

Education

Doctor of Philosophy

2018 - Present

Human-Centered Computing

Clemson University

Dr. Kelly Caine & Dr. Emma Dixon Advisors

Master of Science

2015-2018

Computer Science

Specialization: Interactive Intelligence

Georgia Institute of Technology

Bachelor of Science

2006-2011

Computer Science

University of Tennessee

Research Statement

I use mixed methods to study older adults' usage and perceptions of voice user interfaces (VUI). I'm particularly interested in how widely available VUI technologies like smart speakers can be used to help people with visual, motor, cognitive, or situational impairment do therapeutic expression.

Awards

HFI Director's Award - Human Factors Institute - 2022

National GEM Consortium Fellowship - 2020

Arnold Small Award for Outstanding Student Paper, HFES Technology Group on Aging - 2020

Grad Cohort for Underrepresented Minorities and Persons with Disabilities, Computing Research Association 2020

Graduate International Research Experiences Fellowship - Institute of International Education - 2019

Grad Cohort for Underrepresented Minorities and Persons with Disabilities, Computing Research Association 2019

New Memphis Embark - 2014

Publications

Black, J., Michael, I., Roberts, D., **Stigall, B.**, & Knijnenburg, B. P. (2023). Retiree Volunteerism: Automating "Word of Mouth" Communication.

Stigall, B., & Caine, K. (2022). Towards Self Expression Through Voice User Interfaces. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.

Coghlan, S., Waycott, J., Nui, L., Caine, K., & **Stigall, B.** (2021). Swipe a Screen or Say the Word: Older Adults' Preferences for Information-seeking with Touchscreen and Voice-User Interfaces. 33rd Australian Conference on Human-Computer Interaction, 130–143.

<https://doi.org/10.1145/3520495.3520512>

Stigall, B., & Caine, K. (2020). A Systematic Review of Human Factors Literature About Voice User Interfaces and Older Adults. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.

Huff, E. W., **Stigall, B.**, Brinkley, J., Pak, R., & Caine, K. E. (2020). Can Computer-Generated Speech Have an Age ? *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*.

Stigall, B., Waycott, J., Baker, S., & Caine, K. (2019). Older Adults ' Perception and Use of Voice User Interfaces : A Preliminary Review of the Computing Literature. *Proceedings of the 31st Australian Computer-Human Interaction Conference, OzCHI 2019*.

Experience

Clemson University, School of Computing, August 15, 2021–Present
Graduate Research Assistant

Human-computer interaction researcher on the interdisciplinary Auracle Project in collaboration with Dartmouth College.

Conducting research with Dr. Kelly Caine on various projects.

Adobe Inc, Artificial Intelligence Experience Lab, May 10, 2021–August 11, 2021
Graduate Research Intern

Led an internal research project on participant expectations for chatbots. This project involved mixed methods, including interview and survey studies. A prototype chatbot was also developed.

Clemson University, School of Computing, January 15, 2020–May 10, 2021
Graduate Research Assistant

Conducting research with Dr. Kelly Caine on various projects.

Graduate Teaching Assistant

Usable Security and Privacy CPSC 4180/6180/8810 - Fall 2020

Systems Analysis CPSC3710 - Spring 2021

University of Melbourne (Australia), Interaction Design Lab, June 15, 2019-December 15, 2019
Visiting Student Researcher

Conducting research abroad towards PhD. Participating in lab research projects.

Mentored master's students on projects

Clemson University, School of Computing, August 15, 2018–May 2019

Graduate Teaching Assistant

Head teachers assistant for multiple labs, mentoring undergraduate Computer Science Students.
Grading of student assignments, proctoring tests.

Software Development Foundations CPSC2150 - Spring 2019

Special Topics: Web Programming CPSC4820 - Fall 2018

Programming Methodology CPSC1070/71 - Fall 2018

1 Lecture on Interview Methods, Research Methods in Human-Centered Computing HCC8330

AutoZone Inc.

Systems Engineer. February 22, 2016 – July 13, 2018

DevOps Team

Georgia Institute of Technology, College of Computing, August 17, 2017– December 2017

Teachers Assistant

Mentored 16 Master's Students. Guided and graded projects for mentees

Educational Technology CS6460 - Fall 2017

International Paper Inc.

Applications Development Specialist. June 20, 2011 – February 9, 2016

Java, SAP, and Web application development and support.

Mobile application development

BMW Manufacturing Co., LLC

IT Research and Development Intern May 24, 2010 – August 13, 2010

Responsible for researching and implementing new technologies for BMW.

AutoZone, Memphis Tennessee May 18, 2009 – August 10, 2009

Software Development Intern

Z-Net Parts Lookup Program development team.

AutoZone, Memphis Tennessee May 19, 2008 – July 31, 2008

Technology Intern

Supply Chain department software development.

HealthSouth, Memphis Tennessee

Rehabilitation Technician June 2006 – August 2006

Physical Therapy assistance

University of Tennessee Medical School, Memphis Tennessee

Non UT Student Assistant June 2005 – August 2005

Telemedicine technology research team

Leadership and Professional Activities

Socialize Workshop, International Conference on Intelligent User Interfaces, ACM
Monday, March 28, 2023, Sydney Australia (presented virtually)

Human Factors Ergonomic Society Annual Meeting, HFES
October 10 - 14, 2022, Atlanta Georgia

**Emerging Technologies for Aging and Dementia, International
Dementia Scholars Collaborative**
June 8-9, 2022, University of Tennessee, Knoxville, TN

GEM Fellowship Conference and Annual Board Meeting, GEM Fellowship
September 9 - 11, 2021, Houston, Texas

Human Factors Ergonomic Society Annual Meeting, HFES
October 5 - 9, 2020, Virtual

CHIMe 2020, SIGCHI
April 24, 2020, Virtual

**Grad Cohort for Underrepresented Minorities and Persons with Disabilities, Computing Research
Association**
March 6-7, 2020, Austin, Texas

31st Australian Conference on Human Computer Interaction (OzCHI 19),
December 3-5, 2019, Perth/Fremantle Western Australia, Australia

**Grad Cohort for Underrepresented Minorities and Persons with Disabilities, Computing Research
Association**
March 22-23, 2019, Waikoloa Village, Hawaii

Graduate Teaching Assistant Training, Clemson University
Lead by Dr. Eliza Gallagher and Dr. Aubrie Pfirman
August 2018

EMBARK Program, New Memphis
August-November 2014
Memphis, Tennessee

Service

Golden Soil Foundation - 2020 - Present
Board Member, Donor, Scholarship Committee

Aspire Peer Mentor, Clemson University - July 2021- Present

Alumni Liason, Memphis Challenge - May 2020 - Present

Peer Review, International Journal of Human-Computer Interaction - 2021

Peer review, Human Factors Ergonomics Society - 2020

Peer review, SIGCHI , Computer Supported Collaborative Work(CSCW) - 2020

Peer Review, International Journal of Human-Computer Interaction - 2020

Speaking with Reach Memphis High School Students about Computer Science - January 22, 2020
with National Society of Black Engineers, Memphis and REACH Memphis.
Participated Remotely from Clemson. Students in Memphis, TN

RoboBus STEM Fair - August 18, 2019
Harmsworth Hall and Park, Collingwood VIC Australia

Memphis Challenge Interviews - May 8-10, 2019
Emerge Memphis, Memphis Tennessee

Science Fair Judging at Clemson Elementary - February 13,2019
Clemson Elementary School, Clemson SC

Martin Luther King Day Volunteering at Clemson Downs - January 21, 2019
Clemson Downs Retirement Home, Clemson SC

Alpha Phi Alpha Fraternity Incorporated
Life Member
Executive Board Member, Chapter Historian, Memphis Tennessee Chapter - 2015-2017
Youth Leadership Development Institute Committee - 2014-2015

National Society of Black Engineers, Memphis Professionals
Executive Board Member, Webmaster, 2014-2015