Winslow S. Burleson
Professor, School of Information
Professor, Health Sciences Design
University of Arizona
win@arizona.edu
646.755.2824

CHRONOLOGY OF EDUCATION

2006 **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, Cambridge, MA.
Ph.D. MIT Media Lab, Department of Media Arts and Sciences.
Dissertation: Affective Learning Companions: Strategies for Empathetic Agents with Real-Time Multimodal Affective Sensing to Foster Meta-Cognitive and Meta-Affective Approaches to Learning, Motivation, and Perseverance.
Advisor: Professor Rosalind Picard.

1997 **STANFORD UNIVERSITY**, Palo Alto, CA.
M.S.E. Mechanical Engineering Department, Product Design.
Advisor: Professor David Kelley.

1995 **RICE UNIVERSITY**, Houston, TX.
B.A. Physics with a Biology-Option.

1992 **SEA EDUCATION ASSOCIATION**, Woods Hole, MA.
SEA Semester, Oceanographic Research, Woods Hole Oceanographic Institute.

HONORS AND AWARDS

2019 Association for Computing Machinery (ACM) Creativity and Cognition 2019 Best Paper Award.
2017 ACM Distinguished Member - Recognized as a Pioneering Innovator of the Digital Age, for Scientific Contributions to Computing.
2016 ACM Senior Member.
2015 White House Fellow Regional Finalist (New York, NY).
2014 Fulbright Specialist Roster Candidate.
2013 Google Faculty Research Award.
2012 White House Fellow Regional Finalist (Dallas, TX).
2011 White House Fellow Regional Finalist (Los Angeles, CA).
2011 UMUAI Journal of Personalization Research, James Chen Annual Best Paper Award.
2011 Barrett Honors College Visiting Honors Faculty Fellow.
2010 Time Magazine, The 50 Best Inventions of 2010: NeoNurture Incubator, Contributor.
2009 NAE, First Frontiers of Engineering Education Symposium, Invited Finalist.
2009 AI in Education 2009 Overall Best Paper Award.

2009	AI in Education 2009 Overall Best Demo Award.
2008	ASU Dean's recognition as an outstanding Assistant Professor.
2007-Present	Barrett Honors College Faculty Affiliate.
2004-2007	Kavli Fellow, National Academy of Science (US-Chinese Frontiers of Science).
1999-2005	MIT Media Lab, PhD Fellowship, Full Tuition and Living Stipend.
2004	Student Leader Group Award, MIT.
2002	Time Magazine The 10 Best Inventions of 2002: Sputmik Microphone, Contributor.
2000	IBM Research Division Award: 3rd Plateau Inventors Achievement Award.
1999	IBM Research Division Award: 2nd Plateau Inventors Achievement Award.
1998	IBM Research Division Award: 1st Plateau Inventors Achievement Award.
1998	IBM Research Division Award: Digital Coffee Table with Media Opportunity.
1991-1995	World Scout Bureau Youth Representative to the United Nations.
1993	NASA Public Service Group Achievement Award.
1990-1992	Rice Outdoors Club, President.
1991-1992	The Explorers Club, Student Member.
1991	Hubble Space Telescope, Co-Principal Investigator, Amateur Astronomer.
1989	National Eagle Scout Association, Life Member.
1989	Boy Scouts of America - NSF Antarctic Science Program, National Finalist.

CHRONOLOGY OF EMPLOYMENT

Research Experience

UNIVERSITY OF ARIZONA, SCHOOL OF INFORMATION, Tucson, AZ.
JOINT APPOINTMENT IN HEALTH SCIENCES DESIGN, Tucson, AZ.

2020-Present	Professor, designer and social inventor with transdisciplinary program of integrated research and education focused on human-centered participatory design advancing cyberlearning, creativity support, and personalized health systems.
2019-Present	School of Information, Associate Director, Director of Research. Managing $21M research portfolio. Working with Provost, Dean of the College of Social and Behavioral Sciences, and Director of the School to create UA College of Information. Director of the Executive Committee for Vertically Integrated Projects, providing transdisciplinary, community-based research experiences promoting diversity, equity, and inclusion. Co-Director Closed Loop Sensor Lab, Director of UA Holodeck, and Founding Director Motivational Environments research group.
2019-2020	Associate Professor, School of Information and Founding Faculty Member of Health Science Design.
2014-2019	**NYU RORY MEYERS COLLEGE OF NURSING**, New York, NY. Associate Professor and social inventor with transdisciplinary program of integrated research and education focused on health and educational technologies, informatics, design, simulation, and innovation. Leading laboratory- and field-based research advancing human computer interaction, cyberlearning, creativity research, affective computing, intelligent environments (tutoring systems, smart homes, and "things that think"), and media arts. Engaging in open innovation and

global initiatives in partnership with the Maker, Hacker, and Do-It-Yourself (DIY) movements. Founding Director of the NYU-X Lab and research group, NYU Holodeck, and NYU Meyers Informatics Initiative. Co-Director, Technology Resource Core, NIH P20 Center for Precision Health in Diverse Populations.

2006-2014   **ARIZONA STATE UNIVERSITY: SCHOOL OF COMPUTING, INFORMATICS, AND DECISION SYSTEMS ENGINEERING**, Tempe, AZ. Assistant Professor of Human Computer Interaction (HCI). Founding Director of the Motivational Environments research group and ASU's Inventors' Workshops initiative. Advancing research in educational technology, affective computing, intelligent tutoring systems, human robot interaction, creativity research and support tools, smart environments, ubiquitous computing, and advanced gaming. Founding member of ASU's Learning Sciences Institute and Senior Sustainability Scientist at ASU's Global Institute of Sustainability. Collaborator and advisor for faculty, post-doctoral researchers, graduate students and Barrett Honors College students engaged in the School of Arts, Media, and Engineering; Motivational Environments; ASU's Mars Education Program; the Center for Research on Education in Science, Mathematics, Engineering and Technology (CRESMET); and Learning Sciences Institute.

2006   **DEUTSCHE TELEKOM INNOVATION LABORATORIES**, Berlin, Germany. Senior Research Scientist, advancing understanding of affective interactions with mobile technologies through European Union sponsored research with colleagues in Usability and Networking groups.

    MIT MEDIA LABORATORY, Cambridge, MA.

2003-2006   Research Assistant, with Professor Rosalind Picard. Investigated, designed, built, and evaluated a multi-modal, affective sensing, relational agent system. Advanced theoretical perspectives on the use of relational agents and virtual peers in support of affective self-awareness, learning, creativity, playful imagination, motivation, and meta-cognitive skills to improve learning.

2002-2005   Participant in Amabile Research Group, with Professor Teresa Amabile, Head of the Entrepreneurial Management Unit, Harvard Business School. Advanced social psychology, creativity research, and organizational behavior research on teams. Investigated context aware techniques to enhance creative processes, exploring the relationships of motivation, physiology, and collaboration on creative tasks through context aware sensing and interface, affective computing, motivational psychology, peak performance, applied behavior analysis, and captology.

1999-2003   Research Assistant, with Professor Ted Selker. Assisted in establishing Context Aware Computing Group and research laboratory, developing interactive computer systems with user-system-task models. The research integrated industrial design, mechanical engineering, electronic hardware and sensor design, artificial intelligence techniques for smart products, and rapid prototyping. Developed a theoretical framework for contextual design of ubiquitous, networked, mobile, wearable, mixed reality, desktop, interactive environments,

and tangible computing through scenario implementation, exploration, and HCI user testing. Embedded projects included: Flexor Sleeve, Social Floor, Canopy Climb, Sports Ball, Media Bed, Eye-Tracking Bed, Exercise-Car, E-Windshield, Talking Couch, Educational Dice, Eye-R Glasses, Desert Oracle, Electronic Necklace, Digital Cigarette, and Motivating Pen.

1995-1999   **IBM ALMADEN RESEARCH CENTER**, San Jose, CA.
Design Engineer with User Systems Ergonomic Research, inventing, prototyping, patenting, and promoting next generation products. Created new portable and wearable computers and accessories, socially appropriate and collaborative embedded systems, Web Browser Intermediaries applications, and applied Personal Area Networks. Projects included: Exercise Machine, TrackPoint Science, Uses for Web Browser Intermediaries Applications, Keyboard Research and Ergonomics, Personal Area Networks for Wearable Computing, Out Of Box Experience Package Design, Electronic Wallet, Leather Portfolio Computer, Sunlight Computer, GPS Tablet Concept Computer, and palm platform development for EduSlate K-12 Reinventing Education Grant. Worked with IBM Special Needs Group on physical pointing device and cursor software research. Assisted in the organizing of five annual New Paradigms for Using Computers Workshops.

STANFORD UNIVERSITY PRODUCT DESIGN PROGRAM, Palo Alto, CA.
1997   Rope Aesthetics Masters Project: Invention of a Knot Mechanism.
1996-1997   Researched and proposed rainforest canopy access and traversal technologies.
1996   Created Physical and Virtual Musical Lego Blocks for novice tangible composition. Coursework included: ethnography, participatory design, user testing, consulting with Phlebotomy Department of San Francisco General Hospital, educational media design, casting, machining, vacuum-thermoforming, welding, CAD/CAM/CNC, and electronics for smart product design.

1991-1999   **SPACE TELESCOPE SCIENCE INSTITUTE**, Baltimore, MD.
Co-Principal Investigator on "The Investigation of Binary Asteroids." Proposed and implemented research as a Space Telescope Science Institute Amateur Observer.

1992   **RICE UNIVERSITY**, Houston, TX.
Lab assistant on oceanographic seismic studies of Sabine and Colorado River sediments in the Gulf of Mexico, with correlations to Antarctic paleo-climatology. Lab assistant on bio-genetic studies of drosophila phenotype adaptation.

Teaching Experience

2019-Present   **UNIVERSITY OF ARIZONA, SCHOOL OF INFORMATION,** Tucson, AZ.
JOINT APPOINTMENT IN HEALTH SCIENCES DESIGN, Tucson, AZ.
Faculty appointments with endorsement to chair or co-chair in:
      School of Information (PhD)
      Health Sciences Design

Graduate Interdisciplinary Program, Cognitive Science (PhD)
Professor for graduate and undergraduate transdisciplinary research groups, instructing project-based activities in Information, Health Science Design, Computer Science, and Education. School of Information Honors College Liaison. Director of the Executive Committee for Vertically Integrated Projects, providing transdisciplinary, community-based research experiences promoting diversity, equity, and inclusion.

2014-2019   **NYU RORY MEYERS COLLEGE OF NURSING**, New York, NY.
Faculty appointments with endorsement to chair or co-chair in:
     Tandon School of Engineering, Computer Science and Engineering (PhD)
     Tandon School of Engineering, Integrated Digital Media (MS)
     Steinhardt Education Culture and Technology (PhD/MA)
     Courant Institute of Mathematical Sciences, Computer Science (PhD)
     Global College of Public Health (PhD)
Professor for graduate and undergraduate transdisciplinary research groups; instructing project-based courses in Nursing, Computer Science, and Computer Science and Engineering, including: STEM Nursing Innovation (S2017); Vertically Integrated Projects (2016F-Present); Independent Studies (2015S-Present); and mentor for Research Experiences for Undergraduates (REU, 2015-Present) and Meyers Honors Summer Research Program (2017).

Doctoral Students Mentored:
     Crystal Butler (Committee Member, May 2016 - Present)
     Ronald Moore (Advisor, September 2018 - 2019)
     Lisa Groom (Advisor, September 2017 - 2019)
     Armanda Lewis (Co-Chair, January 2015 - June 2017)

Masters Students Graduated:
     Caitlin Sikora (Chair/Advisor, December 2016)
     Crystal Butler (Advisor, May 2016)

Post-Doctoral Scholars Mentored:
     Joseph Mango, MS (March 2017 - May 2017)

Research-Scientists Supervised:
     Jeremy Rowe, EDD (Sept. 2014 - August 2019)

Assistant Professors Mentored:
     Raquel Ramos, PhD (May 2017 - August 2019)
     Chin Park, PhD (May 2017 - August 2019)

2006-2014   **ARIZONA STATE UNIVERSITY: SCHOOL OF COMPUTING, INFORMATICS, AND DECISION SYSTEMS ENGINEERING**, Tempe, AZ.
Professor for graduate and undergraduate transdisciplinary research groups; endorsed to graduate faculty chair or co-chair in: Aerospace Engineering (PhD), Computer Science (PhD), Educational Technology (PhD), Environmental Design/Planning (PhD), Industrial Engineering (PhD), Geological Sciences (PhD), Mechanical Engineering (PhD), and Media Arts and Sciences (PhD). Instructing

project-based courses in Arts, Media, and Engineering, Computer Science and Engineering, College of Education, and the School of Earth and Space Exploration, including: Physical Computing (2007S/2009S), Affective Computing (2007S), Ethics in Computing (2007F), Human Robot Mission Team Contingencies Seminar (2007F/2008F/2009F/2011F), Active Learning in Mediated Environments (2008S), Human Computing Interaction (2010S/2011S), Motivational Environments (2011S), Inventors' Workshops: How to design almost anything (2011F). Honors Faculty Advisor and Visiting Honors Faculty Fellow (2011) for the Barrett Honors College and Course Mentor for: School of Design's Innovation Space, Computer Science and Engineering Capstone Courses, Mechanical Engineering Capstone Courses, Independent Studies, ASU 101, and Fulton Undergraduate Research Initiative (FURI)/ NASA Space Grant.

Doctoral Students Graduated:
> Victor Augusto Da Silva Girotto (Co-Chair, May 2019)
> Lavinia Danielescu (Primary Co-Chair, May 2019)
> Helen Chavez Echeangary (Primary Co-Chair, August 2018)
> Javier Gonzalez-Sanchez (Primary Co-Chair, July 2016)
> Jisoo Lee (Primary Co-Chair, July 2016)
> Byron Lahey (Chair, April 2015)
> Vijay Kumar Ravishankar (Chair, April 2015)
> Ryan Brotman (Chair, May 2013)
> Priyamvada Tripathi (Chair, May 2011)
> Elodie Billionare (Committee, May 2010)

Doctoral Students Advanced to Candidacy:
> Mahmoud Dinar (Committee, May 2012)
> Robert Christopherson (Co-chair, May 2011)
> Taemie Kim (External Committee, MIT Media Lab, April 2009)

Masters Students Graduated:
> Yoalli Hidalgo Pontet (Chair, May 2017)
> Patrick Lu (Chair, May 2016)
> Elissa Thomas (Chair, April 2014)
> Luis Garduño (Chair, April 2012)
> Akshay Vankipuram (Committee, August 2012)
> Sainath Parab (Co-chair, December 2010)
> Collin Ruffenach (Chair, May 2010)
> Natalie Freed (Chair, May 2010)
> Soumya Tilak (Chair, May 2010)
> Uday Kumar Bandaru (Chair, May 2010)
> Adithya Renduchintala (Chair, May 2008)
> Pooja Ambekar (Chair, May 2008)

Post-Doctoral Scholars Mentored:
> Cecil Lozano (Mentor, January 2012 – May 2014)
> Sylvie Girard (Co-mentor, September 2011 – May 2013)
> Kasia Muldner (Mentor, August 2008 - June 2010; July 2012 - 2014)
> Erin Walker (Mentor, April 2011 - November 2012)

Ning Wang (Co-mentor, June 2010 - August 2010)
Colleen Megowan-Romanowicz (Co-mentor, Jan. 2008 – Dec. 2008)

MIT MEDIA LABORATORY, Cambridge, MA.

1999-2006 Research supervisor for 15 students involved in the Undergraduate Research Opportunities Program (UROP): designing, implementing and documenting smart product design, embedded technologies, affective computing, and senior research projects with Context Aware Computing and Affective Computing Groups.

2003-2004 Academic Advisor Freshman Arts Seminar Advising Program, Professor Peter Childs.

2003 Mentor for Freshmen Seminar: "Mission 2007: Alaska National Wildlife Refuge," Professor Kip Hodges.

1999-2003 Visual Thinking and Design Techniques Workshop: Sketching, Design, and Fabrication.

2002 Teaching Assistant, Industrial Design Intelligence, Professor Ted Selker.

2002 Mentor for Freshmen Seminar: "Mission 2006: Rainforest," Professor Kip Hodges.

2001 Mentor for Freshmen Seminar: "Mission 2005: Oceans," Professor Kip Hodges.

2000 Convened Research Methods for Creativity Reading Seminar.

Guest Lecturer in Graduate Courses at the MIT Media Lab:

2004 Digital Innovations and Anthropology Seminar, Professor Sandy Pentland.

2001-2003 Industrial Design Intelligence, Professor Ted Selker.

2001 Design That Matters, Professor Mitchel Resnick.

2000-2001 How to Make (Almost) Anything, Professor Neil Gershenfeld.

Guest Lecturer in Graduate and Undergraduate Courses at other Institutions:

2003 Demystifying Engineering, Panelist, MIT Office of Academic Services.

2002 Weather Monitoring Station, Guest Lecturer and Juror, Harvard Department of Architecture, Visiting Professor Winka Dubbeldam.

2002-2003 Architectural Intervention Collaboration Studio, Guest Lecturer, Parsons School of Design, Visiting Instructor Beatrice Witzgall.

2002-2005 **MIT RESIDENTIAL LIFE PROGRAMS,** Cambridge, MA.
Graduate Residence Tutor, Simmons Hall, responsible for 40 undergraduates. Fostered a safe and supportive living and learning environment, personal growth, community standards, interpersonal skills, and provided coaching, mental health support, and stress management resources.

STANFORD UNIVERSITY PRODUCT DESIGN PROGRAM, Palo Alto, CA.

1998-1999 Co-Instructor of Visual Thinking, appointed twice, with 54 and 56 students. Taught brainstorming, design sketching, peak performance, teamwork, product design, rapid prototyping, and creative problem solving skills as part of the required core curriculum for Mechanical Engineering, Product Design, and Urban Studies. Responsibilities included grading, project design, curriculum development, lectures, critiques, office hours, and management of two teaching assistants.

1998 Invited Critic, Advanced Product Design, Lecturer Bill Burnet.

1997	Teaching Assistant, Visual Thinking, two quarters, leading to Instructor appointment.
1996	Teaching Assistant, Ambidextrous Thinking, Graduate Course, Professor Rolf Faste.

IBM ALMADEN RESEARCH CENTER, San Jose, CA.

1996-1999	Recruited and mentored summer interns from Stanford Product Design Program.
1998	IBM Research Liaison for Industry Sponsored Research to Stanford University's Mechanical Engineering Design Course, Professor Drew Nelson. Mentored the design of a pocket-sized overhead projector for use with IBM ThinkPad 755CV.
1993-1994	**NASA AMES RESEARCH CENTER - SETI INSTITUTE**, Mountain View, CA. Curriculum Developer and Experimentalist at NASA Ames Research Center for SETI Institute's NSF-NASA grant, Life in the Universe: An Exciting Vehicle for Teaching Integrated Science Nationwide and PBS's Live From Antarctica! Contributed to nationwide pilot testing, publication, and grant writing.

Professional Experience

2019-Present	**UNIVERSITY OF ARIZONA, SCHOOL OF INFORMATION,** Tucson, AZ. **JOINT APPOINTMENT IN HEALTH SCIENCES DESIGN,** Tucson, AZ. Professor, Leading translational activities with Tech Launch Arizona; the Office of Research, Innovation, and Impact; University IT Services and industry and community collaborators (California Closets, Lombardi Undersea LLC; Creative Machines; Banner Hospital; City of Tucson).
2015-Present	**INVENTORS' WORKSHOPS, INCORPORATED,** New York, NY. Founder and President of social invention research consultancy firm, advancing next generation product development and social enterprise initiatives including: (1) Dressing Assistance for People Living with Dementia and their Caregivers and (2) Ocean Space Habitat^{TM}, Actualizing Transformative Experiences for Citizen Science.
2014-2019	**NYU RORY MEYERS COLLEGE OF NURSING**, New York, NY. Assistant Professor, leading translational activities with NYU Office of Industrial Liaison, IT Services, and industry collaborators (Design that Matters, Open IDEO, Google, LEGO, Lombardi Undersea LLC IBM, Microsoft Research, UN Development Program Innovation Lab, NYC Media Lab consortium).
2006-2014	**ARIZONA STATE UNIVERSITY: SCHOOL OF COMPUTING, INFORMATICS, AND DECISION SYSTEMS ENGINEERING**, Tempe, AZ. Assistant Professor of Human Computer Interaction, leading a research team of 20 postdoctoral, graduate and undergraduates in collaborative transdisciplinary research. Involved in ASU's global outreach initiatives with governmental, industry, and academic engagements in Scandinavia, Germany, China, and Mexico. Founding Director of the Inventors' Workshop, a transdisciplinary University wide initiative to train the Science, Technology, Engineering, Arts, and Math (STEAM) Leaders of 2020 and 2100, today. Democratizing expertise through hands on, Do-It-

Yourself (DIY), passion based, integrated learning and research, via a network of peers, mentors, and world-class research centers, engaging the grand challenges of our time.

2004-2014   **QUOTIDIA INCORPORATED,** New York, NY.
Founder and President of social invention consultancy firm, advancing next generation product development and social enterprise initiatives with NGOs and industry collaborators: Future Generations, Design that Matters, Phillips and LEGO Group.

2006   **DEUTSCHE TELEKOM INNOVATION LABORATORIES,** Berlin, Germany.
Senior Research Scientist, research and development that transferred academic technologies to industry applications through European Union collaborations.

1999-2006   **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, Cambridge, MA.
Research Assistant to Professors Rosalind Picard and Ted Selker, brainstormed and consulted with senior management of Fortune 500 companies, executives, and diplomats in the public and non-profit sectors. Outsourced production and procurement of 200 eye-behavior detecting circuit boards.

1998-2003   **NAUI SCUBA DIVING INSTRUCTOR**, Palo Alto, CA and Cambridge, MA.
Independent Instructor of Novice through Dive Master Leadership courses, solely responsible for safety, curriculum, instruction, equipment, and certification.

1995-1999   **ALMADEN RESEARCH CENTER**, San Jose, CA.
Design Engineer with User Systems Ergonomic Research Group. Developed and promoted next generation products at COMDEX96 and Atlanta Summer Olympics. Initiated concept computer production capabilities, creating 40 touch screen tablet computers with GPS. Participated in grant writing and applicant interviews.

1991   **UNITED NATIONS CHILDREN'S FUND (UNICEF)**, New York, NY.
Principal consultant on Substance Abuse Prevention and Responsible Sexual Behavior, Program Development for Adolescents and Youth. Developed and presented international strategies for the United Nations Children's Fund.

1988   **EAGLE SCOUT SERVICE PROJECT**, Kathmandu, Nepal.
Conceived, organized, and executed more than 4000 hours of volunteer campaigns for drug awareness supported by the Nepal Scouts Association, Boy Scouts of America, and World Scout Bureau. Created International Library for Drug Awareness and an international "Drug Awareness Merit Badge."

SERVICE/OUTREACH

Journal Editorial Service

Editorial Board, International Journal of Artificial Intelligence in Education, International AIED Society, 2013 – Present.
Associate Editor, International Journal of Human-Computer Studies (IJHCS), 2011 – Present.
Editorial Board, Leonardo-Transactions, Peer Reviewed Section of the Journal of the International Society for the Arts, Sciences and Technology, MIT Press, 2012 – 2015.

Conference Leadership Service

Associate Chair, Program Committee, ACM Designing Interactive Systems, 2019.
Associate Chair, Program Committee, ACM Creativity and Cognition, 2015.
Conference Organization Co-Chair, Young Researcher Track, Twelfth International Conference on Intelligent Tutoring Systems (ITS 2014), University of Hawaii at Manoa, Honolulu, Hawaii, 2014.
Chair, CHI 2012 Student Game Competition Innovative Interfaces, Conference on Human Factors in Computing Systems, 2012.
Organizer, CHI 2012 Tutorial: Multimodal Detection of Affective States, Conference on Human Factors in Computing Systems, 2012.
Associate Chair, CHI 2012 Paper and Notes Review, Conference on Human Factors in Computing Systems, 2011.
Organizer, Workshop on Performative Architecture, 2010.
Workshops Chair, International Conference on Ambient Systems, Ambi-Sys, 2010.
Organizer, Workshop on Global Resources for Online Education, Tempe, AZ, CRA/NSF 2009.
Organizer, Workshop on Global Resources for Online Education, Brighton, UK, CRA/NSF 2009.
Associate Chair for Paper and Notes Reviews, CHI 2009, Conference on Human Factors in Computing Systems, 2008.
Organizing Committee, Chinese-American Frontiers of Science Symposium, Chinese Academy of Sciences and the U.S. National Academy of Sciences, 2005-2006.
Organizer, Workshop on Creativity and Interface, Conference on Human Factors in Computing Systems, CHI 2002.
Organizer, Workshop Exploring the Framework of Contextual Awareness in Cooperative Systems, Workshop Organizer, CSCW 2000.

Unit and College Service

Co-Director Closed Loop Sensor Lab, 2020-Present.
Executive Director of University of Arizona VIP Committee, 2019-Present.
Committee Member, Research IT Roadmap—Advanced Visualization Tools and User Interfaces, Co-Lead (University Level, NYU Langone Medical Center), 2017-2018.
Senior Fellow of the Hartford Institute, 2017-2019.
Committee Member, PhD Work Group, 2015-Present.
Committee Member, Sharing Works in Progress (SWIP), 2015-Present.
Committee Member, Simulation and Technology, 2015-Present.

Committee Member, Informatics Undergraduate Program Committee, 2013.
Committee Member, Cultural Informatics Faculty Search, 2012.
Committee Member, Informatics Undergraduate Program Committee, 2012.
Committee Member, Faculty Search Committee, Informatics and Digital Cultures, 2012.
Chair, ASU Search Faculty Committee, Inventors' Workshop Inventor-in-Residence/Professor of
    Practice, ASU, 2011.
Committee Member, Faculty Search Committee, School of Earth and Space Exploration, 2010.
Instructor, ASU 101: 1st Year Introduction to the New American University, 2009.
Committee Member, Informatics Committee, School of Computing and Informatics, 2009.
Committee Member, Arts, Media, and Engineering Research Committee, 2008-2009.
Committee Member, Arts, Media, and Engineering Education Committee, 2007-2008.
Student Representative, MIT Media Lab Biennial Visiting Committee, 2002 and 2004.
Committee Member, MIT Visiting Scholars Residential Program, 2002-2004.
Student Representative, MIT Media Lab Faculty Search Committee, 2002-2003.

STEM Education, Innovation, and Outreach

Organizer, Inventors' Workshops Hands On Activities, ASU Engineering Outreach Week, 2013.
Organizer, STARS Alliance ASU Chapter Broadening Participation in Computing, 2012.
Organizer, NASA TRIAD STEM Cyberlearning and Teacher Training Workshop, 2012.
Faculty Advisor, Inventors' Workshop Student Organization, 2011-Present.
Organizer, STARS Alliance ASU Chapter Broadening Participation in Computing, 2011.
Organizer, NASA TRIAD STEM Cyberlearning and Teacher Training Workshop, 2011.
Organizer, Exxon Mobile Bernard Harris Summer Science Camp Outreach, 2010.
Mentor, MIT Media Lab, Mentor for high school and middle school students, 2000-2004.
Technical Task Force Member, New England Aquarium, 2002.
Volunteer, Center for Women and Enterprise, Entrepreneurial Curriculum Development and
    Product Consultant to Entrepreneurs, 1999-2002.
Rider, New England AIDS Ride, rode 350 miles and raised $2,100, July 2001.
Internship Mentor, IBM Almaden Research Center, Explorer Scout Post, 1995-1999.

Reviewing and Program Committees

Reviewer, Nursing Research, 2016.
Reviewer, NSF Grant Review Panels, National Science Foundation, 2016.
Program Committee Member, AIED 2015, International Conference on AI in Education, 2015.
Reviewer, The Society for Simulation in Healthcare, 2014
Program Committee Member, CHI 2014 Student Design Competition, Metro Toronto
    Convention Centre, Toronto, Canada, 2014.
Program Committee Member, Twelfth International Conference on Intelligent Tutoring Systems
    (ITS 2014), University of Hawaii at Manoa, Honolulu, Hawaii, 2014.
Program Committee Member, CSEDU 2014, 6th International Conference on Computer
    Supported Education, Barcelona, Spain, 2014.
Reviewer, DPPI 2013, Designing Pleasurable Products and Interfaces, 2013.
Reviewer, CSEDU 2014, International Conference on Computer Supported Education, 2013.
Program Committee, ACII 2013, Affective Computing and Intelligent Interaction, 2013.

Program Committee, CHI ECSE 2013, Workshops on Evaluation Methods for Creativity Support Environments, 2013.

Reviewer, AIED 2013, International Conference on AI in Education, 2013.

Reviewer, ICCC 2013, International Conference on Computational Creativity, 2013.

Reviewer, CHI 2013, Conference on Human Factors in Computing Systems, 2013, 2012.

Reviewer, IEEE Transactions on Learning Technologies, 2012.

Reviewer, IEEE 2012, IEEE Transactions on Affective Computing, 2012.

Reviewer, NSF Grant Review, National Science Foundation, 2012.

Program Committee, F&G 2012, Conference on Fun and Games, 2012.

Program Committee, ICCC 2012, International Conference on Computational Creativity, 2012.

Reviewer, UbiComp 2012, Conference on Ubiquitous Computing, 2012.

Reviewer, Journal of Educational Psychology, 2012.

Reviewer, NSF Grant Review Panels, National Science Foundation, 2011.

Reviewer, Journal of Educational Psychology, 2011.

Program Committee, Persuasive 2012, International Conference on Persuasive Technology, 2011.

Program Committee, NSF Sponsored Music, Mind, Invention Workshop, National Science Foundation, 2011.

Reviewer, CSEDU 2012, International Conference on Computer Supported Education, 2011.

Program Committee, FLAIRS 25, Florida Artificial Intelligence Research Society Conference, 2011.

Program Committee, IDC 2012, Conference on Interaction Design for Children, 2011.

Reviewer, TEI 2012, Conference on Tangible and Embedded Interaction, 2011.

Program Committee, DCC12, The 5th International Conference on Design Computing and Cognition, 2011.

Reviewer, SBIE-WIE 2011, Workshop 22º Simpósio Brasileiro de Informática na Educação e 17º Workshop de Informática na Escola, Towards Affective Computing in Education: How to Enhance Student Affective Experience to Foster Learning, 2011.

Reviewer, Journal of Computer Aided Design and Applications, Special Issue on Edutainment, 2011.

Program Committee, AIED 2011, International Conference on Artificial Intelligence in Education, 2011.

Reviewer, International Journal of Computer Games Technology, Hindawi, 2011.

Program Committee, ICCC 2011, International Conference on Computational Creativity, 2011.

Program Committee, ACII 2011, International Conference on Affective Computing and Intelligent Interaction, 2011.

Program Committee, Mobil HCI 2011, International Conference on Human-Computer Interaction with Mobile Devices and Services, 2011.

Program Committee, IDC 2011, Conference on Interaction Design for Children, 2010.

Reviewer, CHI 2011, Conference on Human Factors in Computing Systems, 2010.

Reviewer, HRI 2011, Conference on Human Robot Interaction, 2010.

Reviewer, NSF Grant Review, 2010.

Program Committee, Persuasive 2010, Conference on Persuasive Technology, 2010.

Reviewer, IEEE Transactions on Multimedia, 2010.

Reviewer, AERA 2010 - Learning and Instruction (Technology Research), American Educational Research Association, 2010.

Program Committee, Digital Game and Intelligent Toy Enhanced Learning (DIGITEL2010), 2010.

Program Committee, Persuasive 2010, International Conference on Persuasive Technology, 2009.

Program Committee, International Conference on Computational Creativity 2010, 2009.

Program Committee, Fun and Games 2010, 2009.

Reviewer, NSF Grant Review, National Science Foundation, 2009.

Reviewer, TEI 2010, Conference on Tangible and Embedded Interaction, 2009.

Reviewer, CHI 2010, Conference on Human Factors in Computing Systems, 2009.

Reviewer, Graduate Symposium, Tangible Embedded Interaction, TEI 2010, 2009.

Reviewer, C&C 2009, Conference on Creativity and Cognition, 2009.

Reviewer, ASU's Limited Submission to NSF Science Master's Program, National Science Foundation, 2009.

Reviewer, Social Sciences and Humanities Research Council of Canada, 2009.

Program Committee, Persuasive 2009, International Conference on Persuasive Technology, 2009.

Reviewer, Computers and Education, 2009.

Reviewer, Persuasive Computing, 2009.

Reviewer, American Educational Research Association, 2009.

Program Committee, AIED Workshop, Closing the Affective Loop in Intelligent Learning Environments, AIED 2009, Artificial Intelligence in Education Conference, 2008.

Reviewer, NSF Grant Review Panels, National Science Foundation, 2008.

Program Committee, DCC08, Design Computing and Cognition, 2008.

Reviewer, CHI 2008, Conference on Human Factors in Computing Systems, 2007.

Reviewer, two NSF Grant Review Panels, National Science Foundation, 2007.

Program Committee, Intelligent User Interfaces Conference Workshop, Tangible Play: Research and Design for Tangible and Tabletop Games, 2007.

Program Committee, AIED 2007 Workshop on Modeling and Scaffolding Affective Experiences to Impact Learning, 13th International Conference on Artificial Intelligence in Education, 2007.

Reviewer, CHI 2006, Conference on Human Factors in Computing Systems, 2005.

Reviewer, Computers and Education, 2005.

Reviewer, CHI 2005, Conference on Human Factors in Computing Systems, 2004.

Student Representative, MIT Media Lab Biennial Visiting Committee, 2002 and 2004.

Committee Member, MIT Visiting Scholars Residential Program, 2002-2004.

Mentor, MIT Media Lab, Mentor for high school and middle school students, 2000-2004.

Reviewer, Interacting with Computers, 2003.

Reviewer, Communications of the ACM, 2003.

PUBLICATIONS/CREATIVE ACTIVITY

Authors are listed in order of contribution. Authors who were mentored students at the time of publication development are marked in bold; first author students are followed by their mentor(s). Impact Factors (IF) and Acceptance Rates (AR) represent averages for recent years, as available. Conference h-indices presented with respect to the top conference h-index of the respective field. Conferences and journals considered to be in the top 10 list for their respective

fields are marked with an * by their title. An * is placed to the left of any publication title substantially based on work done as a graduate student. Data based journal and conference full papers are marked with a ᵈ. Ranks and h-indices are based on Microsoft Academic Search.

Refereed Journal Articles

1. Navarra, A., Gwadz, M., Whittemore, R., Bakken, S. Cleland, C., Burleson, W., Kaplan Jacobs, S., and D'Eramo Melkus, G. (2017) Health technology-enabled interventions for adherence support and retention in care among US HIV-infected adolescents and young. *AIDS and Behavior*. IF: 3.1.
2. ᵈ Burleson, W., Mahoney**, D., Lozano, C., Ravishankar, V.,** Rowe, J., Mahoney, E. (2017) Assistive Dressing System: A Capabilities Study for Personalized Support of Dressing Activities for People Living with Dementia. *JMIR Medical Informatics*.
3. ᵈ Burleson, W., Harlow, D., **Nilsen, K.,** Perlin, K., **Freed, N., Jensen, C., Lahey, B., Lu, P.,** Muldner, K., (2017) Active Learning Environments with Robotic Tangibles (ALERT): Children's Physical and Virtual Spatial Programming Experiences. *IEEE Transactions on Learning Technologies, Special Issue on Innovation in Technologies for Educational Computing*. IF: 1.1.
4. ᵈ VanLehn, K., **Zhang, L.,** Burleson, W., **Girard, S., Hidago-Pontet, Y.** (2016) Can a non-cognitive learning companion increase the effectiveness of a meta-cognitive learning strategy? *IEEE Transactions on Learning Technology*. IF: 1.1.
5. Burleson, W. and **Lewis, A.** (2016) Optimists' Creed: Brave New Cyberlearning, Evolving Utopias (Circa 2041) *International Journal of Artificial Intelligence in Education*.
6. ᵈ **Ravishankar, V. K.,** Burleson, W., and Mahoney, D. (2015) Smart Home Strategies for User-Centered Functional Assessment of Older Adults. *International Journal of Automation and Smart Technology*, *5*(4), 233-242.
7. ᵈ Arroyo, I., Woolf, B.P., Burleson, W., **Muldner, K., Rai, D., Tai, M.** (2014) A Multimedia Adaptive Tutoring System for Mathematics that addresses Cognition, Metacognition and Affect. International Journal on Artificial Intelligence in Education. Special Issue on *"Landmark AIED Systems for STEM Learning"*. 24:387–426.
8. ᵈ **Zhang, L.,** VanLehn, K., **Girard, S.,** Burleson, W., **Chavez-Echeagaray, M.E., Gonzalez-Sanchez, J.,** and **Hidalgo-Pontet, Y.** (2014) Evaluation of a Meta-Tutor for Constructing Models of Dynamic Systems. *Computers and Education*. *75*:196-217. IF: 3.7.
9. ᵈ **Muldner, K.** and Burleson, W. (2013) Utilizing Sensor Data to Model Students' Creativity in a Digital Environment. *Computers in Human Behavior*, (Special issue on Digital Creativity: New Frontier for Research and Practice), Lee, K. C. guest editors, ISSN: 0747-5632. IF: 2.48.
10. ᵈ **Arroyo, I.**, Burleson, W., **Tai, M., Muldner, K.**, and Woolf B. (2013) Gender Differences In the Use and Benefit of Advanced Learning Technologies for Mathematics. *Journal of Educational Psychology*, (Special Issue on Advanced Learning Technologies), Aleven, V. and Beal, C. guest editors, ISSN: 0022-0663. IF: 4.93.
11. ᵈ Lombardi, M., Burleson, W., Godfrey, J., and Fryburg, R. (2013) An Experimental Deployment of a Portable Inflatable Habitat in Open Water to Augment Lengthy In-Water Decompression by Scientific Divers. *Marine Technology Society Journal*. *47*(6), 54-65.
12. ᵈ **Lahey, B.**, Burleson, W., and Streb, E. (2012) Translation + Pendaphonics = Movement Modulated Media. *Leonardo Journal*, *45*(4), pp. 322-329, ISSN: 0024-094.

13. [d] Burleson, W. and **Tripathi, P.** (2011) Mining Creativity Research to Inform Design Rationale in Open Source Communities. *Human Technology: An Interdisciplinary Journal of Humans in ICT Environments*, *7*(2) Special Issue on Creativity and Rationale in Software Design, Agora Center, University of Jyväskylä), pp. 143-163, ISSN: 1795-6889. IF: 2.15.

14. [d] **Muldner, K.**, Burleson, W., van de Sande, B., and VanLehn, K. (2011) An Analysis of Students' Gaming Behaviors in an Intelligent Tutoring System: Predictors and Impacts. *User Modeling and User-Adapted Interaction (UMUAI*)*, 21(1-2) Special Issue on Data Mining for Personalized Educational Systems, Springer) pp. 99-135, ISSN 0924-6818. IF: 3.07, *James Chen Annual Best Paper Award*.

15. Burleson, E. and Burleson W. (2011) Innovation Cooperation: Energy Biosciences and Law. *University of Illinois Law Review*, Rev. 335, pp. 651-694. IF: 1.51.

16. [d] Woolf, B., Burleson, W., **Arroyo, I., Dragon, T., Cooper, D.,** and Picard, R. W. (2009) Affect-Aware Tutors: Recognizing and Responding to Student Affect. *International Journal of Learning Technology (IJLT*)*, *Inderscience Enterprises Ltd 4*(3/4), pp. 129-164, ISSN 1477-8386. H-Index: 11/45.

17. [d] Birchfield, D., Thornburg, H., **Megowan-Romanowicz, C., Hatton, S., Mechtley, B., Dolgov, I.,** and Burleson, W. (2008) Embodiment, Multimodality, and Composition: Convergent Themes Across HCI and Education for Mixed-Reality Learning Environments. *Advances in Human-Computer Interaction*, (Special issue on Interactive Play and Learning for Children, Hindawi Publishing Corporation), 19 pages, ISSN 1687-5893. H-Index: 3/99.

18. [d] *Kapoor, A., Burleson, W., and Picard, R. (2007) Automatic Prediction of Frustration. *International Journal of Human Computer Studies (IJHCS*)*, *65*(8), pp. 724-736, ISSN 1071-5819. IF: 2.273, *Second Most Cited IJHCS Paper Since 2007 (Scopus)*.

19. [d] *Burleson, W. and Picard, R. (2007) Evidence for Gender Specific Approaches to the Development of Emotionally Intelligent Learning Companions. *IEEE Intelligent Systems Journal*, *22*(4), pp. 62-69, ISSN 1541-1672. IF: 2.63.

20. [d] *Burleson, W. and Picard, R. W. (2007) Affective Learning Companions. *Educational Technology*, *47*(1 Special Issue on Pedagogical Agents, Saddle Brook, N.J.), pp. 28-32, ISSN 0013-1962.

21. *Burleson, W. (2005) Opportunities for Creativity, Motivation, and Self-Actualization in Learning Systems. *International Journal of Human-Computer Studies (IJHCS*)*, *63* (Special Issue on Creativity and Computational Support), pp. 436-451, ISSN 1071-5819. IF: 2.27.

22. [d] *Selker, T. and Burleson, W. (2000) Context Aware Design and Interaction in Computer Systems. *IBM Systems Journal*, *39*(3.4), pp. 880-891, ISSN 0018-867. IF: 1.79.

23. [d] Storrs, A., Weiss, B., Zellner, B., Burleson, W., Sichitiu, R., Wells, E., Kowal, C., and Tholen, D. (1999) Imaging Observations of Asteroids with Hubble Space Telescope. *International Journal of Solar System Studies (ICARUS)*, *137*(2), pp. 260-268, ISSN 0019-1035. IF: 3.82.

Refereed Conference Full Papers

1. [d] **Girotto, V.,** Walker, E., Burleson, W. (2019) CrowdMuse: Supporting Crowd Idea Generation through User Modeling and Adaptation. *In Proceedings of the 2019 on Creativity and Cognition (C&C '19)* ACM, New York, NY, USA, 95-106. AR: 29%, *Best Paper Award.*

2. [d] **Butler, C., Michalowicz, S.,** Subramanian, L., Burleson, W. (*2017*) More than a Feeling: The MiFace Framework for Defining Facial Communication Mappings, *Proceedings of the*

30th ACM Symposium on User Interface Software and Technology (UIST*) Quebec City, Canada. 12 pages. AR: *20%.*

3. d Arroyo, I., **Wixon, N.,** Muldner, K., **Allesio, D.,** Burleson, W., Woolf, B. (2017) Collaboration Improves Student Interest in Online Tutoring. *Proceedings of the 17th International Conference on Artificial Intelligence in Education (AIED*)* Wuhan, China. 12 pages. AR: 30%.

4. d Muldner, K., **Wixon, N., Rai, D.,** Burleson, W. Woolf, B., Arroyo, I. (2017) Exploring the impact of a learning dashboard on student affect. *Proceedings of the 17th International Conference on Artificial Intelligence in Education (AIED*)* Wuhan, China. 11 pages. AR: 30%.

5. d **Karumbaiah, S., Lizarralde, R., Allessio, D.,** Woolf, B., Arroyo, I., **Wixon, M.,** Burleson, W. (2017) Addressing Student Behavior and Affect with Empathy and Growth Mindset. *Proceedings of the 10th International Conference on Educational Data Mining (EDM*)* Wuhan, China. 7 pages. AR: 25%.

6. d **Lee, J.,** Walker, E., Burleson, W., **Kay, M.**, Buman, M., and Hekler, E. B. (2017) Self-Experimentation for Behavior Change: Design and Formative Evaluation of Two Approaches. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems *(CHI*)* Denver, CO. 10 pages. AR: 25%.

7. d **Girotto, V**., Walker, E., Burleson, W. (2017) The Effect of Peripheral Micro-Tasks on Crowd Ideation. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI*)* Denver, CO. 10 pages. AR: 25%.

8. d **Girotto, V., Lozano, C.,** Muldner, K., Burleson, W., Walker, E. (2016) Lessons Learned from In-School Use of rTAG: a RoboTangible Learning Environment. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI*)* San Jose, CA. 10 pages. AR: 23%.

9. d Muldner, K., **Wixon, M**., **Rai, R**., Burleson, W., Woolf, B., Arroyo, I. (2015, June) Exploring the impact of a learning dashboard on student affect: *Proceedings of the 17th International Conference on Artificial Intelligence in Education (AIED*)* Madrid, Spain. 8 pages. AR: 28%.

10. d **Brotman, R**., Burleson, W., Forlizzi, J., Heywood, W., **Lee, J.** (2015, April) Building Change: Constructive Design of Smart Domestic Environments for Goal Achievement. *Conference on Human Factors in Computing Systems (CHI*)* Seoul, Republic of Korea. 10 pages. AR: 23%.

11. d **Wixon, M.,** Arroyo, I., Muldner, K., Burleson, W., **Lozano, C.,** Woolf, B. (2014, July) The Opportunities and Limitations of Scaling Up Sensor-Free Affect Detection. *Proceedings of the 7th International Conference on Educational Data Mining (EDM)* London, United Kingdom. 8 Pages. AR: 17%.

12. d **Muldner, K., Girotto, V., Lozano, C.**, Burleson, W. and Walker, E. (2014, June) The Impact of a Social Robot's Attributions for Success and Failure in a Teachable Agent Framework. Proceedings of *the International Conference of the Learning Sciences (ICLS)*, Boulder, CO. 10 pages. AR: 30%.

13. d **Muldner, K.,** Burleson, W. and Chi, M. (2014, June) Impact of Students' Self-Explanations on Learning about Emergent Phenomena. *Proceedings of the International Conference of the Learning Sciences (ICLS)* Boulder, CO. 10 pages. AR: 30%.

14. d **Girotto, V., Thomas, E., Lozano, C., Muldner, K.,** Burleson, W., and Walker, E. (2014) A Tool for Integrating Log and Video Data for Exploratory Analysis and

Model Generation. *The 12th International Conference on Intelligent Tutoring Systems (ITS*)* Honolulu, HI. 5 pages. AR: 17%.

15. [d] VanLehn, K., Burleson, W., **Girard, S., Chavez-Echeagaray, M. E., Gonzalez-Sanchez, J., Hidalgo-Pontet, Y. & Zhang, L.** (2014) The Affective Meta-Tutoring project: Lessons learned. *The 12th International Conference on Intelligent Tutoring Systems (ITS*)* Honolulu, HI. 10 pages. AR: 17%.

16. [d] **Lee, J., Garduno, L.,** Walker, E., and Burleson, W. (2013, September) A Tangible Programming Tool for Creation of Context-Aware Applications: *Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UBICOMP*)* Zurich Switzerland. 10 pages. AR: 26% (<18% conditionally accepted first round).

17. [d] **Muldner, K., Lozano, C., Girotto, V.**, Burleson, W., and Walker, E. (2013, July) Designing a Tangible Learning Environment with a Teachable Agent: *Proceedings of the 15th International Conference on Artificial Intelligence in Education (AIED*)* Memphis, TN. 10 pages. AR: 32%.

18. [d] **Girard, S., Chavez-Echeagary, M., Zhang, L., Hidalgo Pontet, Y.,** Burleson, W., VanLehn, K., and **Gonzalez-Sanchez, J.** (2013, July) Defining the behavior of an affective learning companion in the affective meta-tutor project: *Proceedings of the 15th International Conference on Artificial Intelligence in Education (AIED*)* Memphis, TN. 10 pages. AR: 32%.

19. [d] **Tadayon, R.**, Burleson, W., and Amresh, A. (2012, September) World of Golf: A Socially Relevant Simulation Game: *The 4th International Conference on Fun and Games*. Toulouse, France. 10 pages. ACM press, AR: 30%.

20. [d] **Lahey, B.,** Burleson, W., and Streb, E. (2012, August) Translation + Pendaphonics = Movement Modulated Media: *39th International ACM Conference and Exhibition on Computer Graphics and Interactive Techniques (ACM SIGGRAPH*)* Los Angeles, CA, 4 pages. New York, NY: Art Gallery ACM. H-Index: 182/182, AR: 19%.

21. [d] **Jensen, C.**, Burleson, W., and **Sadauskas, J.** (2012, June) Fostering Early Literacy Skills in Children's Libraries: Opportunities for Embodied Cognition and Tangible Technologies: *Proceedings of the 11th International Conference on Interaction Design and Children (IDC)* Bremen, Germany, pp. 50-59. ACM press. H-Index: 19/99, AR: 29%.

22. [d] **Newman, N.,** Burleson, W., and **Brotman, R.** (2012, June) Empowering Independent Living for People with Autism: Designing Supportive, Low-Cost, Interactive E-Health Environments: *International Conference on Persuasive Technology (PERSUASIVE)* Linköping, Sweden. 12 pages. H-Index: 11/99, AR: 38%.

23. [d] **Tripathi, P.** and Burleson, W. (2012, February) Predicting Creativity in the Wild: Experience Sample and Sociometric Modeling of Teams: *Conference on Computer Supported Cooperative Work (CSCW*)* Seattle, WA. 10 pages. ACM. H-Index: 99/99, AR: ~20% (<10% conditionally accepted in first round; per CSCW certificate).

24. [d] VanLehn, K., Burleson, W., **Chavez Echeangary, H., Christopherson, R. M., Gonzales Sanchez, J., Hastings, J., Hidalgo Pontet, Y., Muldner, K.,** and **Zhang, L.** (2011, November) The Level Up Procedure: How to Measure Learning Gains without Pre- and Post-testing: *Proceedings of the 19th International Conference on Computers in Education (ICCE*)* Chiang Mai, Thailand: Asia-Pacific Society for Computers in Education. 5 pages. H-Index: 25/44, AR: ~26%.

25. [d] **Arroyo, I.**, Woolf, B., **Cooper, D.**, Burleson, W., and **Muldner, K.** (2011, July) The Impact of Animated Pedagogical Agents on Girls' and Boys' Emotions, Attitudes, Behaviors

and Learning: *Proceedings of the 11th IEEE International Conference on Advanced Learning Technologies, (ICALT*)* Athens, GA. pp. 506-510. H-Index: 21/44, AR: ~25%.

26. [d] **Lahey, B., Girouard, A.**, Burleson, W., and Vertegaal, R. (2011, May) PaperPhone: Understanding the Use of Bend Gestures in Mobile Devices with Flexible Electronic Paper Displays: *Conference on Human Factors in Computing Systems (CHI*)* Vancouver, Canada. pp. 1303-1312. New York: ACM press. H-Index: 139/99, AR: 27%.

27. [d] **Cooper, D., Muldner, K.**, **Arroyo, I.**, Woolf, B. P., Burleson, W., and Dolan, R. (2010, June) Ranking Feature Sets for Emotion Models used in Classroom Based Intelligent Tutoring Systems: *The 18th International Conference on User Modeling and Adaptive Presentation (UMAP)* Big Island of Hawaii, HI, Vol. 6075. pp. 135-146. Springer. H-Index: 32/99, AR: ~20%.

28. [d] **Muldner, K.**, Burleson, W., and VanLehn, K. (2010, June) "Yes!": Using Tutor and Sensor Data to Predict Moments of Delight during Instructional Activities: *The 18th International Conference on User Modeling and Adaptive Presentation (UMAP)* Big Island of Hawaii, Vol. 6075, pp. 159-170. H-Index: 32/99, AR: ~20%.

29. [d] Woolf, B. P., **Arroyo, I., Muldner, K.**, Burleson, W., **Cooper, D.,** Dolan, R., and **Christopherson, R. M.** (2010, June) The Effect of Motivational Learning Companions on Low-Achieving Students and Students with Learning Disabilities: *The 10th International Conference on Intelligent Tutoring Systems (ITS*)* Pittsburgh, PA, Vol. 6094, pp. 327-337. Berlin-Heidelberg: Springer. H-Index: 39/44, AR: ~30%.

30. [d] **Muldner, K.**, Burleson, W., van de Sande, B., and VanLehn, K. (2010, June) An Analysis of Gaming Behaviors in an Intelligent Tutoring System: *The 10th International Conference on Intelligent Tutoring Systems (ITS*)* Pittsburgh, PA, Vol. 6094, pp. 184-193. Berlin-Heidelberg: Springer. H-Index: 39/44, AR: ~30%.

31. [d] **Freed, N.**, Burleson, W., Raffle, H., Ballagas, T., and **Newman, N.** (2010, June) User Interfaces for Tangible Characters: Children Connecting Remotely through Toy Perspectives. *The 9th International Conference on Interaction Design and Children (IDC)* Barcelona, Spain. pp. 69-78. New York: ACM. H-Index: 19/99, AR: ~33%.

32. [d] **Arroyo, I., Cooper, D.,** Burleson, W., Woolf, B., **Muldner, K.,** and **Christopherson, R. M.** (2009, July) Emotion sensors go to school: *Proceedings of the 14th International Conference on Artificial Intelligence in Education (AIED*)* Brighton, England, pp. 17-24. Frontiers in Artificial Intelligence and Applications, 200 IOS Press 2009. H-Index: 44/44, AR: 28%, *Best Paper Award*.

33. [d] Woolf, B., **Dragon, T., Arroyo, I., Cooper, D.,** Burleson, W., and **Muldner, K.** (2009, July) Recognizing and Responding to Student Affect: *Proceedings of the 14th International Conference on Artificial Intelligence in Education (AIED*)* Brighton, England, pp. 713-722. Frontiers in Artificial Intelligence and Applications, 200 IOS Press 2009. H-Index: 44/44, AR: 28%.

34. [d] **Muldner, K., Christopherson, R.**, Atkinson, R., and Burleson, W. (2009, June) Investigating the Utility of Eye-tracking Information on Affect and Reasoning for User Modeling: *International Conference on User Modeling and Adaptive Presentation (UMAP)* Trento, Italy, Vol. 5535, pp. 138-149. H-Index: 32/99, AR: ~26%.

35. [d] **Cooper, D., Arroyo, I.,** Woolf, B., **Muldner, K.**, Burleson, W., and **Christopherson, R. M.** (2009, June) Sensors Model Student Self Concept in the Classroom: *The 1st and 17th International Conference on User Modeling and Adaptive Presentation (UMAP)* Trento, Italy, Vol. 5535, pp. 30-41. H-Index: 32/99, AR: ~26%.

36. [d] Overholt, D., **Skriver Hansen, A., Jensen, C.**, and Burleson, W. (2009, February) Musical Applications and Design Techniques for the Gametrack Tethered Spatial Position Controller: *Proceedings of the Conference on Tangible Embedded Interaction 2009*. Cambridge, England, 6 pages. H-Index: 15/99, AR: 44%.

37. [d] **Lahey, B.**, Burleson, W., **Jensen, C**. N**., Freed, N.,** and **Lu, P.** (2008, August) Integrating Video Games and Robotic Play in Physical Environments: *Proceedings of the 35th International Conference and Exhibition on Computer Graphics and Interactive Techniques (ACM SIGGRAPH*) Symposium on Video Games, Sandbox'08*. Los Angeles, CA, pp. 107-114. New York, NY: ACM. H-Index: 182/182, AR: ~17%.

38. [d] **Dragon, T., Arroyo, I.**, Woolf, B., Burleson, W., **Kaliouby, R.**, and Eydgahi, H. (2008, June) Viewing Student Affect and Learning through Classroom Observation and Physical Sensors. *International Conference on Intelligent Tutoring Systems (ITS*), Eds. Woolf, B. et al)* Montreal, Canada, Vol. 5091, pp. 29-39. Berlin-Heidelberg: Springer. H-Index: 39/44, AR: 30.4%.

Conference Short Papers, Posters, Workshop Papers, Demos, Reports

1. **Girotto, V.,** Walker, E., Burleson, W (2018) CrowdMuse: An Adaptive Crowd Brainstorming System. In The 31st Annual ACM Symposium on User Interface Software and Technology Adjunct Proceedings (UIST '18 Adjunct) ACM, New York, NY, USA, 93-95.

2. **Sikora, C.** and Burleson, W. (2017) The Dance of Emotion: Demonstrating Ubiquitous Understanding of Human Motion and Emotion in Support of Human Computer Interaction. *Proceedings of the 7th International Conference on Affective Computing and Intelligent Interaction (ACII)* 8 pages. AR: 55%.

3. **Girotto, V**., Walker, E., Burleson, W. (2017) Scalable Crowd Ideation Support through Data Visualization, Mining, and Structured Workflows. *Companion of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (CSCW '17 Companion) ACM, New York, NY, USA, 183-186.

4. Mahoney, D., Burleson, W., Rowe, J., Mahoney, E. (2016, October) Accuracy and stability testing of a 'smart dresser' for persons with dementia. Gerontechnology 2016. doi:10.4017/gt.2016.15.s.912.00

5. **Wixon, N., Schultz, S., Allesio, D.,** Muldner, K., Burleson, W., Woolf, B.P, Arroyo, I. (2016)
Internal & External Attributions for Emotions Within an ITS. *ACM's 24th International Conference on User Modeling, Adaptation and Personalization*. Halifax, Canada, July 2016.

6. Arroyo, I., **Schultz, S., Wixon, N.,** Muldner, K., Burleson, W., Woolf, B.P. (2016) Addressing Affective States with Empathy and Growth Mindset. The 6th International Workshop on Personalization Approaches in Learning Environments (PALE), in conjunction with *ACM's 24th International Conference on User Modeling, Adaptation and Personalization*. Halifax, Canada, 2016.

7. **Schultz, S., Wixon, N., Allesio, D.,** Muldner, K., Burleson, W., Woolf, B.P, Arroyo, I. (2016)
Blinded by Science?: Exploring Affective Meaning in Students' Own Words. *The 13th International Conference on Intelligent Tutoring Systems*. Zagreb, Croatia, 2016.

8. **Wixon, N.; Schultz, S.,** Muldner, K., **Allesio, D.,** Woolf, B.P, Burleson, W., Arroyo, I. (2016) "When the Going Gets Tough…": Challenge, Emotions, & Difference of Perspective. *The 13th International Conference on Intelligent Tutoring Systems*. Zagreb, Croatia, 2016.

9. **Lee, J.,** Walker, E., Burleson, W., and Hekler, E. B. (2015, April) Understanding Users' Creation of Behavior Change Plans with Theory-Based Support. *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 2301-2306) ACM.

10. **Wixon, . N. V., Allessio, D., Ocumpaugh, J.,** Woolf, B., Burleson, W., & Arroyo, I. (2015) La Mort du Chercheur: How well do students' subjective understandings of affective representations used in self-report align with one another's, and researchers'?. In *CEUR Workshop Proceedings.* (Vol. 1432, pp. 34-43) CEUR-WS.

11. Burleson, W., **Lozano, C., Ravishankar, V.,** Rowe, J., Mahoney, E., & Mahoney, D. (2015) Assistive Dressing System: A Capabilities Study for Personalized Support of Dressing Activities for People Living with Dementia. *Iproceedings*, *1*(1), e13.

12. Mahoney, D., Burleson, W., **Lozano, C, Ravishankar**, V, Mahoney, E. (2014) Development of a Responsive Emotive Sensing System (DRESS) to aid persons with dementia dress independently. Gerontechnology 2014:13(2):259; doi:10.4017/gt.2014.13.02.020.00

13. **Lee, J.,** Walker, E., Burleson, W., and Hekler, E. (2014) Programming tool of context-aware applications for behavior change. In Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct Publication (UbiComp '14 Adjunct) (pp. 91-94) ACM

14. **Lee, J.,** Walker, E., Burleson, W., & Hekler, E. B. (2014) Exploring users' creation of personalized behavioral plans. In Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct Publication (UbiComp '14 Adjunct) (pp.703-706) ACM.

15. **Lozano, C., Ravishankar, V.,** Burleson, W., and Mahoney, D., (2014) "Development of a responsive emotive sensing system (DRESS) to aid persons with dementia to dress independently", *The 9th World Conference of Gerontechnology hosted by the International Society for Gerontechnology* (ISG), Taipei, Taiwan. *First Leading Edge Technology Paper Award.*

16. **Lozano, C.,** Burleson, W., **Ravishankar, V., Lee, J.,** Muldner, K., and Mahoney, D. (2014) Assisting with Dressing Activites for People with Dementia via Adaptive Prompting. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association,* 10(4), P443.

17. **Gonzalez-Sanchez, J., Chavez-Echeagary, M. E.,** VanLehn, K., **Burleson, W., Girard, S., Hidalgo-Pontet, Y., Zhang, L.** (2014) A system architecture for affective meta intelligent tutoring. *Proceeding of the Intelligent Tutoring Systems, 12th International Conference,* ITS 2014, Berlin: Springer, 529-534.

18. **Zhang, L.,** Burleson, W., **Chavez-Echeagary, M. E., Girard, S., Gonzalez-Sanchez, J., Hidalgo-Pontet, Y.** and VanLehn, K. (2013) Evaluation of a meta-tutor for constructing models of dynamic systems. In H. C. Lane, K. Yacef, J. Mostow & P. Pavlik (Eds), *Artificial Intelligence in Education: 16th International Conference, AIED 2013*, 666-669.

19. Hekler, E., Burleson, W., and **Lee, J.** (2013) A DIY self-experimentation toolkit for behavior change. Published & Presented via the Personal Informatics in the Wild: Hacking Habits for Health & Happiness. *ACM-CHI Conference*. Paris, France.

20. **Rai, D., Stephens, L., Lozano, C.,** Burleson, W. Woolf, B., Arroyo, I., and Beck, J. (2013) Repairing deactivating negative emotions with student progress pages. Poster *AIED: Artificial Intelligence in Education 2013*, 9-13th July, Memphis, TN.

21. **Girard, S., Zhang, L., Pontet, Y.,** VanLehn, K., Burleson, W., **Chávez, M., González,** and **Sánchez, J.** (2013) Using HCI task modeling techniques to measure how deeply students model. Poster, *AIED: Artificial Intelligence in Education 2013*, 9-13th July, Memphis, TN.

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23. Mahoney, D. F., W. Burleson, W., and Mahoney, E. (2012) Context aware automated prompting for dressing: Concept feasibility, Dementia Related Dressing Issues Influencing Device Design and Development. *Gerontological Society Annual Scientific Meeting*, Nov 14-18th, San Diego, CA, Vol. 11, Issue 2, p. 298. *Gerontechnology Journal from the International Society of Gerontechnology*.

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8. [d] **Girotto, V.,** Walker, E., Burleson, W. (In Preparation) Creativity Bottlenecks in Free and Open Source Software Communication Channels. *Journal Paper, Venue To Be Determined*.

MEDIA

Exhibits

1. Dubbledam, W. "From Hard*Ware* to Soft*Form*." Contributor. Museum of Modern Art, New York, NY, September 2019.
2. "STREB (2009) BRAVE." Tempe, AZ. November 2009. MacArthur Award winning choreographer, Elizabeth Streb in collaboration with ASU's Future Arts Research (FAR) and Motivational Environments' mixed reality interaction technologies.
3. Burleson, W. "Slow/Flow." Tempe, AZ: ASU Art Museum, November 2009. Greenbuild Symposium.
4. Overholt, D., Lahey, B., Skriver Hansen, A., Burleson, W., and Jensen, C. June 2009. Pendaphonics: *Conference on New Interfaces for Musical Expression (NIME)*, ACM, 8 pages, Installation, Carnegie Mellon University, Pittsburg, PA.AR: 20%.
5. Burleson, W., Perlin, K., Kaliouby, R., Freed, N., and Lu, P. "Emotion Mirror." San Francisco, CA: Exploratorium the Museum of Science, Art, and Human Perception. November 2009.
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17. Burleson, W. and Selker, T. "Reflective Ghost." Linz, Austria: Ars Electronica 2000, Next Sex, September 2000.
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20. Burleson, W. "Electronic Lego Music Blocks." Palo Alto, CA, Stanford Design Exhibit, February 1997.

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60. San Jose Mercury News, Technology's Thinkers Get Daring at Intellectual Circus, July 1998.
61. ABCNEWS, Room With A View: Collaborative Working Environment, November 1997.
62. Interactions, A Conversation with Ted Selker, September – October 1997.
63. Forbes, Redefining the Term 'User-Friendly', July 1997.
64. PC Magazine, The Future of Hand-Held Devices, IBM Style, March 25, 1997.
65. Communications of the ACM, New Paradigms for Computing, August 1996.
66. IBM Wimbledon Web Pages, Court Side: Ambient Light ThinkPad, June 1996.
67. The Sunday Times, London, It's at Hand: A Mini PC to Suit Every Wallet, February 26, 1996.

CONFERENCES/SCHOLARLY PRESENTATIONS

1. Burleson W. "Experiential Supercomputing: A Transdisciplinary Holodeck for Research, Education and Innovation" Arts, Culture, and Digital Transformation Summit, Banff Centre for Arts and Creativity, November 2020.
2. Burleson, W. "Motivational Environments: Cyberlearning and the Advancement of Experiential Supercomputing." School of Education, University of Arizona, Tucson, AZ, November, 2020.
3. Burleson, W. "Convergence Science and the Built Environment" RESTRUCT Symposium, Tucson, AZ, October, 2020.
4. Burleson, W. "Dressing Assistant: I-Corps Journey" NIH I-Corps, Bethesda, MD. June, 2019.
5. Burleson, W. "Dressing Assistant Technology for Aging in Place", Houston, TX. May, 2019.
6. Burleson, W. "Motivational Environments: Advancing Transdisciplinary Strategies for Experiential Learning, Human Centered Design and Innovation", Dartmouth College, Hannover, NH. February 2019.
7. Burleson, W. "Motivational Environments: Learning Differences, and Succeeding at Society's Grand Challenges", Graduate School of Education, Stanford University, Palo Alto, CA. January 2019.
8. Burleson, W. "Exploring the Future of Usability: A Transdisciplinary Holodeck for Research, Education, and Innovation", School of Information, University of Arizona, Tucson, AZ. November 2018.
9. Burleson, W. "Assistive Smart Home Technologies", UMASS Medical School, Worcester, MA. September 2018.
10. Burleson, W. "NYU-Holodeck Thesis Opportunities", NYU Integrated Digital Media, Brooklyn NY. September 2018.
11. Burleson, W. "STEM Nursing Innovation", Trinity College, Dublin, Ireland. June 2018.
12. Burleson, W. "NYU-X Holodeck: Experiential Supercomputing", ATLAS Institute, Boulder, Co. July 2017.
13. Burleson, W. "NYU-X Smart Home and Assistive Technology Research Agenda" Rusk Institute of Rehabilitation Medicine, New York, NY. June 2017.
14. Burleson, W. "IT Services Research Strategy: An Integrated Advanced Visualization Initiative" NYU Langone, School of Medicine, New York, NY. June 2017.

15. Burleson, W. "NYU-X Holodeck" AR in Action, New York, NY. June 2017.
16. Burleson, W. "NYU-X Holodeck: Experiential Supercomputing Wireless Futures" NYU Wireless, Brooklyn, NY. April 2017.
17. Burleson, W. "NYU-X and STEM Nursing Innovation" Belgian Nurse Seminar, New York, NY. March, 2017.
18. Burleson, W. "NYU-X Holodeck: 5G Wireless Experiences" NYU Wireless, Brooklyn, NY. January 2017.
19. Burleson, W. "NYU-X Holodeck: Next Genneration Wireless Experience" NYU Wireless, Brooklyn, NY. September 2016.
20. Burleson, W. "NYU-X Biometrics" NYU MAGNET, Brooklyn, NY, May 2017.
21. Burleson, W. "Design and Evaluation of an Automated Dressing Technology for People Living with Dementia" Eastern Nursing Research SocietyAnnual Scientific Session, Philadelphia, PA.   April 2017.
22. Burleson, W. "NYU-X Learning Sciences" NYU Steinhardt. April 2017.
23. Burleson, W. "Affective Learning Companions and the Holodeck" NYU Steinhardt, New York, NY. April 2017.
24. Burleson, W. "NYU Holodeck Media Futures" NYU Courant, NBC Universal, New York, NY. January, 2017
25. Burleson, W. "NYU Holodeck and Future Reality" NYC Media Lab Exploring Future Reality, New York, NY. November 2016.
26. Burleson, W. "Experience Design and Super Computing" IDEO, New York, NY. October 2016.
27. Burleson, W. "Experiential Supercomputing: Advancing a Transdisciplinary Holodeck for Research, Education, and Innovation" Cornell Tech, New York, NY, October, 2016.
28. Burleson, W. "Emotion-Sensitive Games for Learning" NYU Steinhardt, New York, NY. September 2016.
29. Burleson, W. "Experiential Supercomputing: Announcing the NYU Holodeck" NYC Media Lab Annual Summit, New York, NY. September 2016.
30. Burleson, W. "A Transdisciplinary Holodeck for Research, Education, and Innovation" IBM World of Watson, Las Vegas, NV. October 2016.
31. Burleson, W. "Operational Accuracy and Stability Testing of a "Smart" Dresser for Persons Living with Dementia" MGH Partners In Health Symposium, Boston, MA. October 2015.
32. Burleson, W. "Building Change: Constructive Design of Smart Domestic Environments for Goal Achievement." CHI2015, Seoul, Republic of Korea. April 2015.
33. Burleson, W. "Peer Learning Assessment Strategies" University of the World, Franklin, WV. April 2015.
34. Burleson, W. "Inventors' Workshops: Advancing Health and Educational Technology, Informatics, Simulation, and Innovation" NYU Global Institute of Public Health, New York, NY. February 2015.
35. Burleson, W. "Inventioneering" NYU School of Engineering, New York, NY. January 2015.
36. Burleson, W. "Motivational Environments: Integrating Cyber Learning, Creativity Support, and Open Health Innovation" Cornell Tech, New York, NY. December 2014.
37. Burleson, W. "Motivational Environments: Strategies for Personalized Learning, Intelligent Creativity Support, and Open Health Innovation" Carnegie Mellon University, Pittsburg PA. November 2014.

38. Burleson, W. "Open Strategies for Advancing Personalized mHealth Innovation" NYU mHealth Symposium, New York, NY. October 2014.
39. Burleson, W. "Motivational Environments: Strategies for Advanced Personalized Learning and Intelligent Creativity Support" University of Wisconsin Madison, Madison, WI. September, 2014
40. Burleson, W. "Open Peer Learning Assessment: Strategies Fostering Excellence and Flow." University of the World, New York, NY. January 2014.
41. Burleson, W. "Automated Assessment: Empowering Distributed Peer Learning." University of the World, New York, NY. January 2014.
42. Burleson, W. "Actualizing Assessment: Globally Distributed Peer Mentored Open Learning." University of the World, New York, NY. January 2014.
43. Burleson, W. "The Soul of the LEGO House: A Global Vision Actualizing Play, Innovation, and Creativity." Lego Foundation Idea House, Billund, Denmark. October 2013.
44. Burleson, W. "Interaction Design: Examples at the Nexus of Visualization, Simulation, Modeling, and Graphics." Chalmers University of Technology. Gothenburg, Sweden. October 2013.
45. Burleson W. "Motivational Environments: Advancing Personalized Learning and Intelligent Creativity Support." Teachers College, Columbia University. New York, NY. September 2013.
46. Burleson, W. "Motivational Environments: Advancing Industrial Research Collaborations." Chalmers University of Technology. Gothenburg, Sweden. September 2013.
47. Burleson, W. "From Visual Thinking to Managing Time in Projects." Chalmers University of Technology. Data Intensive Visualization and Analysis, Summer School 2013, Gothenburg, Sweden. September 2013.
48. Burleson, W. "Motivational Environments for Learning, Creativity, Health and Well-Being." Lego Foundation Idea House, Billund, Denmark. July 2013.
49. Burleson, W. "Human Computer Integration Strategies to Advance Personalized Learning, Creativity, Health and Well-Being." Aarhus University. Aarhus, Denmark. August 2013.
50. Burleson, W. "Human Computer Interaction Strategies to Advance Personalized Learning, Creativity, Health and Well-Being." Aarhus University. Aarhus, Denmark. August 2013.
51. Burleson, W. "Motivational Environments and Inventioneering." Reykjavik University, Reykjavik, Iceland. July 2013.
52. Mahoney, D. and Burleson, W. "Context Aware Affective Computing to Enable Dressing by Persons with Alzheimer's Disease." Technology and Dementia Preconference, Everyday Technologies for Alzheimer Care (ETAC), Alzheimer's Association International Conference (AAIC) Boston, MA. July 2013.
53. Burleson, W. "Empowering Independence and Innovation through Personalized Context- and Affect-Aware e-Health Environments." New York University. New York, NY. July 2013.
54. Burleson, W. "Motivational Environments for Learning, Creativity, Health and Well-Being." Aarhus University. Aarhus, Denmark. June 2013.
55. Burleson, W. "Advancing Informatics, Learning, and Visualization through Real-time Immersive Environments." Chalmers University of Technology. Gothenburg, Sweden. May 2013.
56. Burleson, W. "Intelligent Creativity Support, Workshop on Evaluation Methods for Creativity Support Environments." Conference on Human Factors in Computing Systems (CHI) Paris, France. May 2013.

57. Burleson, W. "Inventioneering and Personalized Passion Based Life-Long Learning, Personalized Learning Workshop." Connexions Conference, Rice University. Houston, TX. April 2013.
58. Burleson, W. "Creativity, Collaboration, and Strategies for Democratizing Cyber-Physical-Enabled Learning: The Road Ahead for Advanced Learner Modeling Techniques." University of Memphis. Memphis, TN. September 2012.
59. Mahoney, D. and Burleson, W. "Context Aware Computing with Motivational Counseling to Enable Dressing." The 8th Annual Everyday Technologies for Alzheimer's Care (ETAC) Conference, Alzheimer's Association. Chicago, IL. September 2012.
60. Burleson, W. "Empowering Independent Living for People with Autism: Designing Supportive, Low-Cost, Interactive E-Health Environments." Persuasive Technology, Persuasive 2012. Linköping, Sweden. June 2012.
61. Burleson, W. "Creativity, Imagination, and Cultures." Lego Foundation. Billund, Denmark. May 2012.
62. Burleson, W. "Sociometrics, Synthesis, Creativity and Inventors Workshops. National Science Foundation Workshop on Advancing Theory and Research on Scientific Synthesis." National Center for Ecological Analysis and Synthesis. Santa Barbara, CA. April 2012.
63. Burleson, W. "Affective Learning Companions: A Serial Mash–Up of Affective Sensing, Machine Learning, and Relational Agents." Annual Meeting of the American Educational Research Association (AERA), Vancouver, Canada. April 2012.
64. Burleson, W. "Motivational Environments." Stanford HCI Seminar, Stanford University. Palo Alto, CA. April 2012.
65. Burleson, W. "Personalized Cyberlearning and Inventors' Workshops." Life Center, University of Washington. Seattle, WA. February 2012.
66. Burleson, W. "Predicting Creativity in the Wild: Experience Sample and Sociometric Modeling of Teams." Conference on Computer Supported Cooperative Work (CSCW) Seattle, WA. February 2012.
67. Burleson, W. "Inventors' Workshops: Learning by Doing." Philadelphia University, College of Design, Engineering, and Commerce. Philadelphia, PA. February 2012.
68. Burleson, W. "Sustainable Ecologies: Robotic in the Wild." University of Pennsylvania. Garbage Patch Robotics Studio, Philadelphia, PA. February 2012.
69. Burleson, W. "Growth and Development of Design Education & Research within the School of Industrial Design." School of Industrial Design, Georgia Tech. Atlanta, GA. October 2011.
70. Burleson, W. "Inventors' Workshops and Lego Universe." Lego Learning Institute. Billund, Denmark. July 2011.
71. Burleson, W. "Motivational Environments: Inventors' Workshops, Cyberlearning, and the 21st Century." Arizona State University. SkySong, Innovation, Technology, Imagination Center. Education Innovation Summit. Scottsdale, AZ. April 2011.
72. Burleson, W. "Motivational Environments: Cyberlearning and the 21st Century." Center for Engineering Education and Outreach, Tufts University. Medford, MA. March 2011.
73. Burleson, W. "Astronaut Robot Mission Simulators: Motivational Environments, Cyberlearning and 21st Century STEM Innovation." Conference on Cyberlearning Tools for STEM Education (CyTSE) March 2011.
74. Burleson, W. "Motivational Environments: Robotics in the Wild." University of Pennsylvania. Garbage Patch Robotics Studio, Philadelphia, PA. February 2011.

75. Burleson, W. "Inventors' Workshops: Transformative Strategies for Transdisciplinary Design and Engineering Education." Georgia Tech. Atlanta, GA. December 2010.
76. Burleson, W. "Success Strategies for Transdisciplinary Collaborations." NSF/NEA Joint Workshop "RE/search: Art, Science, and Information Technology," NSF. Arlington, VA. September 2010.
77. Burleson, W. "Motivational Environments and Human Robot Interaction." Danish Technical Institute / Innovation Center Denmark. Odense, Denmark. June 2010.
78. Burleson, W. "Motivational Environments: HCI Opportunities and Challenges." Barcelona Study Abroad Program, Georgia Tech. Barcelona, Spain. May 2010.
79. Burleson, W. "Motivational Environments: Advancing Learning, Creativity, and Exploration." Universitat Pompeu Fabra, Barcelona and University of Valencia. Valencia, Spain. May 2010.
80. Burleson, W. "Designing Transdisciplinary Relationships and Experiences." School of Industrial Design, Georgia Tech. Atlanta, GA. April 2010.
81. Burleson, W. "Motivational Cyberlearning Environments." Phoenix Zoo. Phoenix, AZ. May 2010.
82. Burleson, W. "Shaping the Future: Creating Enthusiasm for Technology, Science, and Engineering in Today's Youth." Faculty Cross Talks, Office of the Executive Vice President and Provost of the University. Arizona State University, Tempe, AZ. March 2010.
83. Burleson, W. "Motivational Environments: Transdisciplinary Experience Design." Copenhagen IT University. Copenhagen, Denmark. February 2010.
84. Burleson, W. "Failing Early and Often." First Frontiers of Engineering Education National Symposium. National Academy of Engineering, Washington, DC. November 2009.
85. Burleson, W. "Rich Interfaces for Cyberlearning." Graduate School of Education, UC Berkeley. Berkeley, CA. October 2009.
86. Burleson, W. "Design Based Research and Motivational Environments." Berkeley Institute for Design, UC Berkeley. Berkeley, CA. October 2009.
87. Burleson, W. "Playing Dice with the Universe and Winning." Games for Learning Institute, New York University. New York, NY. October 2009.
88. Burleson, W. "Motivational Environments – Actualizing Mixed Reality Worlds." Medialogy, Aalborg University. Aalborg, Denmark. August 2009.
89. Burleson, W. "Motivational Environments – Immersive Environments." Sussex University. Brighton, England. July 2009.
90. Burleson, W. (2009, July) Emotion Sensors Go to School. Paper presented at AIED2009, Frontiers in Artificial Intelligence and Applications 200 IOS Press 2009, Brighton, England.
91. Burleson, W. "Motivational Environments: Games, Music, and Robots." Interaction Design for Children, Motivational Environments Demonstration. Como, Italy. June 2009.
92. Burleson, W. "Learning Companions and Motivational Environments for Life-Long Learning." Learning Companions and Pedagogical Agents: Future Trends and Possibilities, Department of Education. Oxford Internet Institute, Oxford, England. May 2009.
93. Burleson, W. "Mixed Reality Cyberlearning." Skysong, Arizona State University. Scottsdale, AZ. May 2009.
94. Burleson, W. "Rich Interfaces: Mixed-Reality Cyberlearning." Global Resources for Online Education Workshop, Computer Research Association, National Research Council, National Science Foundation. Tempe, AZ. April 2009.

95. Burleson, W. "Transdisciplinary Approaches to Creativity Research and Expression." Workshop on Computational Creativity Support, CHI2009. Boston, MA. April 2009.

96. Burleson, W. "Creativity and IT as Integral Elements of Growing Creative-IT Communities." Creative IT Principle Investigator's Symposium, National Science Foundation. Arlington, VA. January 2009.

97. Burleson, W. "Motivational Environments for Creative Education." Santa Fe Institute. Santa Fe, NM. October 2008.

98. Burleson, W. "Motivational Environments: New Paradigms for Human Computer Interaction Research." School of Computing and Informatics, Arizona State University. Tempe, AZ. October 2008.

99. Burleson, W. "Human Sensing and Flourishing: Human Computer Interaction Strategies and Social Science." Institute for Social Science Research, Arizona State University. Tempe, AZ. October 2008.

100. Burleson, W. "Affective Computing and Communication Technologies." Innovative Communication, Copenhagen IT University. Copenhagen, Denmark. August 2008.

101. Burleson, W. "Affective Computing and the Design of Educational Technologies." Graduate School of Education, University of California Berkeley. Berkeley, CA. March 2008.

102. Burleson, W. "Large Scale Scientific Computing." Frontiers of Science Symposium. National Academies of Science - Chinese Academy of Science, Beijing, China. October 2007.

103. Burleson, W. "Emerging Topics in Human Computer Interaction." Tecnológico de Monterrey. Guadalajara, Mexico. October 2007.

104. Burleson, W. "Physiological Computing for Motivational Interfaces." Microsoft Research. Redmond, WA. May 2007.

105. Burleson, W. "Affective Computing Systems and the Design of Enhanced Interactions." IEEE Tempe Chapter. Tempe, AZ. November 2006.

106. Burleson, W. "Designing Affective Relationships for Reflective Experience." Institute for Architecture and Design, Aalborg University. Aalborg, Denmark. December 2005.

107. Burleson, W. "Affective Computing Research Agenda." The 8th Annual Chinese-American Frontiers of Science Symposium. Chinese Academy of Sciences and the U.S. National Academy of Sciences, Xiamen, China. November 2005.

108. Burleson, W. "Affective Computing: Transforming Relationships with Objects, Environments and Experience." Department of Industrial and Systems Engineering, University of Wisconsin – Madison. Madison, WI. August 2005.

109. Burleson, W. "Affective Computing: Transforming Relationships and User Experience." Deutsche Telekom Post-Doctoral Symposium. Berlin, Germany. July 2005.

110. Burleson, W. "Affective Computing: Human Computer Interaction." Intel Research Seattle. Seattle, WA. June 2005.

111. Burleson, W. "Affective Learning Companions." Human-Computer Interaction Institute, Carnegie Mellon University. Pittsburgh, PA. March 2005.

112. Burleson, W. "Affective Computing: Transforming User Experience." College of Computer and Information Science, Northeastern University. Boston, MA. January 2005.

113. Burleson, W. and Picard, R. "Affective Agents: Sustaining Motivation to Learn Through Failure and a State of 'Stuck'." Workshop on Social and Emotional Intelligence in Learning

Environments at the 7th Conference on Intelligent Tutoring Systems (ITS) Maceió, Brasil. August 2004.

114. Burleson, W. "Affective Learning Companions." Student Track, 7th Conference on Intelligent Tutoring Systems. Maceió, Brasil. August 2004.

115. Burleson, W., Picard, R., Perlin, K., and Lippincott, J. "A Platform for Affective Agent Research." Workshop on Empathetic Agents, the 3rd International Joint Conference on Autonomous Agents and Multi-Agent Systems. New York, NY. July 2004.

116. Burleson, W. "Affective Learning Companions: Strategies for Perseverance through Failure." Amabile Research Group, Harvard Business School. Allston, MA. March 2004.

117. Dubbeldam, W., Selker, T., and Burleson, W. "From Hard*Ware* to Soft*Form*." Sketches and Applications - Art Installations, SigGraph 2003. San Diego, CA. July 2003.

118. Burleson, W., Nemirovsky, P., and Overholt, D. "Hydrogen Wishes." Sketches and Applications - Art Installations, SigGraph 2003. San Diego, CA. July 2003.

119. Burleson, W. and Selker, T. "Canopy Climb: A Rope Interface." Sketches and Applications - Physical Interface, SigGraph 2003. San Diego, CA. July 2003.

120. Burleson, W. "Developing a Framework for HCI Influences to Creativity." The 10th International Conference on Human-Computer Interaction (HCII) Crete, Greece. June 2003.

121. Burleson, W. "HCI Techniques to Enhance Creativity." Invited Paper for the Supporting Human Creativity Session, 10th International Conference on Human-Computer Interaction (HCII) Crete, Greece. June 2003.

122. Burleson, W. "Personal Project Analysis as a HCI Methodology." HAPPI Group, Harvard Psychology. May 2003.

123. Burleson, W. "The Vision: Today and Tomorrow's Innovations." The Visionaries Track, CONNECTIONS: The Digital Home Conference and Showcase, Parks Associates and Consumer Electronics Association. San Jose, CA. May 2003.

124. Burleson, W. "Designing Context Aware Computing." Workshop: Co-located Tabletop Collaboration, Conference on Computer Supported Cooperative Work (CSCW) New Orleans, LA. November 2002.

125. Burleson, W. "Vision Teams." Lego Vision Lab. Billund, Denmark. October 2002.

126. Burleson, W. "Inventing the Future: The Role of Context Aware Computing." UCLA, Design | Media Arts. Los Angeles, CA. October 2002.

127. Burleson, W. "Impact of Motivation, Physiology, and Collaboration on Creative Tasks." Workshop on Creativity and Interface, Conference on Human Factors in Computing Systems (CHI) Minneapolis, MN. April 2002.

128. Burleson, W. "Context Awareness: Supporting Humans Engaged in the Creative Process." Workshop on Physiological Computing, Conference on Human Factors in Computing Systems (CHI) Minneapolis, MN. April 2002.

129. Burleson, W. "Creativity in the Kitchen." Counter Intelligence: Smart Kitchens Symposium. MIT Media Lab, Cambridge, MA. April 2001.

130. Burleson, W. and Selker, T. "Flexor Sleeve." Trade Guest, American International Toy Fair: The World Market Place for Children's Entertainment. New York, NY. February 2001.

131. Burleson, W. "Rainforest Canopy." Z001: An Animal Odyssey, Symposium on Technology, Zoos of the Future and Lessons for Toy Design. Bartos Theater, MIT Media Lab, Cambridge, MA.   January 2001.

132. Selker, T. and Burleson, W. "Designing Context Aware Computing." Workshop: Exploring the Framework of Contextual Awareness in Cooperative Systems, Conference on Computer Supported Cooperative Work (CSCW) Philadelphia, PA. December 2000.
133. Selker, T., Burleson, W., and Jackson, J. "Media-Bed." Media Lab Europe Grand Opening. Dublin, Ireland. July 2000.
134. Burleson, W. "Agenda for Context Aware Computing." Workshop on Context Computing, Conference on Human Factors in Computer Systems (CHI) Den Hage, Netherlands. April 2000.
135. Burleson, W. "Cars: Anything Goes." CC++ Car Consortia Winter Symposium. MIT Media Lab, Cambridge, MA. December 1999.
136. Burleson, W. "Aerobatic Cars." CC++ Car Consortia Fall Symposium. MIT Media Lab, Cambridge, MA. October 1999.
137. Burleson, W. "Rainforest Canopy Access Technologies." Second International Forest Canopy Conference, Forest Canopies 98: Global Perspectives. Marie Selby Botanical Gardens, Sarasota, FL. November 1998.
138. Burleson, W. "Networked Bodies." Innovations in Residential Systems, Services, and Distribution Channels, Parks Associates Forum 98: Hidden Treasures @ Home. Florida. November 1998.
139. Burleson, W. "New Form Factors for Computers." IBM Consumer Division, Personal Systems Institute Symposium. Yorktown, NY. November 1998.
140. Selker, T. and Burleson, W. "Digital Coffee Table." David Coursey's Digital Living Room Conference. Dana Point, CA. June 1998.
141. Burleson, W. "A Stanford Approach to Engineering Education." National Collegiate Inventors' and Innovators Alliance 3rd Annual Meeting. Washington, DC. March 1998.
142. Burleson, W. "Canopy Trek and Rope Explorations." Stanford Product Design Presentations.   Palo Alto, CA. May 1997.
143. Selker, T., Allison, J., Burleson, W., Ihde, S., Eisbach, C., Cummer, M., and Bruel, T. "Room With a View: A Room Sized Virtual Office." Cyberhome 2000, Computer Life. San Francisco, CA.   May 1997.
144. Selker, T. and Burleson, W. "Prototypes for the Next 50 Years." ACM Conference on the Next 50 Years of Computing. San Jose, CA. March 1997.
145. Selker, T. and Burleson, W. "Ambient Light Think Pad." IBM Pavilion, COMDEX96. Las Vegas, NV. November 1996.

AWARDED GRANTS AND CONTRACTS

Awards as PI:

1. NIH National Institute on Aging (NIA) R41AG062082, Small Business Technology Transfer (STTR): Dressing Assistant: Home Technology to Sustain Independent Dressing in Dementia (9/18-5/21) $679,254.
2. NIH National Institute on Aging (NIA) R41AG062082 I-Corps STTR Supplement Award: Dressing Assistant: Home Technology to Sustain Independent Dressing in Dementia (4/19-7/19) $55,000.
3. NSF Award 1735909 EXP: Augmenting a Teachable Robot with Adaptive Cognitive and Social Support (8/17-7/20) $749,752.

4. NSF Award 2030441 EAGER: Cyberlearning with Co-Robotic Teachable Agents (8/19 – 7/21) 299.000.
5. NSF Award 1626098: MRI: Development of Experiential Supercomputing: A Transdisciplinary Research and Innovation Holodeck (9/16-8/21) $4,100,000 ($2.888,815 NSF/1,200,000 NYU).
6. NSF Award 1324880: Impact of Adaptive Interventions on Student Affect, Performance, and Learning (9/13-9/17) $1,500,000.
7. NSF Award 1210008346: Modeling and Supporting Creativity in Open-Ended Collaborative STEM Activities (9/13-9/15) $500,000.
8. NSF 1249406: EAGER: A Teachable Robot for Mathematics Learning in Middle School Classrooms (8/12-2/14) $250,000.
9. NSF 1109142: REU: Personalized Learning: Strategies to Respond to Distress and Promote Success (06/12-5/13) $15,781.
10. Alzheimer's Association Award ETAC-11200316 through Massachusetts General Hospital CRS0336-11069991: Context Aware Computing with Motivational Coaching to Enable Dressing (10/11-9/13) $81,000.
11. NSF Computing Innovation Fellows Postdoctoral Mentor Award (5/12-11/12) $73,344.
12. NSF Award 11049425: Personalized Learning: Strategies to Respond to Distress and Promote Success (09/11-09/14) $600,000.
13. NSF Computing Innovation Fellows Postdoctoral Mentor Award (5/11-5/12) $225,000.
14. NSF Award 0846148: SGER: Human-Centered Computing: Creativity in IT Research Organizations (9/08-9/10) $149,934.
15. NSF Award 0846145: Workshop: Creativity and IT as Integral Elements of Growing Creative-IT Communities (9/08-9/10) $50,000.
16. NSF Award 0742305: Game as Life - Life as Game (9/07-9/08) $100,034.
17. NASA/Jet Propulsion Laboratory Strategic University Research Partnership: Mission Contingencies for Astronaut - Robot – Mission Team Interactions (8/07-9/08) $75,000.
18. NSF Award 0705883: HCC: Collaborative Research (U-Mass Amherst): Affective Learning Companions: Modeling and Supporting Emotion During Learning (10/07-10/10) $304,465.
19. NSF Award 0705883: REU-Supplement: HCC: Collaborative Research (U-Mass Amherst): Affective Learning Companions: Modeling and Supporting Emotion During Learning (10/07-10/10) $16,000.

Awards as Co-I:

1. NSF Award 1141631: EAGER: Sensible Science: A Sociometric Approach to Collaboration in Synthesis Groups (7/12-6/13) $256,640.
2. NASA Triad: A Triangulated Program to Promote NASA STEM Education Nationwide (9/10-9/12) $1,154,064.
3. NSF Award 0910221: Deeper Modeling via Affective Meta-Tutoring (9/09-9/12) $900,000.
4. NSF Award 0931237: Preparing for College: Using Technology to Support Students with Learning Disabilities in Mathematics (9/09-9/10) $120,668.
5. JPL: Award 1311294: Electronics and Instrumentation for Extreme Environment Systems (7/07-7/08) $20,000.

Awards from Industry and as Senior Consultant:

1. NSF SGER: Virtual eXchange for Science, Engineering, Design and the Arts (XSEAD) (8/11-7/14) $258,980.
2. Center Theater Group, Human Robot Interaction - On Stage, (9/09) $10,000.
3. Nokia Research Center, Toys In Touch: Distance Play Interfaces, (10/09) $10,000.
4. Motorola Foundation, Innovation Generation Award, Motivational Environments, (9/09) $60,000.
5. ASU Ira A. Fulton College of Engineering Incentive Award - Game as Life (9/07) $10,000.
6. Deutsche Telekom Innovation Laboratories: Everyday Soundtracks (8/07-8/09) $54,000.
7. iRobot Corporation: Human Robot Interaction: Terrain Mapping and Pet-Building (8/07) $20,000.

ACTIVITIES

Inventioneering; Solo Kayaking, 22 days, Grand Canyon; Slow Computing; Viking Polar Bear Club; Sailing, Hawaii to Seattle, Norway and Sweden to Denmark; Kite-Surfing; Gas and Hot Air Ballooning and Ground Crew; Student Glider Pilot; Instructing Scuba Diving; Spelunking Rescue 1; EMT-B; MIT Mahjong Champion; MIT Concert Chorus, Carnegie Hall, Handel's Messiah; Land Rover Driving School; Skip Barber Racing School; Antarctic and Planetary Sciences; Inventing Expedition Technologies; National Ski Patrol; Intermediate Spanish, French, and Danish; Writing and Illustrating Children's Pop-Up Books; Toy Design; Ceramics; Glass Blowing; Cooking and Gardening.