


Gabriella M. Johnson

HCI, Accessibility Researcher

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 gabriellamjohnson.com

Research Interests: Human Computer Interaction, Accessibility, Child Computer Interaction, Assistive Robotics

RESEARCH EXPERIENCE

Graduate Researcher

University of Colorado Boulder

January 2019 – Present

Advisor: Daniel Szafir

- Reading with Riley: Smart Reading Robot for Storytime
 - Robot that aids children during storytime by reading words they do not know
 - Evaluated a Wizard of Oz Prototype to study interactions

Graduate Research Assistant

University of Colorado Boulder

August 2018 – Present

Advisor: Shaun Kane

- Game Changer: Accessible Audio and Tactile Guidance for Board and Card Games
 - Developed a system to empower blind players to be independent players during gameplay
 - Created a set of guidelines for accessible board games
- BoardBooster: A Platform for Game Designers to Augment Board Games for Accessibility
 - Developed an application to generate accessibility kits for board games
- Paw-ticipatory Design: Youth Enactment of Science and Engineering Practices to Enrich their Pets' Lives
 - Ran a virtual summer camp, participants conducted sensory activities and scientific investigations with their pets

Research Experience for Undergraduates Participant

University of South Florida & Universidad de Oviedo

May 2017 – July 2017

Advisor: Miguel Labrador

- Water Detection in Single Daytime Images for Fall Prevention Systems
 - Collaborated with a student from the Universidad de Oviedo in Oviedo, Spain
 - Trained a fall prevention system to detect water in images using neural networks

Department of Homeland Security Scholar

University of Texas at San Antonio

August 2016 – December 2017

Advisor: Palden Lama

- Analysis and Training in Defense of Biological and Digital Threats
 - Classified digital threats using machine learning techniques
 - Created guidelines for a digital threat metric system emulating the biological threat system

TEACHING EXPERIENCE

Graduate Student Staff

University of Colorado Boulder

August 2020 – Present

- Held office hours, conducted interview meetings for students in an introductory Computer Science course

Student-Athlete Tutor

University of Colorado Boulder

August 2019 – December 2019

- Assisted student-athletes with their studies in the areas of Mathematics, Computer Science, and History

Private Tutor

San Antonio, Texas

January 2018 – August 2018

- Tutored students from elementary to college level in the subjects of Mathematics and Computer Science

Supplemental Instruction Leader

University of Texas at San Antonio

August 2017 – December 2017

- Planned and facilitated study sessions for History students
- Mentored students on how to be successful in college

Computer Science Tutor

Brennan High School, San Antonio, Texas

August 2017 – December 2017

- Assisted high school students with projects in their Computer Science courses

OTHER RELEVANT PROJECTS

- A Playful Approach to A Difficult Topic: Using Board Games to Teach Families About Digital Privacy Fall 2018
- Created a board game to teach children and families about the dangers of digital privacy
 - Included accessibility features to make more inclusive

PROFESSIONAL EXPERIENCE

- IT Developer I** May 2016 – August 2016
 Steves & Sons, San Antonio, Texas
- Constructed data analysis reports using SQL queries
 - Constructed C# classes to be included in door classification projects

- Software Development Intern** June 2015 – May 2016
 BIF Technologies, San Antonio, Texas
- Shadowed CEO of company
 - Developed a new information dashboard for nurses

PUBLICATIONS

Gabriella M. Johnson, and Shaun K. Kane. "Game Changer: Accessible Audio and Tactile Guidance for Board and Card Games." In *Proceedings of the 17th International Web for All Conference*, pp. 1-12. 2020.

Gabriella Johnson. *Eye in the Sky: An Audio Description System for Board Games*. CRA URMD Grad Cohort Workshop. Waikoloa Village, Hawaii. Poster.

INVITED TALKS

Johnson, G.M. (2020). My Journey and Current Work. Ada Lovelace Week at University of Chicago.

EDUCATION

University of Colorado Boulder August 2018 – Present
Ph.D. Candidate in Computer Science **GPA: 4.00/4.00** Advisor: Shaun Kane

University of Texas at San Antonio August 2015 – December 2017
B.S. in Computer Science, Minor in Mathematics **GPA: 3.81/4.00, Magna Cum Laude**

HONORS, AWARDS

- GEM Full Fellow, 2020
- NSF Graduate Research Fellowship Honorable Mention, 2020
- Grace Hopper Celebration Scholar, 2019
- ACM Richard Tapia Celebration of Diversity in Computing Scholar, 2019
- GEM Associate Fellow, 2019
- CRA Women Grad Cohort Travel Grant, 2019
- CRA URMD Grad Cohort Travel Grant, 2019
- Dean's Summer Research Fellowship, 2018
- Department of Homeland Security Scholar, 2016 – 2017
- UTSA Women's Soccer Team Scholarship Recipient, 2015
- UTSA Distinguished Presidential Scholarship Recipient, 2015 – 2017

ACTIVITIES, SERVICE

- CU Boulder Graduate Application Feedback Program, 2020

- Boulder ASSETS Volunteer, University Hill Elementary School, 2019 – 2020
- Children’s House Preschool Volunteer, 2019
- HRI Late Breaking Report Reviewer, 2019
- CU Boulder Graduate School Peer Mentor, 2019 – 2020
- ACM CHI Student Volunteer, 2019
- ACM-W Public Relations Officer, University of Texas at San Antonio, 2017
- NCAA Division One Athlete, University of Texas at San Antonio, 2015

PROFESSIONAL DEVELOPMENT

- Grace Hopper Celebration, October 2019
- ACM Richard Tapia Celebration of Diversity in Computing, September 2019
- Computing Research Association Women Workshop, April 2019
- Computing Research Association URMD Workshop, March 2019