored by United States Army Engineer Research and Development Center (ERDC). (PI) Daniel Carruth, (Co-PI) Lesley Strawderman, (Co-PI) John Usher, (Co-PI) David May, and **(Co-PI) Cindy L. Bethel**. $1,326,688.

04/28/2017 – 04/27/2020 – Title: *Big Data Visualization: GVI Geometry and Visualization Module.* Sponsored by United States Army Corps of Engineers (DoD). **(PI) Cindy L. Bethel** and (Co-PI) Greg Burgreen. Total Award: $533,122.

10/01/2016 – 5/31/2017 - Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel and Christopher Archibald**. $2,500.

08/16/2016 – 08/15/2017 – *Phase I – Vehicle Visualization Application* – Sponsored by International Auto Manufacturer. Investigator **(PI) Cindy L. Bethel,** Eric Collins (Senior Personnel). $146,488.

08/01/2016 – 07/31/2017 – *Phase I – Pallet Building Platform Independent Application* – Sponsored by International Auto Manufacturer. Investigator **(PI) Cindy L. Bethel.** $147,456.

07/01/2016 – 06/30/2018 – Title: *NSF CHS: Medium: The Use of Robots as Intermediaries to Gather Sensitive Information from Children.* Sponsored by the National Science Foundation (CISE-IIS-Cyber-Human Systems). This is an REU supplement for one undergraduate research assistant. Investigators **(PI) Cindy L. Bethel**, (Co-PI) Deborah Eakin, (Co-PI) David May, (Co-PI) Melinda Pilkinton. $8,000.

05/23/2016 – 06/30/2018 – Title: *NSF EAGER: Therabot: A Robotic Therapy Support System.* Sponsored by the National Science Foundation (CISE – Cyber-Human Systems). This is an REU supplement for two undergraduate research assistants. Investigator **(PI) Cindy L. Bethel**. $16,000.

01/01/2016 – 12/31/2016 – SIMBRS (WD64 Topic 6) – *Virtual Prototyping of Vehicle Systems.* Sponsored by the Department of Defense Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) David May, (Co-PI) Lesley Strawderman. $311,450.

09/30/2015 – 09/29/2018 - *CRES-GV - Research to Incorporate Virtual Test Environments for Manned and Unmanned Ground Vehicle Design Concept Analysis Tools.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) Teena Garrison. $851,044.

09/30/2015 – 09/29/2018 – CRES-GV - *Interactive and Collaborative Workspaces for Exploration and Evaluation of Virtual Prototyping for Product Comparison.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(PI) Cindy L. Bethel**, (Co-PI) Daniel Carruth, (Co-PI) Lesley Strawderman. $868,959.

10/01/2015 – 05/31/2016 – Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel**. $2,500.

04/01/2015 – 03/31/2016 - *IVPPED – Providing Dynamic Environments for Integrated Virtual Prototyping.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) Lesley Strawderman, (Co-PI) David C. May, (Co-PI) John Usher. $329,712.

01/01/2015 – 04/30/2017 – *iPad Application for Production Line DPR/ILO Reporting.* Sponsored by International Auto Manufacturer. Investigator **(PI) Cindy L. Bethel**. $100,796.

12/20/2014 – 12/19/2015 - *IVPPED – Enhanced Simulation Techniques for Robust Evaluation of Product Performance.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Christopher Archibald, (Co-PI) Linkan Bian. $199,872.

10/01/2014 – 09/30/2015 – *CRES-GV - Interactive and Collaborative Workspaces for Exploration and Evaluation of Virtual Prototyping for Product Comparison.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(PI) Cindy L. Bethel**, (Co-PI) Daniel Carruth, (Co-PI) Lesley Strawderman. $215,126.

10/01/2014 – 09/30/2015 - *CRES-GV - Research to Incorporate Virtual Test Environments for Manned and Unmanned Ground Vehicle Design Concept Analysis Tools.* Sponsored by Department of Defense, Army Engineering Research and Development Center for the Army Corps of Engineers. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) Teena Garrison. $161,880.

09/15/2014 – 05/15/2015 – Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel**. $2,300.

07/09/2014 – 04/15/2016 – Title: *Study of Robot Integration into Tactical Team Environments and the Use of Diversions During Covert and Night Operations*. Sponsored by the Army Research Laboratories – Human Research and Engineering Directorate (ARL-HRED). Investigator **(PI) Cindy L. Bethel**. $84,887.

07/01/2014 – 06/30/2018 – Title: *NSF CHS: Medium: The Use of Robots as Intermediaries to Gather Sensitive Information from Children.* Sponsored by the National Science Foundation (CISE-IIS-Cyber-Human Systems). Investigators **(PI) Cindy L. Bethel**, (Co-PI) Deborah Eakin, (Co-PI) David May, (Co-PI) Melinda Pilkinton. $1,199,819.

07/01/2014 – 06/30/2018 – Title: *NSF EAGER: Therabot: A Robotic Therapy Support System.* Sponsored by the National Science Foundation (CISE – Cyber-Human Systems). This is an REU supplement for two undergraduate research assistants. Investigator **(PI) Cindy L. Bethel**. $16,000.

02/01/2014 – 09/17/2014 – Title: *CEED-ERS: Integrating Dynamic Environments for Unmanned Ground Vehicle Simulation*. Sponsored by the Department of Defense. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) Lesley Strawderman, (Co-PI) David C. May, (Co-PI) John Usher. $472,461.

02/01/2014 – 09/17/2014 – Title: *CEED-ERS: Enhancing Modeling and Simulation Techniques for Evaluation of UGS Design and Mission Performance*. Sponsored by the Department of Defense. Investigators **(Co-PI): Cindy L. Bethel**, (PI) Christopher Archibald. $218,740.

02/01/2014 – 09/17/2014 – Title: *CEED-ERS – Framework for Modeling and Simulation of Autonomous Vehicles*. Sponsored by the Department of Defense. Investigators **(Co-PI): Cindy L. Bethel**, (PI) Christopher Archibald. $109,626.

11/01/2013 – 10/31/2014 – Title: *Cross-College Research: Robotic Systems Working Group.* Sponsored by the MSU Office of Research and Economic Development. **Group led by Cindy L. Bethel**. $2,000.

10/01/2013 – 09/17/2014 – Title: *CRES-GV Project: Research to Investigate Methods to Support Interactive and Collaborative Exploration of CRES-GV Vehicle Design Analyses.* Sponsored by the Department of Army, Engineering Research and Development Center. Investigators **(PI) Cindy L. Bethel**, (Co-PI) Daniel Carruth, (Co-PI) Lesley Strawderman. $320,968.

10/01/2013 – 09/17/2014 – Title: *CRES-GV Project: Research to Incorporate Virtual Test Environments for Manned and Unmanned Ground Vehicle Design Concept Analysis.* Sponsored by the Department of Army, Engineering Research and Development Center. Investigators **(Co-PI) Cindy L. Bethel**, (PI) Daniel Carruth, (Co-PI) Teena Garrison. $225,346.

10/01/2013 – 06/30/2014 – Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel**. $1,800.

09/25/2013 – 3/31/2014 – Title: *4.3.2 Human Robotic Interaction (HRI): Exploration of Interfaces for Conveying Intent for Robot Behaviors and for Supervisory Control While Operating in Close Proximity to Soldiers on Maneuvers.* Sponsored by the Department of Defense, Department of Army, Human Research and Engineering Directorate (HRED). Investigator **(PI) Cindy L. Bethel**. $43,821.

07/01/2013 – 06/30/2017 – Title: *NSF EAGER: Therabot: A Robotic Therapy Support System.* Sponsored by the National Science Foundation (CISE – Human Centered Computing). This is an REU supplement for two undergraduate research assistants. Investigator **(PI) Cindy L. Bethel**. $16,000.

05/20/2013 – 06/30/2014 – Title: *Developing a Robotic Application for Bullying Intervention: A Big Idea Proposal* by the Bagley College of Engineering and the MSU Office of Research and Economic Development. **Group Coordinator and Lead Advisor: Cindy L. Bethel**. Investigators: Megan Stubbs, Jennifer Carruth, Jeannice Louine (Graduate Students in Sociology); Kaleb Stuart and Kayla Huddleston (Undergraduate Students in Computer Science and Engineering). $9,414.

11/01/2012 – 10/31/2013 – Title: *Cross-College Research: Robotic Systems and Psychosocial Robotics Working Group.* Sponsored by MSU Office of Research and Economic Development (ORED). **Group led by Cindy L. Bethel**. $2,000.

10/01/2012 – 06/30/2013 – Title: *Robotic Systems Working Group.* Sponsored by MSU Bagley College of Engineering. **Group led by Cindy L. Bethel**. $2,000.

07/15/2012 – 08/17/2012 – Title: *Exploration of Conveying the Intent of Robot Behaviors and Movements While Operating in Close Proximity to Soldiers on Maneuvers.* Sponsored by Army Research Labs – Human Research and Engineering Directorate (HRED). Investigator **(PI) Cindy L. Bethel**. $24,913.

07/15/2012 – 06/30/2018 – Title: *NSF EAGER: Therabot: A Robotic Therapy Support System.* Sponsored by the National Science Foundation (CISE – Human Centered Computing). Investigator **(PI) Cindy L. Bethel**. $186,681.

05/01/2012 – 04/30/2013 – Title: *Integrating Robotics Exercises into CSE 1284 – 1384 to Improve Retention and Learning.* Sponsored by MSU Schillig Special Teaching Project. Investigators **(PI) Cindy L. Bethel** and (Co-PI) Donna Reese. $2,542.

PUBLICITY FOR RESEARCH

- 12/18/2017 – Senator Wicker's Weekly Report – mentioned in the article regarding my research associated with the hearing on *Digital Decision-Making: The Building Blocks of Machine Learning and Artificial Intelligence. https://www.wicker.senate.gov/public/index.cfm/weekly-report?ID=18851D90-D630-40C2-8F8C-A72FCB1219BE*

- 10/26/2017 – Social Science Research Center Annual Report 2017 – Featured in the annual report on pages 26-27 *"Social, Therapeutic, and Robotic Systems Lab Partners with SSRC." https://ssrc.msstate.edu/wp-content/uploads/2017/10/2017_AnnualReport_FINAL.pdf*

- 05/19/2017 – Mississippi State University Television – Momentum Program – *"Robotic Developments in the Social, Therapeutic, and Robotic Systems (STaRS) Lab" https://www.youtube.com/watch?v=Lg4Amfi9TPM*

- 05/15/2017 – Brigham Young University Radio – Top of Mind with Julie Rose Program – *"Would Abused Children Open Up to a Robot?" https://www.byuradio.org/episode/8ce4834e-b631-420c-8c6f-83d70fa7dd65?playhead=3063&autoplay=true*

- 05/12/2017 – Canadian Broadcasting Corporation Spark! Radio Program with Nora Young – *"Could robots be better at listening to abused children?"* http://www.cbc.ca/radio/spark/could-robots-be-better-at-listening-to-abused-children-1.4110217

- 03/23/2017 – Mississippi State University – We Ring True – Therabot Video Series – "*Here at Mississippi State University, we are changing the game of therapeutic recovery and leading the way to a better tomorrow."* https://www.facebook.com/msstate/?pnref=story

- 03/22/2017 – New Scientist News & Technology – featured in an article with my graduate student Zachary Henkel titled *"Robots could help children give evidence in child abuse cases."* https://www.newscientist.com/article/mg23331184-500-robots-could-help-children-give-evidence-in-child-abuse-cases/

- 03/10/2017 – Discovery News Seeker Online Magazine – featured in an article with my graduate student Zachary Henkel titled *"Robots Might Gather Evidence Better than Humans in Child Abuse Investigations."* http://www.seeker.com/robots-might-gather-evidence-better-than-humans-in-child-abuse-investi-2309485251.html

- 01/30/2016 – The Columbus Dispatch – featured in an article with collaborators, Deborah Eakin, David May, and Melinda Pilkinton titled *"Meet Nao: Researchers at MSU Explore Ways a Pint-Sized Robot Might Help Children."* http://www.cdispatch.com/lifestyles/article.asp?aid=47854

- 11/14/2015 – WCBI News – featured with my collaborators, David May and Deborah Eakin in an interview associated with our NSF funded research on "The Use of Robots as Intermediaries for Gathering Sensitive Information from Children." The feature is called "Robots Helping Kids." http://www.wcbi.com/local-news/robots-helping-kids/

- 10/26/2015 – MIT Technology Review – featured as an expert opinion on this new technology – *Forget Skype, Inhabit This Teddy Bear's Using Virtual Reality.* http://www.technologyreview.com/news/542741/inhabit-this-teddy-bears-body-using-virtual-reality/.

- 09/01/2015 – September/October Issue of Inside Unmanned Vehicles – *Using Ground Robots for a Tactical Advantage.* http://insideunmanned.epubxp.com/i/562514-aug-2015/69.

- 08/20/2015 – Article on iDigitalTimes.com – *Robots and Humans Must Get Along: How Human-Robot Interaction Researchers Are Building Our Future with the Machines.* http://www.idigitaltimes.com/robots-and-humans-must-get-along-how-human-robot-interaction-researchers-are-building-467951.

- Summer 2015 – Article in Mississippi State University's Alumnus Magazine. *"Therapeutic Robot Doubles as 'Man's Best Friend'".* http://www.idigitaltimes.com/robots-and-humans-must-get-along-how-human-robot-interaction-researchers-are-building-467951.

- 08/13/2015 – Article in Wired.com online magazine – Associated with research developments with Therabot. *"When a Real Dog Won't Do, This Puppy Bot Helps PTSD Victims"* http://www.wired.com/2015/08/therabot-puppy-robot/.

- 08/07/2015 – Article on iDigitalTimes.com on research associated with Therabot. *"Therabot Robot Helps PTSD Sufferers Heal, Development Research Settles Puppies vs. Kitties Debate Once and For All."* http://www.idigitaltimes.com/therabot-robot-helps-ptsd-sufferers-heal-development-research-settles-puppies-vs-465396.

- 02/05/2015 – Article on NSF Funded research related to the use of robots as intermediaries for gathering sensitive information from children. *"Feds Spending $374,351 for Children to Talk to Robots about Bullying – Interviews used for 'eliciting information related to bullying'."* Article does misrepresent the funding levels and sources, but provides information about the research that is relevant. http://freebeacon.com/issues/feds-spending-374351-for-children-to-talk-to-robots-about-bullying/.

- 2014 Annual Report for the Mississippi State University Center for Advanced Vehicular Systems Annual Report. This article covers the research I am performing associated with the integration of robots with tactical teams. http://www.cavs.msstate.edu/annual_reports/2014CAVS_annualreport.pdf pages 14-15.

- Fall/Winter 2014 – Mississippi State University College of Arts & Sciences Vision Magazine – features an article on my research sponsored by the National Science Foundation titled *"The Use of Robots as Intermediaries for Gathering Sensitive Information from Children."* http://issuu.com/msu-artssciences/docs/visionmagazinewebs15 pages 6-7.

- 08/30/2014 – Starkville School District Commercial played at the first football game of the season and on local television stations features the STaRS lab members and robots and the collaboration efforts developing between the STaRS lab and the local city schools. *http://vimeo.com/103184463*

- 08/03/2014 – Starkville Daily News published a front-page news article on a database that Deborah Eakin and I have established to recruit children ages 8 – 12 in the region to participate in different research studies including the newly funded NSF medium grant on the use of robots as intermediaries for gathering sensitive information from children related to eyewitness memory and experiences with bullying. http://www.scribd.com/fullscreen/235718276?access_key=key-KraHMq54Pf2FkA7HyAAW&allow_share=false&escape=false&show_recommendations=false&view_mode=scroll

- 08/01/2014 – Patrick Sammon, a film producer, came to MSU on June 1, 2014, to film my research on the integration of robots with tactical teams and it was published for international and national public release as a Computing in Action Video sponsored and distributed by Computing Research Association (CRA) and the Computing Community Consortium (CCC) http://www.cra.org/ccc/resources/computing-research-in-action/past-videos/413-stars-lab

- 6/13/2013 – Interview with The Economist Technology Quarterly - http://www.economist.com/news/technology-quarterly/21584455-robotics-new-breed-robots-being-designed-collaborate-humans about research on the use of robots for forensic interviews with children.

- 4/16/2013 – Article in MSU Interior Design News on robotic research study conducted by my Ph.D. student Joe Crumpton - http://caad.msstate.edu/wpmu/interiordesignnews/robot/

- March and April 2013 - Phone interviews with BBC2 - London about research using robots for interviews and other research activities I am working on. They are interested in coming to MSU to at some point to do a feature on my research. Ongoing discussions.

- 2/25/2013 – Interview with New Hampshire Public radio regarding research on the use of robots for interviews (see HRI 2013 publication).

- 2/25/2013 – WTVA story on the use of robots with the Starkville PD SWAT team – (links have changed and this story is no longer searchable)

- 2/19/2013 – Interview with German National Radio regarding research on the use of robots for interviews (see HRI 2013 publication).

- 2/9/2013 – Article in Digital Trends - http://www.digitaltrends.com/home/no-one-expects-the-robotic-inquisition/
- 1/25/2013 – Interview with Hal Hodsen from New Scientist Magazine - http://www.newscientist.com/article/mg21729036.100-robot-inquisition-keeps-witnesses-on-the-right-track.html#.UuNJo2TnauU
- 1/17/2013 – Featured in the IEEE Women in Engineering "I Am an Engineer. I Change the World." Campaign - http://www.ieee.org/ns/periodicals/WIE/issue1/index.html

AWARDS, HONORARY, MEMBERSHIPS, AND LEADERSHIP
Fellowships:

- 2017 – Submitted application for Fulbright Fellowship Senior Scholar for Research Program at the University of Technology Sydney – Committee has made a recommendation for the award, I have interviewed, and decisions/announcements will be made in April 2018.
- 2013 – Nominated for the 2014 Microsoft Faculty Research Fellowship Award for New Faculty *(only one person per university is selected)*
- 2009 – 2011 NSF Computing Innovation Postdoctoral Fellowship – Yale University: Mentor, Brian Scassellati (*1 of 60 selected from 526 applications nationally*)
- 2008 IEEE Robotics and Automation Society Fellowship *(only one selected per year internationally)*
- 2008 – 2009 Mortar Board National Senior Honor Society Graduate Fellowship
- 2005 – 2008 National Science Foundation Graduate Research Fellowship *(1 of 1,024 from over 20,000 applications nationally)*
- 2004 – 2005 USF Investing in the Future Graduate Fellowship *(only one selected per year)*

Scholarships:

- 2004 Outstanding Honor Society Member of the Year Award and Scholarship
- 2003 – 2004 Peter Pempsell Endowed Scholarship
- 2002 – 2004 USF Women's Club Grace Allen Scholarship
- 2002 – 2003 USF Computer Science and Engineering Scholarship
- 2001 – 2003 Community College 2 + 2 Scholarship through ATSS
- 2001 – 2003 USF Honors College Scholarship
- 2001   Golden Key International Honor Society Outstanding Junior Award and Scholarship
- 2001 – 2002 Honors Program Scholarship
- 2001 – 2002 Open Door Foundation Scholarship

Awards:

- 2017 – 2020 – Billie J. Ball Endowed Professorship in Engineering (renewable every three years)
- 2017 – Awarded Research Fellow with the MSU Social Science Research Center
- 2017 – 2020 – Member of the ACM Distinguished Speakers Program

- 2017-2018 – Nominated for the national NCWIT Undergraduate Research Mentoring Award. (Not selected in the 2015-2016 resubmitted packet at the request of the committee Fall 2017)

- 2016-2017 – Nominated for the Computing Research Association (CRA-E) Undergraduate Research Mentoring Award. (Updated and resubmitted packet at the request of the selection committee) – *Not selected to receive this award.*

- 2015-2016 – Nominated for the national NCWIT Undergraduate Research Mentoring Award. (Not selected but selection committee requested that I allow the nomination to roll over to next cycle for consideration and would request updates before deadline – expected in Fall 2017)

- 2015-2016 – Nominated for the Computing Research Association (CRA) Undergraduate Research Mentoring Award. (Not selected but selection committee requested that I allow the nomination to roll over to next year for consideration and would request updates before deadline)

- 2014-2015 – Awarded the New Faculty Research Teaching Award from the American Society of Engineering Education (ASEE).

- 2014-2015 – Inducted into the James Worth Bagley College of Engineering Academy of Distinguished Teachers. *(lifetime membership)*

- 2014 – Nominated for the American Society of Engineering Education (ASEE) New Faculty Research Teaching Award

- 2013 – Nominated, Selected, and Featured in the IEEE Women in Engineering Campaign "I am an Engineer, I Change the World" – An international media compaign to encourage the recruitment of women into STEM related fields

- King-O'Neal Scholar Award for 4.0 GPA (*13 awarded from 2535 graduates - spring 2004*)

- Computer Science and Engineering Outstanding Graduate Award (*one awarded – spring 2004*)

- Engineering Alumni Society Outstanding Senior of the Year (*one awarded per year – 2004*)

- 2001 – 2002 USF Provost's Scholar Award

- 2001 – 2002 Dean's List of Scholars - USF College of Engineering (*all semesters*)

Memberships and Leadership Positions:
- Member of the Upsilon Pi Epsilon International Honor Society for Computing and Information Disciplines

- Member of the USF Honors College

- Member of Tau Beta Pi Engineering Honor Society

- Member of USF Mortar Board Senior Honor Society – Athenaeum Chapter
  - *Senior Advisor:* Summer 2005 – August 2009
  - *Junior Advisor:* Fall 2004 – Spring 2005
  - *President:* Spring 2003 – Summer 2004
  - *Vice President of Internal Affairs:* Fall 2002

- Member of the Honor Society of Phi Kappa Phi

- Member of the Golden Key International Honor Society

- Member of the Phi Sigma Theta Honor Society

- Student Member of Association for Computing Machinery
  - *Co-Advisor:* Fall 2005 – August 2009
  - *Chair:* Spring 2003 – Summer 2005
- Student Member of IEEE-Computer Society
  - *Administrative Vice President:* Fall 2002 – Spring 2004
- Member USF Council of Honor Societies
  - *1st Vice President of Programs:* Fall 2003 – Spring 2004

PUBLICATIONS *(italics represents student contributions)*
Refereed Journal Articles

[1]   *Jensen, L. T.,* Carruth, D. W., **Bethel, C. L.,** Babski-Reeves, K., *Hudson, C. R.,* "Validating Latency Effects in Simulation for Unmanned Ground Vehicles. Submitted to the *IEEE Transactions on Human-Machine Systems*. Submitted December 16, 2017. *Under Review. (Impact Factor: 2.493)*

[2]   Sabanovic, S., Berry, C., **Bethel, C. L.,** "Introduction to the Special Issue on HRI Education." Published in the *Journal of Human-Robot Interaction (JHRI)*. October 6, 2017.

[3]   Strawderman, L., Ivy, O. N., **Bethel, C. L.,** Carruth, D. W., "The Influence of Individual and Group Behavior on Collaborative Workspace Preferences." Submitted to the *International Journal of Computer-Supported Collaborative Learning*. Submitted August 9, 2017. *Under Review. (Impact Factor: 3.469)*

[4]   *Stives, K. L.,* May, D. C., Pilkinton, M., **Bethel, C. L.,** Eakin, D. K., "Strategies to Combat Bullying: Parental Responses to Bullies, Bystanders, and Victims." Submitted to *Youth and Society Journal*. Submitted May 22, 2017. *Accepted for Publication. (Impact Factor: 1.722)*

[5]   *Louine, J.,* May, D. C., Carruth, D. W., **Bethel, C. L.,** Strawderman, L., Usher, J., "Are Black Robots Like Black People? Examining How Negative Stigmas about Race are Applied to Robots." Submitted to *Sociological Inquiry*. Submitted February 28, 2017. *Under Review. (Impact Factor: 0.788)*

[6]   Liu, Y., *Batte, J., Collins, Z., Bateman, J., Atkins, J., Davis, M., Salley, D.,* **Bethel, C. L.,** Ball, J., and Archibald, C., "Mechanical Design, Prototyping, and Validaton of a Martian Robot Mining System," in the *SAE International Journal of Passenger Cars – Mechanical Systems*. DOI: 10.4271/2017-01-1305 (March 2017). Volume 10, Issue 1. March 2017. *(Impact Factor: 0.730)*

[7]   Usher, J., *McCool, R.,* Strawderman, L., Carruth, D., **Bethel, C.,** May, D., "Simulation Modeling of Pedestrian Behavior in the Presence of Unmanned Mobile Robots." Published in *Simulation Modelling Practice and Theory*. DOI: 10.1016/j.simpat.2017.03/012. Volume 75, pages 96-112. March 2017. *(Impact Factor: 1.954)*

[8]   *Durst, P.* Anderson, D. **Bethel, C. L.,** "A Historical Review of the Development of Verification and Validation Theories for Simulation Models." Published in the *International Journal of Modeling, Simulation, and Scientific Computing*. DOI: 10.1142/S1793962317300011 (January 2017). Volume 8, Issue 2, 2017 *(Impact Factor: 0.213)*.

[9] May, D. C., *Holler, K.,* **Bethel, C. L.,** Strawderman, L., Carruth, D. W., Usher, J., "Survey of Factors for the Prediction of Human Comfort with a Non-Anthropomorphic Robot in Public Spaces." Published in *The International Journal of Social Robotics.* DOI: 10.1007/s12369-016-0390-7 (December 2016). Volume 9, Issue 2, pages 165-180, April 2017 *(Impact Factor: 2.559).*

[10] Strawderman, L., *Campbell, S.,* May, D., **Bethel, C. L.,** Usher, J., and Carruth, D., "Understanding Human Response to the Presence and Actions of Unmanned Ground Vehicle Systems in Field Environments." Published in the *IEEE Transactions on Human-Machine Systems.* DOI: 10.1109/THMS.2017.271905. Volume PP, Issue 99, pages 1-12, April 29, 2015. *(Impact Factor: 2.493)*

[11] *Srinivasan, V.,* Murphy, R. R., and **Bethel, C. L.,** "A Reference Architecture for Social Head Gaze Generation in Social Robotics." *International Journal of Social Robotics*. DOI: 10.1007/s12369-015-0315-x (September 2015). Volume 7, Issue 5, Pages 601 – 616. November 2015. *(Impact Factor: 2.559)*

[12] *Crumpton, Joseph* and **Bethel, C. L.,** "A Survey of Using Vocal Prosody to Convey Emotion in Robotic Speech," *International Journal of Social Robotics.* DOI: 10.1007/s12369-015-0329-4 (December 2015). Volume 8, Issue 2, Pages 271-285. April 2016 *(Impact Factor: 2.559)*

[13] *Srinivasan, V.,* **Bethel, C. L.,** and Murphy, R. R., "Evaluation of Head Gaze Loosely Synchronized with Real-Time Synthetic Speech for Social Robots," *IEEE Transactions on Human-Machine Systems*. DOI: 10.1109/THMS.2014.2342035 (August 2014). Volume 44, Issue 6, C2. November 2014. *(Impact Factor: 2.493)*

[14] *Henkel, Z.,* **Bethel, C. L.,** and Murphy, R. R., *Srinivasan, V.,* "Evaluation of Proxemic Scaling Functions for Social Robotics," *IEEE Transactions on Human-Machine Systems*. DOI: 10.1109/THMS.2014.2304075 (February 2014). Volume 44, No. 3, Pages 374-385. May 2014. *(Impact Factor: 2.493)*

[15] **Bethel, C. L.** and Murphy, R. R., "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Used in Victim Management," Invited publication to *Paladyn: International Journal of Behavioral Robotics,* DOI: 10.2478/s13230-011-0009-5 (April 2011). Volume 1, Pages 219-230. December 2010. *(Impact Factor: 1.160)*

[16] **Bethel, C. L.** and Murphy, R. R., "Review of Human Studies Methods in HRI and Recommendations," in *International Journal of Social Robotics*, DOI: 10.1007/s12369-010-0064-9 (July 2010). Volume 2, Issue 4. 2010. December 2010. *(Impact Factor: 2.559)*

[17] **Bethel, C. L.** and Murphy, R. R., "Survey of Non-facial/Non-verbal Affective Expressions for Appearance-Constrained Robots," in *IEEE Transactions on Systems, Man, and Cybernetics, Part C – Applications and Reviews*, DOI: 10.1109/TSMCC.2007.905845 (December 2007). Volume 38, No. 1. January 2008. *(Impact Factor: 2.171)*

[18] Dick, S., **Bethel, C.,** and Kandel, A., "Software Reliability Modeling: The Case for Deterministic Behavior," in *IEEE Transactions on Systems, Man and Cybernetics, Part A – Systems and Humans*, DOI: 10.1109/TSMCA.2006.886364 (December 2006). Volume 37, Issue 1, Pages 106 - 119. January 2007. *(Impact Factor: 2.350)*

Refereed Conference Papers/Videos Proceedings and Presentations

Note: In my professional community, some of full-text refereed conference articles have very low acceptance rates (listed for each relevant article), are widely read, and have a professional impact that is comparable to journal articles.

[1]   *Davis, M., Cagle, L. Morgan, C., Hudson, C. R.,* Ball, J. E., Anderson, D., **Bethel, C. L.,** Liu, Y., Gafford, J., LeClair, A., "Hydra: A modular, universal multisensory data collection system," accepted for publication and oral presentation in *Autonomous Systems: Sensors, Vehicles, Security and the Internet of Everything* track of *SPIE DCS Defense and Security Program and Symposium.* Orlando, FL, USA, April 15-19, 2018.

[2]   **Cindy L. Bethel,** "Improving Student Engagement and Learning Outcomes through the Use of Industry-Sponsored Projects in Human-Computer Interaction Curriculum," *Invited Paper and Keynote Presentation* to the *15th International Conference on Emerging eLearning Technologies and Applications (ICETA 2017).* The High Tatras, Slovakia. October 26-27, 2017.

[3]   *Hudson, C. R.,* **Bethel, C. L.,** Carruth, D. W., Pleva, M., Juhar, J., Ondas, S., "Training Tool for Speech Driven Human-Robot Interaction Applications," Presentation and publication to the *15th International Conference on Emerging eLearning Technologies and Applications.* The High Tatras, Slovakia. October 26-27, 2017.

[4]   *Davis, W.,* **Bethel, C. L.,** "Gray Transceiver: A Multi-Robot Communication Interface and Protocol," Submitted to the *2018 IEEE International Conference on Robotics and Automation (ICRA 2018).* Brisbane, Australia. May 21-25, 2018. *Under Review.*

[5]   *Durst, P. J.,* Goodin, C., Anderson, D., **Bethel, C. L.,** "A Reference Autonomous Mobility Model," Presentation and publication at the *50th Winter Simulation Conference (WSC 2017).* Las Vegas, NV, USA. December 3-6, 2017.

[6]   *Pearson III, E.,* **Bethel, C. L.,** Jarosz, A. F., Berman, M. E., "To Click or Not to Click is the Question: Fraudulent URL Identification Accuracy in a Community Sample," Presentation and publication at the *IEEE International Conference on Systems, Man, and Cybernetics (SMC 2017).* Banff, Canada. October 5-8, 2017.

[7]   *Henkel, Z.,* **Bethel, C. L.,** *Kelly, J., Jones, A., Stives, K., Buchanan, Z.,* Eakin, D. K., May, D. C., Pilkinton, M., "He Can Read Your Mind: Perceptions of a Character-Guessing Robot." Presentation and publication at the *26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2017).* Lisbon, Portugal. August 28-31, 2017.

[8]   *McCool, R.,* Usher, J., Strawderman, L., Carruth, D., **Bethel, C.,** May, D., "Simulating Group Formations that Arise in Pedestrian Traffic." Presentation and publication at the *IISE Annual Conference and Expo 2017*, Pittsburgh, PA, USA, May 20-23, 2017.

[9]   *Henkel, Z.,* **Bethel, C. L.,** "A Robot Forensic Interviewer – The BAD, the GOOD, and the Undiscovered." Presentation in the Alt.HRI track for the *12th ACM/IEEE International Conference on Human-Robot Interaction (HRI 2017)*, Vienna, Austria, March 6-9, 2017. *(21% acceptance rate – competitive)*

[10]   **Bethel, C. L.,** *Henkel, Z.,* Eakin, D. K., May, D. C., Pilkinton, M., "Moving Toward an Intelligent Interactive Social Engagement Framework for Information Gathering." An *Invited Paper* presented at the *15th IEEE International Symposium on Applied Machine Intelligence and Informatics (SAMI 2017)*, Herl'any, Slovakia. January 26-28, 2017.

[11]   Carruth, D. W., **Bethel, C. L.,** "Challenges with the Integration of Robotics into Tactical Team Operations." An *Invited Paper* presented at the *15th IEEE International Symposium on Applied Machine Intelligence and Informatics (SAMI 2017)*, Herl'any, Slovakia. January 26-28, 2017.

[12]   Pleva, M., Juhar, J., Cizmar, A., *Hudson, C. R.,* Carruth, D. W., **Bethel, C. L.,** "Implementing English Speech Interface to Jaguar Robot for SWAT Training." Presentation at the *15th IEEE International Symposium on Applied Machine Intelligence and Informatics (SAMI 2017)*, Herl'any, Slovakia. January 26-28, 2017.

[13]   Liu, Y., *Batte, J., Collins, Z., Bateman, J., Atkins, J., Davis, M., Salley, D.,* **Bethel, C. L.,** Ball, J., Archibald, C., "Mechanical Design, Prototyping, and Validation of a Martian Robot Mining System." Presentation to the *WCX 17: SAE World Congress Experience in the Body Engineering and Design track*, Detroit, MI, USA April 4-6, 2017.

[14]   *Davis, J. E.,* Bednar, A. E., Goodin, C. T., Durst, P. J., Anderson, D. T., **Bethel, C. L.,** "Optimizing Maximally Stable Extremal Region Parameters Using Machine Learning." Presentation to *SPIE Defense + Commercial Sensing Expo* in the Signal Processing, Sensor/Information Fusion, and Target Recognition XXVI Track. Anaheim, CA, USA. April 9-13, 2017.

[15]   *Smith, R. E.,* Anderson, D. T., **Bethel, C. L.,** Archibald, C., "Enhancement of Thermal Imagery Using a Low-Cost High-Resolution Visual Spectrum Camera for Scene Understanding." Presentation to *SPIE Defense + Commercial Sensing Expo* in the Infrared Technology and Applications XLIII Track. Anaheim, CA, USA. April 9-13, 2017.

[16]   **Bethel, C. L.,** *Henkel, Z., Stives, K.,* May, D. C., Eakin, D. K., Pilkinton, M., *Jones, A., Stubbs-Richardson, M.,* "Using Robots to Interview Children about Bullying: Lessons Learned from an Exploratory Study. Presentation in the Special Session on Child-Robot Interaction at the *25th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2016).* New York City, NY, USA. August 26-31, 2016. *(47% acceptance rate – competitive)*

[17]   A*sif, K.M.*, **Bethel, C. L.,** Carruth, D., "Iterative Interface Design for Robot Integration with Tactical Teams," *Invited* Presentation at the *7th International Conference on Applied Human Factors and Ergonomics (AHFE2016).* Orlando, FL, USA. July 27-31, 2016.

[18]   *Jensen, L.,* Garrison, T., Carruth, D., **Bethel, C. L.,** Durst, P., Goodin, C., (July 2016). "Initial Performance Assessment of a Control Interface for Unmanned Ground Vehicle Operation Using a Simulation Platform," Presentation at the *7th International Conference on Applied Human Factors and Ergonomics (AHFE2016).* Orlando, FL, USA. July 27-31, 2016.

[19]   Garrison, T., *Jensen, L.*, *Cagle, L.*, McGinley, J., Carruth, D., **Bethel, C. L.,** Goodin, C., & Durst, P., (July 2016). "Conducting a Prospective Review for Enhanced Interface Features for Unmanned Ground Vehicle Operation." *7th International Conference on Applied Human Factors and Ergonomics (AHFE2016).* Orlando, FL, USA. July 27-31, 2016.

[20]   *Pearson III, E.,* **Bethel, C. L.,** "A Design Review Concept for Mitigating SQL Injection Attacks." Presentation at the *4th IEEE International Symposium on Digital Forensics and Security (ISDFS 2016).* Little Rock, Arkansas, USA. April 25-27, 2016.

[21]   *Downs, D., Comer, T.,* Archibald, C., **Bethel, C. L.,** Goodin, C., Durst, P., (April 2016) "Enhanced Simulation Techniques for the Automatic Evaluation of Vehicle Designs." Presentation at the *SAE 2016 World Congress and Exhibition in the Modeling and Simulation of Military Ground Vehicles (IDM201) track.* Detroit, MI, USA. April 12-14, 2016.

[22]   *Hudson, C. R., Lalejini, A., Odom, B.,* Carruth, D. W., **Bethel, C. L.,** Durst, P. J., and Goodin, C. (August 2015) "ANVEL-ROS: The Integration of the Robot Operating System with a High-Fidelity Simulator." Presentation to the *7th Annual Ground Vehicle Systems Engineering & Technology Symposium & Advanced Planning Briefing for Industry (GVSETS 2015).* Novi, MI, USA. August 4-6, 2015.

[23]   *Crumpton, J.* and **Bethel, C. L.,** "Validation of Vocal Prosody Modification to Communicate Emotion in Robot Speech." Presentation to the *2015 International Conference on Collaboration Technologies and Systems (CTS 2015)."* **Best Paper Award Finalist.** Atlanta, GA, USA. June 01-05, 2015.

[24]   **Bethel, C. L.,** Carruth, D., Garrison, T., and King, R., "Robot Needs Assessment and Issues Discovered from Tactical SWAT Team Exercises," Presented at *NATO CSO STO AVT-241/RSM-022 Technological and Operational Problems Connected with UGV Application for Future Military Operations.* Rseszow, Poland. April 20-22, 2015.

[25]   *Lalejini, A., Duckworth, D., Sween, R.,* **Bethel, C. L.,** Carruth, D. W., "Evaluation of Supervisory Control Interfaces for Mobile Robot Integration with Tactical Teams." Presentation at the *2014 IEEE Workshop on Advanced Robotics and Its Social Impacts.* Evanston, IL, USA. September 11-13, 2014.

[26]   *Crumpton, J.* and **Bethel, C.** "Conveying Emotion of Robotic Speech: Lessons Learned." Podium presentation at *Ro-Man 2014 - the 23rd Annual IEEE International Symposium on Robot and Human Interactive Communication.* Edinburgh, Scotland. August 2014. 15

[27]   *Arya, A.,* Anderson, D., **Bethel, C. L.,** and Carruth, D. "Multi-Kernel Aggregation of Local and Global Features in Long Wave Infrared for Detection of SWAT Teams in Challenging Environments," Presented at *SPIE Defense, Security, and Sensing Conference,* **Best Student Paper Award** in the Automatic Target Recognition Track, Baltimore, MD. April 2013.

[28]   **Bethel, C. L.,** Eakin, D., *Anreddy, S., Stuart, J. K.,* and Carruth, D., "Eyewitnesses Are Misled by Human but Not Robot Interviewers." Presented at the *8th ACM/IEEE International Conference on Human-Robot Interaction 2013,* Tokyo, Japan, March 2013. (23% acceptance rate)

[29]   **Bethel, C. L.,** Carruth, D., and Garrison, T., "Discoveries from Integrating Robots Into SWAT Team Training Exercises," ***Invited*** paper presented at the *10th IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR 2012),* College Station, TX, November 2012.

[30]   *Henkel, Z.,* Murphy, R. R., *Srinivasan, V.,* and **Bethel, C. L.**, "A Proxemic-Based HRI Testbed." Presented at the *2012 Performance Metrics for Intelligent Systems (PerMIS'12) Workshop,* Hyattsville, MD. March 2012.

[31]   **Bethel, C. L.**, *Stevenson, M. R.,* and Scassellati, B., "Secret-Sharing: Interactions Between a Child, Robot, and Adult." Presented at the *2011 IEEE International Conference on Systems, Man, and Cybernetics,* Anchorage, AK. October 2011.

[32]   *Groom, V., Srinivasan, V.,* **Bethel, C.,** Murphy, R., *Dole, L.,* and Nass, C., "Responses to Robot Social Roles and Social Role Framing." Presented at The International Workshop on Collaborative Robots and Human Robot Interaction track at *The 2011 International Conference on Collaborative Technologies and Systems (CTS 2011)*, Philadelphia, PA. May 2011.

[33]   **Bethel, C. L.**, Bringes, C., and Murphy, R. R., "Non-Facial and Non-Verbal Affective Expression in Appearance-Constrained Robots for Use in Victim Management: Robots to the Rescue!" best video finalist in *4th ACM/IEEE International Conference on Human-Robot Interaction 2009,* LaJolla, CA. March 2009.

[34]   Day, B., **Bethel, C. L.**, Burke, J. L., and Murphy, R. R., "A Depth Sensing Display for Bomb Disposal Robots," in *IEEE International Workshop on Safety, Security, and Rescue Robotics (SSRR 2008).* Sendai, Japan. October 2008.

[35]   **Bethel, C. L.**, Salomon, K., Murphy, R. R., and Burke, J. L., "Survey of Psychophysiology Measurements Applied to Human-Robot Interaction," in *16th IEEE International Symposium on Robot & Human Interactive Communication*, Jeju Island, South Korea. August 2007.

[36]   **Bethel, C. L.**, Salomon, K., Burke, J. L., and Murphy, R. R., "Psychophysiological Experimental Design for Use in Human-Robot Interaction Studies," in *The 2007 International Symposium on Collaborative Technologies and Systems (CTS 2007)*, Orlando, FL. May 2007.

[37]   **Bethel, C. L.** and Murphy, R. R., "Non-Facial/Non-Verbal Methods of Affective Expression as Applied to Robot-Assisted Victim Assessment," in *2nd ACM SIGCHI/SIGART Conference on Human-Robot Interaction (HRI 2007)*, Washington, DC. March 2007.

[38]   **Bethel, C. L.**, Hall, L. O., and Goldgof, D., "Mining for Implications in Medical Data," presented at *18th International Conference on Pattern Recognition (ICPR 2006)*, Hong Kong. August 2006.

[39]   Dick, S., **Bethel, C.**, and Kandel, A., "Are Software Failures Chaotic?" in *2002 Annual Meeting of the North American Fuzzy Information Processing Society Proceedings, NAFIPS*. June 2002.

Refereed Workshops/Symposia/Extended Abstracts/Presentations

[1]   *Darrow, S., Kimbrell, A. W., Lokhande, N. P., Dinep-Schneider, N., Ciufo, T. J., Henkel, Z.,* **Bethel, C. L.,** "Therabot: A Robotic Support Companion," submitted as a Demonstration Abstract for the *13th ACM/IEEE International Conference on Human-Robot Interaction,* Chicago, IL, USA, March 5-8, 2018.

[2]   **Bethel, C. L.** and Carruth, D. W., "Privacy Expectations and Concerns Related to the Use of Robots in Law Enforcement." Presentation in the *Privacy-Sensitive Robotics Workshop (https://sites.google.com/oregonstate.edu/hri-2017-privacy-workshop/program)* at the *12th ACM/IEEE International Conference on Human-Robot Interaction,* held in Vienna, Austria, March 6-9th, 2017.

[3]   *Louine, J.,* Nichols, F., **Bethel, C., L.,** May, D. C., "Collaborations between the Town and Gown in Policing." A roundtable discussion presented at the *2017 Academy of Criminal Justice Sciences (ACJS) 54th Annual Meeting*, moderated by David C. May, held in Kansas City, MO, USA on March 21-25, 2017.

[4]   **Bethel, C. L.,** May, D. C., *Louine, J.,* "Use of Technology by Law Enforcement, Especially to Handle Difficult Missions. *Invited* roundtable presentation at the *2016 International Police Executive Symposium (IPES)* held in Washington, DC, USA on August 8-13, 2016. Dr. Bethel was the Panel Moderator.

[5]   Eakin, D. K., *Payne, A. E.,* **Bethel, C. L.,** May, D. C., Pilkinton, M., *Henkel, Z., Stives, K.,* "Children Don't Fear the Robot Inquisition: The Effect on Memory of Misleading Information from a Robot." Poster presentation at the *International Conference on Memory (ICOM 2016),* held in Budapest, Hungary, on July 17-22, 2016.

[6]   Usher, J. M., *McCool, R.,* Strawderman, L. Carruth, D., **Bethel, C.,** and May, D., "Simulation of Pedestrian Group Behavior. Presentation to the *Industrial and Systems Engineering Research Conference (ISERC)* as part of the *IIE Annual Conference and Expo* held in Anaheim, CA, on May 21-24, 2016.

[7]   *Henkel,Z.,* **Bethel, C. L.,** "Increasing Psychological Well-being Through Human-Robot Interaction." Poster presentation at the *2016 Young Pioneers Workshop* and the main conference poster session for the *11th ACM/IEEE International Conference on Human-Robot Interaction*, Christchurch, New Zealand. March 2016.

[8]   *Stives, K.,* May, D., **Bethel, C.,** Pilkinton, M., Eakin, D., *Stubbs-Richardson, M., Jones, A., Henkel, Z., Hutchins, B., Kelly, J., Williams, J., Hollis, D.,* "What Do Parents' Tell Their Children About Responding to Bullying: A Qualitative Analysis." Presentation to the *"Academy of Criminal Justice Sciences Meeting,* Denver, CO. March 2016.

[9]   *Stubbs-Richardson, M., Stives, K., Henkel, Z.,* May, D. C., **Bethel, C.,** "A Qualitative Analysis of Parental Perspectives on Bullying At-Risk Youth." Presented at the *Annual Meetings of the Southern Criminal Justice Association,* Charleston, SC. September 2015.

[10]   Berry, C. A., **Bethel C.,** Sabanovic, S., "HRI Education Workshop: How to Design and Teach Courses in Human-Robot Interaction. Workshop and extended abstract presented at the *10th ACM/IEEE International Conference on Human-Robot Interaction 2015.* Portland, Oregon, USA. March 3-5, 2015.

[11]   *Duckworth, D., Henkel, Z., Wuisan, S., Collins, C., Cogley, B.,* and **Bethel, C. L.,** "Therabot™: The Initial Design of a Robotic Therapy Support System." Poster presentation to the *10th ACM/IEEE International Conference on Human-Robot Interaction 2015.* Portland, Oregon, USA. March 3-5, 2015.

[12]   *Collins, C., Duckworth, D., Henkel, Z., Wuisan, S.,* and **Bethel, C. L.,** "Therabot™: A Robot Therapy Support System in Action." Demonstration – **Best Demonstration Award Nominee – 2nd Place)** to the *10th ACM/IEEE International Conference on Human-Robot Interaction 2015.* Portland, Oregon, USA. March 3-5, 2015.

[13]   **Bethel, C. L.,** May, D. C., Carruth, D., Strawderman, L., *Holler, K., Louine, J., Rogers, S.,* "Using Robots in Criminal Justice Applications: Experiments in Policing, Gathering Sensitive Data from Bullying Victims, and Military Policing. Presented at the *Annual Meetings of the Southern Criminal Justice Association,* Clearwater, FL. September 2014.

[14]   *Henkel, Z.,* Murphy, R. R., and **Bethel, C. L.**, "Towards a Computational Method of Scaling a Robot's Behavior via Proxemics," poster presented at the *7th Annual ACM/IEEE International Conference on Human-Robot Interaction (HRI 2012),* Boston, MA. March 2012.

[15]   **Bethel, C. L.**, *Stevenson, M. R.,* and Scassellati, B., "Sharing a Secret: Interactions Between a Child, Robot, and Adult." in the *Children with Robots Workshop* at the *6th ACM/IEEE International Conference on Human-Robot Interaction 2011,* Lausanne, Switzerland, March 2011.

[16]   **Bethel, C. L.** and Murphy, R. R., "Emotive Non-Anthropomorphic Robots Perceived as More Calming, Friendly, and Attentive for Victim Management," in *AAAI Fall 2010 Symposium: Dialog with Robots.* Washington, DC. November 2010.

[17]   Groom, V., Srinivasan, V., Nass, C., Murphy, R., and **Bethel, C.,** "The Social Medium is the Message," in *AAAI Fall 2010 Symposium: Dialog with Robots.* Washington, DC. November 2010.

[18]   **Bethel, C. L.** and Murphy, R. R., "Use of Large Sample Sizes and Multiple Evaluation Methods in Human-Robot Interaction Experimentation," in *AAAI Spring 2009 Symposium: Experiment Design for Real-World Systems.* Stanford University, Palo Alto, CA. March 2009.

[19]   **Bethel, C., L.,** Salomon, K., Murphy, R. R., Responses to Search-and-Rescue Robots in a Simulated Disaster Environment: The Influence of Robot Behavior. Presented at the *2009 Annual Meeting of the Society for Psychophysiological Research.* Volume 46, DOI: 10.1111/j.1469-8986.2009.00920.x. Berlin, Germany. September, 2009.

[20]   **Bethel, C. L.**, *Bringes, C.,* and Murphy, R. R., "HRI '09 Video Abstract/Non-Facial and Non-Verbal Affective Expression in Appearance-Constrained Robots for Use in Victim Management: Robots to the Rescue!" abstract in *4th ACM/IEEE International Conference on Human-Robot Interaction 2009,* LaJolla, CA. March 2009.

[21]   **Bethel, C. L.**, Salomon, K., and Murphy, R. R., "Preliminary Results: Humans Find Emotive Non-Anthropomorphic Robots More Calming," extended abstract in *4th ACM/IEEE International Conference on Human-Robot Interaction 2009,* San Diego, CA. March 2009.

[22]   **Bethel, C. L.** and Murphy, R. R., "Non-Verbal Affective Expression for Use in Robotic Systems," presented at *AAAI 2006 Fall Symposia on Aurally Informed Performance: Integrating Machine Listening and Auditory Presentation in Robotic Systems.* Washington, DC. October 2006.

[23]   **Bethel, C. L.** and Murphy, R. R., "Affective Expression in Appearance-Constrained Robots," presented at *1st ACM SIGCHI/SIGART Conference on Human-Robot Interaction (HRI 2006)*, Salt Lake City, UT. March 2006.

Refereed Competitions

[1]   **Bethel, C. L.,** "Therabot: A Robotic Therapy Support System." ***Finalist** (1 of 12 from 55 applications)* Pitch Presented at the *Inaugural IEEE Robotics and Automation Society (RAS) Start-Up Competition* as part of the *2015 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'15).* Hamburg, Germany. Travel Support Provided. October, 2015. Received $1250 in travel funds.

SERVICE ACTIVITIES:

New Faculty Mentoring Service

[1]   August 2015 – August 2016: Mentor for Assistant Research Professor, Puntitra Sawadpong from the Distributed Analytics and Security Institute (DASI) and Adjunct Faculty in the Department of Computer Science and Engineering at Mississippi State University.

Dissertation Committee Service

[1]   November 2017 – Present: <u>Dissertation Committee Member</u>, Mentor for *Lucas Cagle* studying Electrical and Computer Engineering at Mississippi State University. (Advisor: John Ball)

[2]   November 2017 – Present: <u>Major Professor</u>, Mentor and Advisor for *Viswadeep Lebakula* studying Computer Science at Mississippi State University.

[3]   September 2017 – Present: <u>Major Professor</u>, Mentor and Advisor for *Oluwatobi Lasisi* studying Computer Science at Mississippi State University.

[4]   August 2016 – Present: <u>Major Professor</u>, Mentor and Advisor for *Audrey Aldridge* studying Computer Science at Mississippi State University.

[5]   August 2016 – Present: <u>Dissertation Committee Member</u>, Mentor for *Olivia "Nikki" Ivy* studying Industrial and Systems Engineering at Mississippi State University. (Advisor: Lesley Strawderman)

[6]   August 2016 – Present: <u>Major Professor</u>: Mentor and Advisor for *Eli Barnes* studying Computer Science at Mississippi State University.

[7]   January 2016 – Present: <u>Major Professor</u>, Mentor and Advisor for *Jeremy Davis* studying Computer Science at Mississippi State University, employed at Babel Street.

[8]   November 2015 – Present: <u>Major Professor</u>, Mentor and Advisor for *Ed Pearson, III* studying Computer Science at Mississippi State University.

[9]   January 2015 – Present: <u>Major Professor</u>, Mentor and Advisor for *Zachary Henkel* studying Computer Science at Mississippi State University.

[10]   August 2014 – Present: <u>Major Professor</u>, Mentor and Advisor for *Christopher Hudson* studying Computer Science at Mississippi State University. Co-Dissertation Director – Daniel Carruth (CAVS).

[11]   August 2014 – August 2015: <u>Major Professor</u>, Mentor and Advisor for *Ronald Nathanael Clark* studying Computer Science at Mississippi State University *(Left CSE Program – Employed at FNC, Inc.)*

[12]   July 2014 – Fall 2016: <u>Dissertation Committee Member</u>, Mentor for *Hao Bai* studying Psychology at Mississippi State University. (Advisor: Gary Bradshaw) - *Graduation: May 2017.*

[13]   June 2014 – October 2016: <u>Major Professor</u>, Mentor and Advisor for *K.M. Ibrahim Asif* studying Computer Science at Mississippi State University *(Changed to another Major Professor).*

[14]   March 2014 – Present: <u>Major Professor</u>, Mentor for *Phillip (Jeff) Durst* studying Computational Engineering at Mississippi State University, employed at ERDC-Vicksburg.

[15]   January 2013 – June 2014: <u>Major Professor</u>, Mentor and Advisor for *Richard Sween* studying Computer Science at Mississippi State University *(Changed to another Major Professor)*

[16]   November 2012 – December 2013: <u>Major Professor</u>, Mentor and Advisor for *Cody Tankersley* studied Computer Science at Mississippi State University *(Left the CSE Program)*

[17]   August 2012 – August 2015: <u>Major Professor</u>, Mentor and Advisor for *Joseph Crumpton* studying Computer Science at Mississippi State University (**MSU Distinguished Research Award Winner**) – *Graduation – August 2015*. *(Employed as an Assistant Clinical Professor at Mississippi State)*

[18]   July 2012 – January 2013: <u>Dissertation Co-Director</u>, Mentor for *Sujan Anreddy* studying Computer Science at Mississippi State University (Co-Director/Advisor: J. Edward Swan, II)

[19]   November 2012 – August 2014: <u>Dissertation Committee Member – Switching to Major Professor in 2015</u>, Mentor for *Zachary Henkel* studying Computer Engineering at Texas A & M University (Advisor: Robin R. Murphy**)
***June 2014 – December 2014 under my direct advising while working as a Research Associate at Mississippi State University – notified on September 15, 2014 he plans to transfer from Texas A & M University and will complete his Ph.D. under my direction at Mississippi State University (see status change above – change finalized January 2015).*

[20]   March 2012 – April 2014: <u>Dissertation Committee Member</u>, Mentor for *Mahbubur Rashid* studying at Mississippi State University (Advisor: Yoginder Dandass) *Changed to M.S. Program – Graduation – August 2014.*

[21]   March 2011 – August 2014: <u>Dissertation Committee Member</u>, Mentor for *Vasant Srinivasan* studying Computer Engineering at Texas A & M University (Advisor: Robin R. Murphy) *Graduation – August 2014. (Employed at Sprinklr, Inc.)*

Masters Committee Service

[1]   November 2017 – Present: <u>Major Professor</u>, *Coursework Only*, Mentor and Advisor for Lucas Kramer studying Computer Science at Mississippi State University.

[2]   September 2017 – Present: <u>Major Professor</u>, *Project*, Mentor and Advisor for *Sarah McDonnell* studying Computer Science at Mississippi State University.

[3]   August 2017 – Present: <u>Major Professor</u>, *Thesis,* Mentor and Advisor for *Jessie Cossitt* studying Computer Science at Mississippi State University.

[4]   August 2017 – Present: <u>Major Professor</u>, *Project*, Mentor and Advisor for *Kelah Mcfarland* studying Computer Science at Mississippi State University.

[5]   April 2017 – Present: <u>Thesis Committee Member</u>. Mentor for *Brian Palmer* studying Computational Engineering at Mississippi State University-Distance Student (Major Professor: John Ball).

[6]   November 2016 – Present: <u>Major Professor</u>, *Project,* Mentor and Advisor for *Daniel Waddell* studying Computer Science at Mississippi State University. *Expected Graduation – May 2018.*

[7]   October 2016 – Present: <u>Thesis Committee Member</u>, Mentor for *Paromita Mitra* studying Aerospace Engineering at Mississippi State University (Major Professor: Keith Koenig). *Expected Graduation – May 2018.*

[8]   September 2016 – Present: <u>Major Professor</u>, *Thesis,* Mentor and Major Professor for *Melissa Harkins Hannis* studying Computer Science and Engineering at Mississippi State.

[9]   August 2016 – Present: <u>Major Professor</u>, *Thesis,* Mentor and Advisor for *Paul Barrett* studying Computer Science at Mississippi State University. *Expected Graduation – August 2018.*

[10]   August 2016 – May 2017: <u>Major Professor</u>, *Project,* Mentor and Advisor for *Nathan Smith* studying Computer Science at Mississippi State University. *Graduation – May 2017 (employed with Bentley Systems in Huntsville, AL)*

[11]   January 2016 – Present: <u>Major Professor</u>, *Project*, Mentor and Advisor for *Brandon Odom* studying Computer Science at Mississippi State University. *Expected Graduation – May 2018.*

[12]   January 2016 – May 2016: <u>Non-Thesis Committee Member</u>. Mentor for *Daniel Downs* studying Computer Science and Engineering at Mississippi State University (Major Professor: Christopher Archibald). *Graduation – May 2016.*

[13]   November 2015 – Present: <u>Thesis Committee Member</u>, Mentor for *Leif Jensen* studying Industrial and Systems Engineering at Mississippi State University (Major Professor: Daniel Carruth). *Graduation – December 2017.*

[14]   August 2015 – May 2017: <u>Major Professor</u>, *Thesis*, Mentor and Advisor for *William Davis* studying Computer Science at Mississippi State University. *Graduation – May 2017 (employed with National Instruments in Austin, TX)*

[15]   August 2015 – December 2016: <u>Major Professor</u>, *Project,* Mentor and Advisor for *Wayne "Morey" Wood* studying Computer Science at Mississippi State University. *Graduation – December 2016.*

[16]   Fall 2014 – May 2016: <u>Major Professor</u>, *Coursework Only Masters,* Mentor and Advisor for *Benjamin Quan* studying Computer Science at Mississippi State University. *Graduation – May 2016.*

[17]   April 2014 – May 2014: <u>Non-Thesis Committee Member</u>, Mentor for *Mahbubur Rashid* studying Computer Science at Mississippi State University (Advisor: Donna Reese) *Graduation – August 2014.*

[18]   March 2014 – April 2014: <u>Thesis Committee Member</u>, Mentor for *Chunya Hua* studying Computer Science at Mississippi State University (Advisor: J. Edward Swan) *Graduation – August 2014 (employed at Google – Mountain View, CA).*

[19]   January 2014 – May 2017: <u>Co-Major Professor</u>, *Thesis,* Mentor and Advisor for *Ryan E. Smith* studying Computer Engineering at Mississippi State University. Co-Major Professor: Derek Anderson. *Graduation – May 2017 – employed with Dynetics, Inc. in Huntsville, AL.*

[20]   Fall 2014 – May 2016: <u>Major Professor</u>, *Coursework Only Masters,* Mentor and Advisor for *Tyler Greer* studying Computer Science at Mississippi State University. *Graduation – May 2016 (Employed as an Instructor of Computer Science at the University of Louisiana – Monroe).*

[21]   December 2013 – June 2014: <u>Non-Thesis Committee Member</u>, Mentor for *Lacy Smith* studying Computer Science at Mississippi State University (Advisor: Edward Allen) *Graduation – August 2014 (employed at Engineer Research and Development Center (ERDC) – Vicksburg, MS).*

[22]   September 2013 – June 2014: <u>Non-Thesis Committee Member</u>, Mentor for *Christopher Boler* studying Computer Science at Mississippi State University (Advisor: Edward Allen) *Graduation – August 2014 (employed at Engineer Research and Development Center (ERDC) – Vicksburg, MS).*

[23]   August 2013 – August 2015: <u>Major Professor</u>, *Thesis,* Mentor and Advisor for *Stephanie Wuisan* studying Computer Science at Mississippi State University. *Graduation – August 2015 (employed at Intel Corporation – Austin, TX).*

[24]   February 2013 – December 2013: <u>Thesis Committee Member</u>, Mentor for *Ibrahim Abdoulahi* studying Computer Science at Mississippi State University (Advisor: Eric Hansen) *Graduation – December 2013, continued into the Ph.D. program.*

[25]   January 2012 – August 2017: <u>Non-Thesis Committee Member</u>, *Project,* Mentor for *Philip Akers* studying Computer Science at Mississippi State University (Advisor: David A. Dampier) *Expected Graduation – August 2017 (employed as a Research Engineer at the MSU Data Analytics and Security Institute)*

[26]   January 2012 – December 2012: <u>Non-Thesis Committee Member</u>, *Project,* Mentor for *Cody Tankersley* studied at Mississippi State University (Advisor: Yoginder Dandass) *Graduated – December 2012 (employed with Raytheon Centers of Innovation – Huntsville, AL)*

[27]   March 2010 – December 2013: <u>Thesis Committee Member</u>, Mentor for *Jason Monast* studying at the University of Denver (Advisor: Kimon Valavanis). *(On leave) (Employed at Caterpillar, Inc.)*

Mentor for Undergraduate Research Projects

[1]   Fall 2017 – Present: ***Erin Upshur (Aerospace Engineering)***

[2]   Fall 2017 – Present: ***Will Herrington (CSE)***

[3]   Fall 2017 – Presnt: ***Emily Davis (Biomedical Engineering)***

[4]   Fall 2017 – Present: ***Warren Wheeler (ECE)***

[5]   Fall 2017 – Present: ***Bo Fulgham (CSE)***

[6]   Fall 2017 – Present: ***Alexander Schmidt (CSE)***

[7]   Fall 2017 – Present: ***Thomas Woodward (CSE)***

[8]   Fall 2017 – Present: ***T. J. Cuifo (Aerospace Engineering)*** *- funded*

[9]   Summer 2017 – Present: ***Cayla Hummel (Aerospace Engineering)*** *– Senior Thesis Committee Member and Research Advisor*

[10]   Summer 2017 – Present: ***Kenna Beth Baugus (CSE)*** *- funded*

[11]   Spring 2017 – Present: ***Aaron Kimbrell (CSE)*** *– funded* ***BCoE Undergraduate Research Award (2017-2018 academic year)*** *and NSF grant award.*

[12]   Spring 2017: ***Deepak Chapagaim (ECE)***

[13]   Spring 2017: ***Meenakshi Das (CSE)***

[14]   Spring 2017: *Dalton Moran (Biomedical Engineering)*

[15]   Fall 2016 – Spring 2017: *Mangesh Joshi (ME)*

[16]   Fall 2016: *Yoseph Alabdulwahab (CSE)*

[17]   Fall 2016 – Present: *Gaurav Joshi (CSE)*

[18]   Fall 2016 – Summer 2017: *Judith Allison Martin (CSE) – funded* (Graduation: August 2017 – *employed with Deloitte, Inc.*)

[19]   Summer 2016: *Chelse Swoopes (Mathematics) – funded internship (MS in ECE at Carnegie Mellon University – Fall 2016)*

[20]   Summer 2016: *Audrey Aldridge (Biomedical Engineering)* – (Graduation: August 2016 – *Ph.D. in Computer Science and Engineering at Mississippi State University – Fall 2016*)

[21]   Summer 2016 – Summer 2017: *John Atkins (ME) - funded*

[22]   Spring 2016 – Present: *Nikhil Lokhande (ECE) – funded* (Expected Graduation: December 2017 – *continuing in ECE MS program at Mississippi State University starting in Spring 2018*)

[23]   Spring 2016 – Fall 2016: *Garrett Porter (ECE) - funded* (Graduation: May 2017)

[24]   Spring 2016 – Present: *Joshua Reid (CSE) – funded*

[25]   Spring 2016 - Present: *Joshua Possel (CSE) – funded*

[26]   Spring 2016: *Chaise Farrar (ECE)*

[27]   Spring 2016: *Austin Mitchell (ECE)*

[28]   Fall 2015 – Fall 2016: *Lucas Cagle (ECE) – funded* (Graduation: May 2017 – *continuing as a direct admit to the Ph.D. program in Electrical Engineering at Mississippi State University – Fall 2017*).

[29]   Fall 2015 – Present: *Sarah Darrow (CSE) – funded BCoE Undergraduate Research Award (fall 2016 and 2017-2018 academic year) and NSF grant award.* Expected Graduation – December 2018.

[30]   Fall 2015 – Spring 2016: *Ajinkya Nawarkar (CSE) - funded (BCoE Undergraduate Research Award)*

[31]   Fall 2015 – Spring 2016, Spring 2017 - Present: *Anubhaw Mathur (CSE) - funded*

[32]   Fall 2015 – Spring 2016: *Jacob Scott (ME)*

[33]   Fall 2015 – Spring 2017: *Jessie Cossitt (Psychology) – funded* (Graduation: May 2017 – *continuing into the M.S. program in the Computer Science and Engineering Department at MSU – Fall 2017*)

[34]   Fall 2015: *Brendan Mooers (ECE) –* (Graduation: December 2016)

[35]   Fall 2015 – Fall 2016**:** *Jeremy Batte (ME)* – (Graduation: December 2016 – *Active Duty Officer in the U.S. Army – Spring 2017*)

[36]   Fall 2015 – Fall 2016: *Timothy Wilson (ME)*

[37]   Fall 2015 – Fall 2016: *Courtney Morgan (ME) – funded* – (Graduation: December 2016 – *continued as a direct admit to the Ph.D. program in Mechanical Engineering at Mississippi State University – Spring 2017*)

[38]   Fall 2015: *Nick Beers (CSE)*

[39]   Fall 2015 – Summer 2017: **Blass Watson (Biomedical Engineering)** – *funded* (Graduation December 2016 – *continued in research for two semesters and then attending graduate school in the MS in a Biomedical Engineering Program at the University of Memphis – Fall 2017*)

[40]   Fall 2015 – Present: **Nicholas Dinep-Schneider (CSE)** - *funded*

[41]   Fall 2015: **Nathan Frank (CSE)**

[42]   Fall 2015 – Spring 2016: **David Saucier (ECE)** – *funded*

[43]   Fall 2015 – Spring 2017: **Shreya Gupta (CSE)** – *funded under* **BCoE Undergraduate Research Award** (Graduation: May 2017 – *employed at Dell Corporation*)

[44]   Fall 2015 – Spring 2016: **Michael Sieja (CSE)**

[45]   Spring 2015 – Present: **Madelyn Davis (ME)** - *funded*

[46]   Spring 2015 – Present: **Alejandro Palacio (ECE)** – *funded*

[47]   Spring 2015 – Spring 2016: **Charlie Veal (ECE)** – *funded* – (Graduation: May 2016 – *M.S. in Electrical and Computer Engineering at Mississippi State University – Fall 2016*).

[48]   Spring 2015: **Joseph Hastings (ECE)**

[49]   Spring 2015: **Jonathan Long (ECE)**

[50]   Fall 2014 – Spring 2017: **Lucas Kramer (CSE)** – *funded* – (Graduation May 2017 – *continuing into the M.S. in Computer Science program at Mississippi State University – Fall 2017*)

[51]   Fall 2014 – Summer 2016: **Eli Barnes (CSE)** – *funded* – (Graduation: May 2016 – *PhD Computer Science at Mississippi State University – Fall 2016*)

[52]   Fall 2014 – Spring 2015: **Alec Szczechowski (Aerospace)** – Senior Design Project (Graduation: May 2015 – *Attending Loyola Law School*)

[53]   Fall 2014 – Fall 2015, Summer 2016 – Fall 2016: **David Hollis (CpE)** - *funded*

[54]   Summer 2014 – Fall 2015: **Brandon Odom (CSE)** – *funded* (Graduation: December 2015 – *MS in Computer Science at Mississippi State University – Spring 2016*)

[55]   Summer 2014 – Fall 2016: **Veera Venkata Karri (CSE)** – *funded* (Graduation: August 2016 – *employed at Zentail Commerce*)

[56]   Summer 2014 – Fall 2014: **Steven Calhoun (ECE)** – *funded* (Graduation: May 2015 – *M.S. Computer Science Graduate Program at Georgia Tech – Fall 2015*)

[57]   Summer 2014 – Summer 2016: **Bryant Hutchins (Psychology)** – *funded* (Graduation: May 2016 – *employed at Mississippi Children's Home Services – Jackson, MS – Fall 2016. Starting as a Research Assistant in the Department of Psychiatry at University of Florida – Summer 2017*)

[58]   Spring 2014: **Paul Balmes (CSE)** (Graduation May 2017 – Business – Supply Chain Management)

[59]   Spring 2014 – Spring 2016: **Daniel Waddell (CSE)** – *funded* (Graduation: May 2016 – *M.S. in Computer Science at Mississippi State University – Fall 2016*)

[60]   Spring 2014: **Victoria Sater (CSE)** – *funded* (Graduation: May 2014 – *employed at Amazon*)

[61]   Spring 2014 – Spring 2015: **Morey Wood (CSE)** – *funded* (Graduation: May 2015 - *Transitioned to Computer Science 5-year MS at Mississippi State University*)

[62]   Spring 2014 – Spring 2015: **William Davis (ECE)** – *funded* (Graduation: May 2015 – *M.S. in Computer Science at Mississippi State University – Fall 2015*)

[63]   Spring 2014 – Spring 2015: ***Christopher Collins (ME)*** *– funded* (Graduation: May 2015 – *Ph.D. in ME Program at University of California – Berkeley – Fall 2015*)

[64]   Fall 2013 – Summer 2016: ***Jesse Williams (Psychology)*** *– funded* (Graduation: May 2016 – *Masters of Business Administration and Information Systems at University of North Alabama – Fall 2017.*)

[65]   Fall 2013 – Fall 2014: ***Brendan Cogley (Psychology)*** *– funded* – (Graduation: May 2014 – *Nurse Anesthetist Masters Program – January 2015*)

[66]   Fall 2013 – Summer 2015: ***Alexander Lalejini (CSE)*** *– funded* – **MSU Meritorious Research Award, Computing Research Association – Honorable Mention – Outstanding Male Undergraduate Researcher Award, MSU Bagley College of Engineering – Student Hall of Fame Inductee –** (Graduation: May 2015 – *Presidential Fellowship Recipient and National Science Foundation Graduate Research Fellowship in the Ph.D. Program at Michigan State University*)

[67]   Fall 2013 – Spring 2016: ***Jacob Mason (CSE)*** *– funded*

[68]   Fall 2013 – Spring 2015: ***Brian Parker (ECE)*** *– funded* (Graduation: December 2016)

[69]   Summer 2013 – Fall 2014: ***Daniel Sween (CSE)*** *– funded* (Graduation: May 2014 –*MS in Computer Science at Mississippi State University – Spring 2015*)

[70]   Summer 2013 – Summer 2014: ***Malcolm McCullum (ECE)*** *– funded through Summer 2014*

[71]   Spring 2013 – Summer 2017: ***John Kelly (CSE)*** *- funded*

[72]   Spring 2013 – August 2013: ***Stephanie Wuisan (ECE)*** *–* (Graduation: May 2013 *- transitioned to MS in Computer Science at Mississippi State University - Fall 2013*)

[73]   Fall 2012 – Spring 2013 and Summer 2015 – Spring 2016: ***Nandita Gupta (ECE)*** *– funded* (**MSU Spirit of State Award, MSU Bagley College of Engineering – Student Hall of Fame Inductee)** – (Graduation: May 2016 – *employed at Georgia Pacific*).

[74]   Fall 2012 – Spring 2013: ***Abhinav Agrawal (CSE)*** *–* (Graduation: May 2013 – *employed at DataPath, Inc.*)

[75]   Fall 2012 – Spring 2016: ***Paul Barrett (CSE)*** *– funded* (Graduation: May 2016 – continuing with *M.S. in Computer Science at Mississippi State University – Fall 2016*)

[76]   Fall 2012 – Summer 2015: ***Dexter Duckworth (ECE)*** *– funded* – (**MSU Meritorious Research Award, Computing Research Association (CRA) Finalist for Outstanding Male Undergraduate Research Award, MSU Bagley College of Engineering Outstanding Undergraduate Research Award and MSU Office of Research and Economic Development Outstanding Undergraduate Research Award**) **-** (Graduation: May 2015 – *Employed at Johns Hopkins Applied Physics Lab*)

[77]   Fall 2012 – Spring 2013: ***Tyler Greer (Transitioned to CSE MS student in Fall 2013)***

[78]   Fall 2012 – June 2014: ***Kayla Huddleston (CSE)*** *– funded* (Graduation: December 2014 *- transitioned to MS in CSE program in Spring 2015 – employed at FNC, Inc.*)

[79]   Fall 2012 – Spring 2016: ***Nathan Smith (CSE)*** *– funded* – (Graduation: May 2016 – *transition to 5-year MS in Computer Science at Mississippi State University).*

[80]   Summer 2012 – Summer 2013: ***Ankit Arya (CSE)*** *– funded* (**2nd place in the MSU Summer Honors Research Symposium – Physical Sciences and Engineering Division, 1st Place LSU Undergraduate Regional Research Conference, Best Student Paper in the Automatic Target Recognition Track of SPIE 2013.**) – (Graduation: August 2013 – *M.S. in CSE program at State University of New York – Stony Brook – Graduation: May 2015 – employed as a Data Scientist at Collective I*)

[81]	Summer 2012 – Spring 2013: *James Stafford (CSE)* – (Graduation: May 2014 – *employed with Bomgar*)

[82]	Summer 2012 – Summer 2013: *Robert Andrew LaFrance (CSE)* – (Graduation: May 2015 - *Transitioned to Computer Science 5-year MS program – Summer 2014*)

[83]	Summer 2012 – June 2014: *James Kaleb Stuart (CSE)* - *funded* (**2nd place in the MSU Summer Honors Research Symposium – Social Science Division-Summer 2012**) – (Graduation: May 2015 – *Transitioned to M.S. in Computer Science program Fall 2015 at Mississippi State University*)

[84]	Summer 2012 – *Ronald Nate Clark (CSE)* – (Graduation: May 2013 - *Transitioned to Ph.D. student in Fall 2014*)

[85]	Spring 2012 – *Michael Helmbrecht (ECE)* – (Graduation: May 2012 – M.S. in Human-Computer Interaction at Carnegie Mellon University)

Undergraduate Advisor: Marc Moore, Jeffrey Sullivan, Hamilton Tillman, Jonathan Ruoss, Dylan Sink, Jeffrey Sullivan, Atharva Mahajan, Linus Martin, Navninder Singh, Yoseph Alabdulwahab, Laura Creekmore, Emily Daniel, Destine'e Donald, Hannah Eakes, Adrian Jimenez, Cassia Jones-Woodard, Kaur Harsimran, Alexandria Lane, Benjamin Dumas, Charlton Wesley Phillips, Alejandra Huanyanca, Kevin Beteta, Joshua Tanksley, William Thompson, Sage Watkins, Aaron Webber, James Weems, Trenton Robinson, Michael Poole, Erik Johnson, Jacob Mason, John Kelly, *Graduates*: Brandon Odom, Daniel Waddell, Nathan Smith, Paul Barrett, Robert Andrew LaFrance, Tyler Bertrand, Wayne Wood, James Kaleb Stuart, Alexander Lalejini, Bradley Barnes, Ronald Nate Clark, James Stafford, Christian Morrison, Ankit Arya, Abhinav Agrawal, and Popin Bose Roy.

Career and Professional Development Undergraduate Advisor for the Electrical and Computer Engineering Students: Dexter Duckworth, Malcolm McCullum, Nandita Gupta, Robert Brian Parker, David Hollis, David Saucier, Charlie Veal, Chaise Farrar, Aaron Barr, Jordan Prather.

Mentor for High School Research Projects

- Spring 2016 – Fall 2016: **Daniel Cieleski** – Mississippi School of Mathematics and Science (MSMS) – Columbus, MS: Working on developing object identification and autonomous nagivation of the AR Drone Jumping Sumo robot. He will start with color tracking using computer vision techniques and then expand those techniques to find targets during navigation through object detection. In Fall 2016, he was working on the use of machine learning techniques for categorizing twitter data for information about dogs to assist with the Therabot research project.

- Fall 2015 – Spring 2016: **Michelle Li** – Mississippi School of Mathematics and Science (MSMS) – Columbus, MS: Working on modifying a toy robot known as MyKeepon. She has added in control hardware and is now adding in fiber optics to the eyebrows and cheeks to program these fiber optics to display emotive behaviors. She will then be conducting user studies to evaluate the effects of her research efforts. *(Continued to B.S. in Computer Science at Yale University)*

Proposal and Product Line Review Service

- 2017 – Invited and served on two NSF Review Panels
- 2016 – Invited and served on two NSF Review Panels
- 2015 – Invited and served on a NSF Review Panel
- 2013 – Invited and served on two NSF Review Panels
- 2012 – Invited and served as a Site Visit Evaluator for NSF
- 2012 – Invited and served on an Army Product Line Review Panel

- 2012 – Invited and served on two NSF Review Panels
- 2012 – Invited and performed a proposal review for U.S. Army TATRC
- 2011 – Invited and served on an NSF Review Panel

Institution Service
Mississippi State University
Computer Science and Engineering Department Service

- Fall 2016 – Present – Member of the Computer Science and Engineering Facilities Committee.

- September 2015 – May 2016 – Member of the Computer Science and Engineering Department Head Search Committee.

- August 2015 – August 2016 – Member of the Computer Science and Engineering Courses and Curriculum Committee

- 2011-2013 and 2014-2015 – Member of the Computer Science and Engineering Graduate Studies Committee

- 2011-2014 – Member of the Computer Science and Engineering Software Engineering Undergraduate Studies Committee

Bagley College of Engineering Service

- November 2015 – Member of the Selection Committee for the Harry Charles Fleming Simrall Award for Engineering Excellence that is awarded by the MSU Association of Retired Faculty – MSU Bagley College of Engineering Committee.

- October 2014 – Present – Lead Faculty Advisor (2014-2016), Faculty Advisor (2016 – Present) for the NASA Robotic Mining Competition Team

- Fall 2013 – Member of the Dean's Faculty Advisory Team on Research

- Spring 2013 – Assisted Dennis Truax in conducting the Order of the Engineer Ceremony

- Spring 2012-Present – Chair of the Robotic Systems Working Group sponsored by the Bagley College of Engineering

- 2012-2013 – Chair of the Psychosocial Robotics Working Group, then combine with Robotic Systems Working Group

- Spring 2012 – Mississippi Science Fair – Upper and Lower Divisions Science Fair

- Fall 2011, Fall 2013 – Judge for the BEST Robotics Competition at Starkville High

University Service

- May 2015 – Present – University-Level Faculty Research Advisory Committee (FRAC)

- Spring 2016 – MSU Campus Safety and Security Review Team – University-level Committee.

- May 2014 – Usher for Spring Commencement Ceremony

- Spring 2014 – Judge for EPSCOR Poster Competition for Graduate and Undergraduate Students

- Spring 2013 – Member of the Review Committee for the Annual MSU Schillig Special Teaching Project Grants

- Spring 2013-Spring 2016 – Member of the Center for Teaching and Learning – Faculty Learning Community

Yale University
Center for Talented Youth Workshop

- Participated in a large Robotics Workshop for students from the Center for Talented Youth (CTY). Led tours of the three robotics laboratories at Yale and answered questions about robotics to encourage children to consider technology for an academic path. (Spring 2010)

Mentor for Undergraduate Research Project

- January 2011 – May 2011, Mentored *Hilary Barr* on an Undergraduate Research Project.

Mentor for High School Student Science Fair Project

- December 2010 – March 2011, Mentored *Jenny Liu* on her Connecticut State Science Fair Project, abstract, and poster.

University of South Florida
Student Thesis Supervision, University of South Florida

- October 17, 2008 – May 2, 2009: <u>Honors Thesis Director</u>, Mentor and Honors Thesis Director for a minority female honors student, *Melanie Dickenson*. Typically, only USF faculty can serve as an honors thesis director.

Institute for Safety Security Rescue Technology Research Demonstrations

- March 4, 2008 – Research Demonstration for Stewart Tansley of Microsoft Research
- April 7, 2008 – Research Demonstration for the Defense Science Research Council (DSRC)
- April 30, 2008 – Research Demonstration for DARPA Interns

University, College, and Department Service

2008 – 2009: <u>Chair – CSE Women at USF</u>

- Started the organization, with the support of the department chair, to provide a support network and resources for both graduate and undergraduate women in Computer Science and Computer Engineering.
- Organized bi-weekly meetings and made contacts to recruit speakers to help develop skills for the women in the department so that they would feel better prepared for their studies or research.
- Solicited female faculty to attend meetings as a resource and support system to the women in the department.

2007: <u>Panelist</u>

- Participated on a panel with Mary Jane Irwin as part of a CRA-W Initiative to encourage women in computer science and engineering attending USF to consider applying to graduate school.
- Shared knowledge on the preparation process for graduate school and fellowship applications.
- Answered questions from attendees on what to expect in graduate school.

2006: Graduate Student Member of Academic Grievance Committee

- Evaluation of a grade grievance submitted by a graduate student outside of the Computer Science and Engineering Department.
- Evaluated the evidence provided by faculty and student to determine the outcome of the grade grievance in accordance with the College of Engineering and University protocols.

2005 – 2009: Co-Advisor – USF Student Chapter of the ACM

- Assisted faculty co-advisor, student officers, and members.
- Supervised chapter activities and assist with financial planning and funding resources.

2004 –2009: Advisor – USF Athenaeum Chapter of Mortar Board Senior Honor Society

- Assisted and trained new society officers and members.
- Supervised chapter activities and finances.
- Completed status reports and was a liaison between the chapter and the national headquarters.

2002: Undergraduate Student Selected to Participate in a CSE Focus Group

- Participated as an undergraduate student in a focus group led by Dr. Robin Murphy on how to attract and retain females in the Computer Science and Engineering (CSE) department at the University of South Florida (USF).
- Made a recommendation that was implemented, which was to have senior faculty teach the entry level courses so that the women who did not have as much confidence in their abilities would be able to gain more confidence and build a strong foundation to be successful in this challenging program.
- The group as a whole made a recommendation that was implemented, that because women enjoy different types of projects than men, that instructors change the focus of some of their class projects and/or offer more than one option so that women would have a choice and find the projects more enjoyable.
- Following implementation the group followed up with several of the female students in the department, and they felt that the changes were positive and made a difference in their desire to enter and/or remain in the program.

Fall 2001 – Spring 2002: Student Representative to the Undergraduate Council at USF
    (*The Student Government Association appointed this position.*)

- Participated in the approval process for course changes and new courses.
- Established new academic policies.
- Participated in academic hearings including student grievances.
- Reviewed course requirements for accreditation.

Conference Service

Steering Committees

- 2015 – 2019: At-Large Member and Finance Chair Member of the Steering Committee for the ACM/IEEE International Conference on Human-Robot Interaction.

Organizing Committees and Program Committees

- 2017 – 2018: <u>Keynote Chair</u> and <u>Program Committee Member</u> for the World Symposium on Digital Intelligence for Systems and Machines (DISA 2018). Kosice, Slovakia. August 23-25, 2018.

- 2017 – 2018: <u>Co-Organizer</u> for the 2018 ACM/IEEE International Conference on Human-Robot Interaction *Social Robots in Therapy: Focusing on Autonomy and Ethical Challenges Workshop,* Chicago, IL, USA, March 5, 2018.

- 2017 – 2018: <u>Program Committee Member</u> for the 2018 ACM/IEEE International Conference on Human-Robot Interaction *Pioneers Workshop,* Chicago, IL, USA. March 5, 2018.

- 2017: <u>Co-Organizer</u> for the *Third EMSHRI 2017 Workshop on Evaluation Methods Standardization for Human-Robot Interaction* held in conjunction with the 26th IEEE International Symposium on Robot and Human Interactive Communication in Lisbon, Portugal, August 28 – September 1, 2017.

- 2016 – 2019: <u>Finance Co-Chair</u> for the 2018 and 2019 ACM/IEEE International Conference on Human-Robot Interaction. 2018 Conference will be held in Chicago, IL, USA and the 2019 Conference in South Korea.

- 2016 – 2017: <u>Program Committee Member</u> for the 2017 ACM/IEEE International Conference on Human-Robot Interaction *Pioneers Workshop*, March 6, 2016. Vienna, Austria.

- 2016 – 2017: <u>Associate Editor</u> for the 2017 IEEE International Workshop on Advanced Robotics and its Social Impacts (ARSO). March 8-10, 2017. Austin, TX, USA.

- 2016: <u>Associate Editor</u> for the 25th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2016). August 26 – 31, 2016. New York City, NY, USA.

- 2016: <u>International Program Committee Member</u> for the 8th International Conference on Social Robotics. November 1-3, 2016. Kansas City, KS, USA.

- 2015 – 2016: <u>Program Committee Member</u> for the 2016 International Joint Conference on Artificial Intelligence (IJCAI-16). July 9-15, 2016. New York City, NY, USA. *Nominated for Outstanding Program Committee Member by Peers*

- 2015 – 2016: <u>Program Committee Member</u> for the 2016 ACM/IEEE International Conference on Human-Robot Interaction *Pioneers Workshop*, March 6, 2016. Christchurch, New Zealand.

- 2015 – 2016: <u>Program Committee Member</u> for the 2016 11th ACM/IEEE International Conference on Human-Robot Interaction, March 7-10, 2016. Christchurch, New Zealand.

- 2015 – 2016: <u>Video Presentation Co-Chair</u> for the 11th International Conference on Human-Robot Interaction in Christchurch, New Zealand.

- 2015: <u>Co-Organizer</u> for a Workshop on Human-Robot Interaction Education at the 10th IEEE/ACM International Conference on Human-Robot Interaction in Portland, OR, USA.

- 2014 – 2015: <u>Program Committee Member</u> for the 2015 *10th ACM/IEEE International Conference on Human-Robot Interaction,* March 2 – 5, 2015. Portland, Oregon, USA.

- 2014 – 2015: <u>Program Committee Member</u> for the 2016 ACM/IEEE International Conference on Human-Robot Interaction *Pioneers Workshop*, March 2 – 5, 2015. Portland, Oregon, USA.

- 2014 - 2015: <u>Co-Organizer</u> for a Discipline Specific Workshop that is a selective Career Mentoring Workshop for Undergraduate and Graduate Students in Robotics sponsored by the Computing Research Association for Women (CRA-W) and the Coalition for Diversity in Computing (CDC). This workshop will be co-located with the flagship conference for the IEEE Robotics and Automation Society (RAS) May 25-31, 2015 at the IEEE International Conference on Robotics and Automation (ICRA 2015) located in Seattle, WA, USA.

- 2014: <u>Session Chair and Session Co-Chair</u> for two sessions at the *23rd IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2014)*. August 25-29, 2014. Edinburgh, Scotland.

- 2014 - 2015: <u>Organizing Committee Member</u> Chair for Website Administration for the *10th ACM/IEEE International Conference on Human-Robot Interaction,* March 2-5, 2015. Portland, Oregon, USA.

- 2014: <u>Associate Editor</u> for the IEEE Workshop on Advanced Robotics and its Social Impact (ARSO 2014), September 11-13, 2014. Evanston, IL, USA.

- 2014: <u>Program Committee Member</u> for the *Workshop on General Intelligence for Humanoid Robots* at the *2014 IEEE International Conference on Robotics and Automation (ICRA 2014)*, May 31 – June 7, 2014. Hong Kong, China.

- 2013 – 2014: <u>Program Committee Member</u> for the *Third International Symposium on New Frontiers in Human-Robot Interaction* as part of the *50th Annual Convention on Artificial Intelligence and the Simulation of Behavior (AISB50)*, April 3 – 4, 2014, Goldsmiths, University of London, United Kingdom.

- 2013 – 2014: <u>Programme Committee Member</u> for the 2013 *9th ACM/IEEE International Conference on Human-Robot Interaction,* March 3 – 6, 2014. Bielefeld, Germany.

- 2013 – 2014: <u>Co-Chair for Late Breaking Reports</u> on the Organizing Committee for the 2013 *9th ACM/IEEE International Conference on Human-Robot Interaction,* March 3 – 6, 2014. Bielefeld, Germany.

- 2012 – 2013: <u>Co-Chair for Late Breaking Reports</u> on the Organizing Committee and <u>Session Chair</u> for the 2013 *8th ACM/IEEE International Conference on Human-Robot Interaction*, March 5 – 8, 2013. Tokyo, Japan.

- 2012 – 2013: <u>Co-Chair and Technical Program Committee Member</u> for the Collaborative Robots and Human-Robot Interaction Workshop at the 2013 *International Conference on Collaboration Technologies and Systems (CTS 2013),* May 20 – 24, 2013. San Diego, CA, USA.

- 2012 – 2013: <u>Technical Program Committee Member</u> for the *2013 Robotics Science and Systems International Conference,* June 24 – 28, 2013. Berlin, Germany.

- 2013 –2013: <u>Associate Editor</u> for the <u>International Program Committee</u> for the *22nd IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2013),* August 26 – 29, 2013. Gyeongju, Korea.

- 2012: <u>International Program Committee Member</u> – *2012 International Conference on Social Robotics*, October 29-31, 2012, Chengdu, China.

- 2011 – 2012: <u>Co-Chair/Session Chair, and Technical Program Committee Member</u> for the Collaborative Robots and Human-Robot Interaction Workshop at the *2012 International Conference on Collaboration Technologies and Systems (CTS 2012)*, May 21 - 25, 2012. Denver, CO, USA.

- 2011: <u>Session Co-Chair</u> – IEEE International Conference on Systems, Man, and Cybernetics, Session W.HMS.A05, October 9-12, 2011, Anchorage, AK, USA.

- 2010 – 2011: <u>Co-Chair for Late Breaking Reports</u> on the Organizing Committee for the 2011 *6th ACM/IEEE International Conference on Human-Robot Interaction*, March 6 – 9, 2011. Lausanne, Switzerland.

- 2011: <u>Program Committee Member</u> for the *2011 3rd Annual International Conference on Social Robotics*, November 24 – 25, 2011. Amsterdam, The Netherlands.

- 2011: <u>Program Committee Member</u> for the 4th International Conference on Intelligent Robotics and Applications (ICIRA 2011), December 6 – 9, 2011. Aachen, Germany.

- 2011: <u>Associate Editor</u> serving on the <u>International Program Committee</u> for the 20th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2011), July 31 – August 3, 2011. Atlanta, GA, USA.

- 2011: <u>Program Committee Member</u> of the 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011), July 16 – 22, 2011. Barcelona Spain.

- 2011: <u>Technical Program Committee (TPC) Member</u> of the International Workshop on Collaborative Robots and Human Robot Interaction. The workshop was part of The 2011 International Conference on Collaboration Technologies and Systems (CTS 2011), May 23 - 27, 2011. Philadelphia, PA, USA.

External Conference Program Reviewer

- 2017 External Consultant – Proposal Reviewer for the NYU Abu Dhabi Institute's Steering Committee for the 3rd Joint UAE Symposium on Social Robotics to determine host and program for this conference.

Refereed Conference Reviewer

- 2018 IEEE International Conference on Robotics and Automation (ICRA), Brisbane, Australia.

- 2017 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2017), Lisbon, Portugal.

- 2017 ACM/IEEE International Conference on Human-Robot Interaction. Vienna, Austria.

- 2015 4th International Symposium on New Frontiers in HRI. Canterbury, UK.

- 2014 IEEE Workshop on Advanced Robotics and Its Social Impacts (ARSO), Evanston, IL, USA.

- 2014 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Chicago, IL, USA.

- 2014 Workshop on General Intelligence for Humanoid Robots as part of the 2014 IEEE International Conference on Robotics and Automation (ICRA), Hong Kong, China

- 2014 3rd Annual Symposium on Third International Symposium on New Frontiers in Human-Robot Interaction as part of the 50th Annual Convention on Artificial Intelligence and the Simulation of Behavior (AISB50), Goldsmiths, University of London, United Kingdom

- 2013 Robotics Science and Systems Conference, Berlin, Germany

- 2013 22nd IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN 2013), Gyeongju, Korea

- 2013 IEEE International Conference on Robotics and Automation, Karlsruhe, Germany

- 2013 8th ACM/IEEE International Conference on Human-Robot Interaction, Tokyo, Japan

- 2012 10th IEEE International Symposium on Safety, Security, and Rescue Robotics, College Station, TX, USA.

- 2012 International Conference on Social Robotics, Chengdu, China

- 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems, Vilamoura, Algarve, Portugal

- 2012 International Conference on Collaboration Technologies and Systems, Denver, CO, USA.

- 2012 IEEE International Conference on Robotic and Automation (ICRA 2012), St. Paul, MN, USA.

- 2012 Haptics Symposium, Vancouver, Canada

- 2011 11th IEEE-RAS International Conference on Humanoid Robots, Bled. Slovenia

- 2011 3rd International Conference on Social Robotics. Amsterdam, The Netherlands

- 2011 4th International Conference on Intelligent Robotics and Applications. Aachen, Germany

- 2011 20th IEEE International Symposium on Robot and Human Interactive Communication. Atlanta, GA, USA.

- 2011 22nd International Joint Conference on Artificial Intelligence. Barcelona, Spain

- 2011 International Conference on Collaboration Technologies and Systems, Philadelphia, PA, USA.

- 2011 6th International Conference on Human-Robot Interaction. Lausanne, Switzerland

- 2010 10th IEEE/RAS International Conference on Humanoid Robots. Nashville, TN, USA.

- 2010 9th International Conference on Development and Learning. Ann Arbor, MI, USA.

- 2010 5th ACM/IEEE International Conference on Human-Robot Interaction. Osaka, Japan

- 2008 IEEE/RSJ International Conference on Intelligent Robots and Systems. Nice, France

- 2007 2nd ACM/IEEE International Conference on Human-Robot Interaction. Washington, DC, USA.

- 2006 15th IEEE Int'l Workshop on Robot and Human Interactive Communication. Hatfield, United Kingdom

- 2006 1st ACM/IEEE International Conference on Human-Robot Interaction. Salt Lake City, UT, USA.

Journal Service

Senior Editor

- January 2016 – December 2017: Promoted from Associate Editor to Senior Editor for the Social and Behavior Science Area of the *International Journal of Human-Robot Interaction.* Journal moving to ACM Transactions on Human-Robot Interaction in January 2018.

Special Issue Guest Editor

- January 2016 – October 2017: Guest Editor with Selma Sabanovic (Indiana University-Bloomington) and Carlotta Berry (Rose-Hulman Institute of Technology) for a Special Issue on HRI Education with the *International Journal of Human-Robot Interaction*.

Associate Editor

- June 2015 – December 2015: Associate Editor for the Social and Behavior Science Area of the *International Journal of Human-Robot Interaction*.

Refereed Journal Reviewer

- Oxford University Press Interacting with Computers Journal

- IEEE Access Journal

- Springer International Software Quality Journal (SQJO)

- Springer International Journal on Autonomous Robots (AURO)

- IEEE Transactions on Human-Machine Systems (formerly IEEE Transactions on Systems, Man, and Cybernetics, Part C – Applications and Reviews) (IEEE-HMS)

- Human-Computer Interaction Journal (HCI)

- Journal of Human-Robot Interaction (JHRI)

- International Journal of Social Robotics (SORO)

- IEEE Transactions on Systems, Man, and Cybernetics, Part A – Systems (IEEE-SMC-A)

- Interaction Studies Social Behaviour and Communication in Biological and Artificial Systems, an international journal.

- IEEE Transactions on Robotics, Special Issue on Human-Robot Interaction

Community Service

- Fall 2011-Present – Involvement, training, and active research in support of the Starkville Police Department and the Mississippi State University Police Department, focused on the integration of robots into tactical teams.

- Summer 2014 – Instruction of basic programming skills at the Boys & Girls Clubs of Columbus, MS and Starkville, MS.

- Fall 2013 – BEST Robotics Competition Judge for Marketing Presentations and in addition to Spirit and Sportsmanship Judge.

- Summer 2013 – Bulldog Bytes Summer Camp – Presentation on the use of robots for law enforcement and therapeutic use. Provided guidance on programming the Finch robots for projects demonstrating identity theft.

- Spring 2013 – Workshop presentation to the I Am Girl group – sponsored by Bagley College of Engineering. Taught a half-day workshop on the use of robots and human-robot interaction. Taught the middle school girls about programming using the Finch Robot.

- Summer 2012 – Women in Cyber Security Summer Camp – Taught a two-day outreach event with Finch robots

- Fall 2012 – East Mississippi Community College – Women in Science and Technology Outreach Event to high school female students

- 2008 – Benito Middle School – Parents/Students Technology and Robotics Night with IBM

- 2008 – USF Polytechnic – Robots at Gifted & Talented Program

- 2008 – Black Engineering Month and IBM's Tampa Women in Technology event

- 2007 – Take Your Child to Work Day at IBM

- 2007 G.R.E.A.T. (Girls Really Excelling at Technology) Camp, hosted by the IBM Tampa Women In Technology

INVITED PRESENTATIONS, WORKSHOPS, and COHORTS

- March 2-3, 2018 – Bloomington, IN – *Invited Plenary Talk* – Indiana University Fashion Technology Symposium. Talk on the use of textiles for technology and robotics as used in Therabot™, a robot therapy support companion.

- December 12, 2017 – Washington, DC – *Invited Testimony* provided before the U.S. Senate Committee on Commerce, Science, and Transportation's Subcommittee on Communications, Technology, Innovation and the Internet Hearing titled, *"Digital Decision-Making: The Building Blocks of Machine Learning, and Artificial Intelligence."* See link for streaming of hearing. https://www.commerce.senate.gov/public/index.cfm/2017/12/digital-decision-making-the-building-blocks-of-machine-learning-and-artificial-intelligence

- October 26, 2017 – High Tatras, Slovakia – *Keynote Talk and Invited Paper* - 15th International Conference on Emerging eLearning Technologies and Applications (ICETA 2017). "Improving Student Engagement and Learning Outcomes through the Use of Industry-Sponsored Projects in Human-Computer Interaction Curriculum," Registration expenses covered and presented remotely.

- October 25, 2017 – Starkville, MS – Mississippi State University – *Invited Talk Presentation* – *Theta Talks* sponsored by Theta Tau Engineering Fraternity Event. "Therabot™ – A Robotic Support Companion."

- January 26, 2017 – Herl'any, Slovakia – *Plenary Talk and Invited Paper* – IEEE Symposium on Applied Machine Intelligence. "Moving Toward an Intelligent Interactive Social Engagement Framework for Information Gathering." Travel expenses covered.

- November 3, 2016 – Bloomington, IN – University of Indiana-Bloomington – *Invited Colloquium Presentation* – "Therabot™ – The Design and Implementation of a Robotic Therapeutic Support System." Travel expenses covered and honorarium.

- November 2, 2016 – Plainfield, IN – Indiana State Police Training Academy – Annual Training Coordinator's Conference – *Invited Talk* – Presentations and training for a three-hour session on "The Use of Robots for Law Enforcement Applications." Travel expenses covered.

- September 30, 2016 – Charlottesville, VA – University of Virginia Robotics Seminar Series – *Invited Talk* - "Research Applications in Human-Robot Interaction." All travel expenses covered.

- August 27, 2016 – New York City, NY – *Invited Speaker* for the Evaluation Methods and Standardisation for Human-Robot Interaction Workshop will present "Lessons Learned from Human-Robot Interaction Evaluations for Different Applications" at the 25th IEEE International Symposium on Robot and Human Interactive Communication.

- March 7, 2016 – Christchurch, New Zealand – 11th ACM/IEEE International Conference on Human-Robot Interaction – *Invited* Pioneers Workshop *Keynote Distinguished Faculty Speaker* and *Distinguished Panelist.* http://www.hripioneers.info/hri16/index.html.

- November 19, 2015 – Palo Alto, CA – Stanford University Research Symposium. *Invited* "Research Interest in Human-Robot Interaction." Lecture presented to Stanford University students as part of the 11th ACM/IEEE International Conference on Human-Robot Interaction Program Committee activities.

- November 7, 2015 – Starkville, MS – Mississippi State University – *Invited* SWE #BeThatEngineer Outreach Event – Faculty Panel Discussion with local high school females considering engineering or STEM–related fields.

- October 26, 2015 – Columbus, MS – Hazard Lecture Series. *Invited* "Research Interests in Human-Robot Interaction and Robotics." Presented to K-12 students at Heritage Academy, Mississippi School of Mathematics and Science, and the local community.

- October 23-24, 2015 – Nashville, TN – Society of Women Engineers – Academic Leadership Program – Scholarship awarded for attending the conference and stipend of $200.

- July 7-10, 2015 – Redmond, WA – Microsoft Faculty Summit 2015 – Invited to represent Mississippi State University and the Department of Computer Science and Engineering at this prestigious invitation only summit for collaboration and insight to advance the area of Artificial Intelligence to the research and academic communities. Microsoft sponsorship in the amount of $1,087.

- May 1-2, 2015 – Arlington, TX – NSF CISE Research Infrastructure (CRI) – Planning Workshop. *Invited* "The Use of Robots for Therapeutic Support and Information Gathering in Human-Robot Interaction." Sponsorship in the amount of $875.

- September 17, 2014 - Starkville, MS – Psi Chi (Psychology Honor Society) Research Panel – *Invited* "Discussion of Current Research Program and Opportunities for Student Research Opportunities."

- July 29, 2014 – Starkville, MS – *CyberGirls Summer Camp:* "Research Projects for the STaRS Lab." *Invited* presentation and robot demonstration for these middle school under-represented young ladies to discuss different opportunities related to Science, Technology, Engineering, and Mathematics programs of study and research.

- July 16, 2014 – Starkville, MS – *WE Lead Conference at MSU:* "Robotics Research Projects for the STaRS Lab." *Invited* presentation and demonstration of robots for the WE Lead Conference. Also discussed leadership, mentoring, and success skills with these young ladies.

- June 4, 2014 – Arlington, VA – *National Defense Industrial Association (NDIA) Quarterly Meeting:* "Integration of Unmanned Ground Vehicles Serving as Team Members Operating with Tactical Teams." *Invited* presentation to Army Science Board, Defense Industry Representatives, and Academic Attendees.

- April 22, 2014 – Starkville, MS – *Mississippi State University:* "Affective Computing for Intelligent Agents." *Guest Lecturer* for CSE4990/6990 Special Topics in AI-Robotics.

- March 6, 2014 – Hatfield, United Kingdom – *University of Hertfordshire*: "Human-Robot Interaction: Exploring the Use of Robots for Law Enforcement and Therapeutic Support." *Invited* presentation to faculty, staff, researchers, and students.

- December 4 and 6, 2013 – Columbus, MS – *Mississippi School of Mathematics and Science (MSMS)*: Presentations and demonstrations of the Finch and NAO robots to the Introduction to Computers course for educational and STEM outreach.

- October 28, 2013 – Starkville, MS – Mississippi State University: "Careers in Computer Science and Research in Human-Robot Interaction/Human-Computer Interaction." Guest Lecturer for <u>two</u> sections of *CSE 1002 Introduction to Computer Science*.

- October 22, 2013 – Starkville, MS – Mississippi State University: "Current Research Activities on Human-Robot Interaction." *Invited* talk for the monthly *Kiwanis Club Meeting* involving community leaders.

- October 22, 2013 – Starkville, MS – Mississippi State University: "Research Topics in Human-Robot Interaction." Guest Lecturer for the *Advanced Social Psychology Lab course*.

- October 10, 2013 – Starkville, MS – Mississippi State University: "Research and careers in the areas of Human-Robot Interaction and Human-Computer Interaction." Participated on a panel in the *Careers in Psychology course*.

- July 26, 2013 – Starkville, MS – Mississippi State University: "The Ethical Conduct of Research for Projects Associated with the STaRS Lab." *Invited* presentation at the *2013 Regional Conference on Regulatory Compliance*.

- April 5, 2013 – Starkville, MS – Mississippi State University: "Research Interests in Human-Robot Interaction." *Invited* presentation to the *Computer Science and Engineering Advisory Board*.

- January 29, 2013 – Starkville, MS – Mississippi State University: "Human-Robot Interaction Research Applications." *Invited* talk as part of the *BEST Robotics Kick-Off Meeting in conjunction with the NASA Mars Rover Project Activities* including presentations by Bobak Ferdowski and Adam Steltzner.

- October 1 and 3, 2012 – Starkville, MS – Mississippi State University: "Human-Robot Interaction Research Topics and Tips for Obtaining a Computer Science Degree" – Presentation to two sections of the *CSE 1002 Introduction to Computer Science course*.

- February 27, 2012 – Tuscaloosa, AL – *University of Alabama*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots and Other Research Topics," *Invited* research presentation to faculty and students.

- November 11, 2011 – Starkville, MS – Mississippi State University: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots and Other Research Topics" – *Cognitive Science Brown Bag ACCESS Colloquium Series* Research Presentation to faculty and students.

- October 17, 2011 – Starkville, MS – Mississippi State University: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots and Related Research" – Presentation to *ACM Student Chapter* members.

- September 14, 2011 – Starkville, MS – Mississippi State University: "Human-Robot Interaction Research Topics and Tips for Obtaining a Computer Science Degree" – Presentation to two sections of the *CSE 1002 Introduction to Computer Science course*.

- April 23, 2011 – Lakeland, FL – *University of South Florida Polytechnic*: "Approaches to Teaching, Research, and Community Involvement" – *Invited* colloquium presentation to faculty, staff, and students. All expenses paid.

- April 18, 2011 – Albuquerque, NM – *Sandia National Labs – Cognitive Applications Organization*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots" – *Invited* colloquium presentation to staff. All expenses paid.

- April 11, 2011 – College Station, TX – *Texas A & M University*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots" – *Invited* Colloquium presentation for National Robotics Week to faculty, staff, and students. All expenses paid.

- April 4, 2011 – Starkville, MS – *Mississippi State University*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots" – Colloquium presentation to faculty, staff, and students. All expenses paid.

- March 25, 2011 – Aberdeen Proving Ground, MD – *Army Research Labs – Human Research and Engineering Directorate*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots" – *Invited* Colloquium presentation to staff. All expenses paid.

- October 6, 2010 – New Haven, CT – *Yale University*: "Affective Computing for Intelligent Agents" – Guest Lecturer for CS470 Artificial Intelligence.

- April, 2010 – Lowell, MA – *University of Massachusetts – Lowell*: "Non-Facial and Non-Verbal Affective Expression for Appearance-Constrained Robots" – *Invited* Colloquium presentation to faculty, staff, and students. Travel expenses paid.

- October 29, 2009 – New Haven, CT – Yale University: "Affective Computing for Intelligent Agents" – Guest Lecturer for *CS470 Artificial Intelligence*.

- April, 2009 – Pittsburgh, PA – *Carnegie Mellon University*: "Robots Without Faces: Non-Verbal Social Human-Robot Interaction" – *Invited* colloquium presentation to faculty, staff, and students. All expenses paid.

- Fall 2008 – Tampa, FL – University of South Florida: "Affective Computing for Intelligent Agents" – Guest Lecturer for *CIS-4930 Introduction to AI-Robotics*.

- May 19, 2008 – Pasadena, CA – NEWHRI: Unifying characteristics of research in human-robot interaction workshop in conjunction with the *ICRA'08 Conference* – http://newhri.org/Home.html Awarded full travel funding.

- March 12, 2008 – Amsterdam, Netherlands – *NSF HRI Pioneers Workshop 2008* – http://www.hripioneers.org/hri08/ Awarded full travel funding.

- June 9-10, 2007 – San Diego, CA – *CRA-W Career Mentoring Workshop* http://www.cra.org/Activities/craw/projects/mentoring/mentorWrkshp/2007/index.php Awarded full travel support.

- March 8, 2007 – Washington, DC – *NSF HRI Pioneers Workshop 2007* – http://www.hripioneers.org/hri07/ Awarded full travel support.

- August 2-6, 2006 – Carmel, CA – *NSF Graduate Student Invitational Research Workshop on Human-Robot Interaction* http://peopleandrobots.org/workshop/index.html Awarded full travel support.

- Spring 2006 – Tampa, FL – University of South Florida: "Affective Computing for Intelligent Agents" – Guest Lecturer for *CIS-4930 Introduction to Artificial Intelligence*.

- March 31 – April 1, 2006 – San Francisco, CA – *CRA-W Grad Cohort* – http://www.cra.org/Activities/craw/gradcohort/2006/schedule.php.

- Spring 2005 – Tampa, FL – University of South Florida: "Affective Computing for Intelligent Agents" – Guest Lecturer for *CIS-4930 Introduction to Artificial Intelligence*.

- February 25-26, 2005 – San Francisco, CA – *CRA-W Grad Cohort* – http://www.cra.org/Activities/craw/gradcohort/2005/schedule.php.

RELATED COURSEWORK AND TRAINING
Major Emphasis Courses:

Programming Concepts in Java, Program Design in C, Data Structures in C, Operating Systems with OSP Simulations in C, Analysis of Algorithms, Software Engineering, Database System Design with a project implementing an Oracle database with a Java User Interface, Computer Organization, Introduction to Discrete Structures, Computer Logic Design and Lab, Introduction to Probability, Computer Architecture, Linear Algebra, Automata Theory/Formal Languages, User Interface Design/Human-Computer Interaction, Computational Geometry with project in C, Advanced Discrete Structures and Cryptography, Computer Networks and Distributed Systems, Introduction to Artificial Intelligence, Programming Languages, Graduate Analysis of Algorithms, AI Robotics, Graduate Operating Systems, Graduate Computer Architecture, Advanced Robotics, Introduction to Homeland Security Technologies, Introduction to Computer Graphics, and Graduate Seminars in Human-Robot Interaction.

Minor Emphasis Courses:

Cognitive Psychology, Psychophysiology, Human Factors, and Applied Statistical Analysis I, II, and III.

Additional Specialized Training:

Mississippi State University

- 2017 – 2018 Mississippi State University Faculty Academic Leadership Program – Dean V. Colvard Class – sponsored by the MSU Office of Research and Economic Development. One of 12 selected from this year's applications.

- 2016 – Society of Women Engineers – Academic Leadership for Women in Engineering Program: Awarded a NSF ASSIST Travel Grant to participate in this two-day training program

- 2015 – Society of Women Engineers – Academic Leadership Program

- 2017 – CITI Responsible Conduct of Research Certification Course

- 2017 – CITI IRB Human Subjects Protection Training

- 2017 – CITI Financial Conflict of Interest Training

- 2013 – National Child Advocacy Center Basic Forensic Interviewer for Children

- 2013 – Starkville Police Department – Law Enforcement Active Shooter Response Training

- 2012 – Training Certification on School Bombing Incident Responses

Yale University

- 2011 – Responsible Conduct of Research Certification Course

- 2010 – Machine Shop Equipment Operation and Safety Course

- 2010 – Yale Continuing Medical Education: 9th Annual Institute on Autism Spectrum Disorders

University of South Florida

- 2006 – FEMA Emergency Management Institute: IS-00800 National Response Plan (NRP)

- 2006 – FEMA Emergency Management Institute: IS-00301 Radiological Emergency Response Certification

PROFESSIONAL MEMBERSHIPS

IEEE *(Senior Member – since 2015)*, IEEE Computer Society *(Senior Member since 2015)*, IEEE Robotics and Automation Society (RAS) *(Senior Member - since 2015)*, IEEE Women in Engineering (WIE), Association for Computing Machinery (ACM) *(Senior Member - since 2015)*, American Society of Engineering Education (ASEE), Society of Women Engineers (SWE), Association for Unmanned Vehicle Systems International (AUVSI).