

Janetta Brown

jancbrow@iu.edu | (630) 518 – 0586 | LinkedIn: www.linkedin.com/in/janetta-brown-57b50388

NIH MyBibliography: <https://www.ncbi.nlm.nih.gov/myncbi/janetta.brown.1/bibliography/public/>

OVERVIEW

My current work is funded through the National Institute on Aging Department of Health and Human Services Small Business Innovation Research Program and through the National Institute on Aging for an R21 clinical trial for research on informal and formal caregiving for Alzheimer's disease as part of the Eskenazi Health Aging Brain Care program. Both projects test the feasibility and potential impact of integrating a mobile health technology intervention on reducing informal caregiver burden and behavioral and psychological symptoms of dementia for patients with Alzheimer's.

EDUCATION

PhD, Industrial and Systems Engineering, North Carolina A&T State University, Greensboro, NC, May 2020

Advisor: Hyung Nam Kim

Dissertation Title: Alzheimer's Disease Caregiver Resource (AICaRe): Tailored Mobile Health Application
(*Distinguished Chancellor's Fellow, Title III HBGI Doctoral Fellowship Recipient*)

BS, Industrial & Systems Engineering, North Carolina A&T State University, Greensboro, NC, May 2015

BS, Mathematics, Spelman College, Atlanta, GA, December 2012

(*Dual Degree Engineering Program*)

University of KwaZulu-Natal Howard College, Durban, South Africa, 2010

(*Study Abroad Program*)

EXPERIENCE

Co-Director of the Health Innovation Lab, Regenstrief Institute, Inc.

8/20-Present

- Leading research initiatives to address the enhancement of user engagement with mobile health technology within chronic disease management for complex older adults

Innovation Fellow, Indiana University School of Medicine

8/20-Present

- Co-director of a health innovation lab that is home to several UX healthcare research projects, equaling over \$100 million in government funding, that aim to improve patient and care partner health outcomes through optimized health information and communication technologies.

- Ideated daily solution sets to improve user engagement for an evidence-based mobile health application targeting Alzheimer's caregivers.

- Leveraged a deep understanding and passion for user needs and design-thinking to contribute to the design of tailored mobile health applications to ensure they exceed customer expectations.

- Initiated the process of a business startup as CEO to expand the impact and national scalability of an app designed to reduce patients' behavioral and psychological symptoms due to dementia.

Research Manager, Indiana University School of Medicine

8/20-Present

- Created clear structure, timing, meeting cadence, reflection, presentation and supporting materials to produce agile, data-driven action plans and recommendations to meet research study goals

- Led internal and external stakeholder collaboration with roughly 200 organizations for community engagement

- Facilitated sprint activities and iterative experiment tests to resolve technical issues and provide data-driven clarity on customer needs

- Used agile implementation to translate business and user needs into executable requirements for my team in order to increase recruitment rates 700% in one month

Doctoral Research, North Carolina A&T State University

8/15-5/20

- Implemented user-centered design and user experience research methods to develop and rigorously test a scalable, award-winning mobile health application that provides tailored healthcare resources and information to Alzheimer's caregivers

- Created storyboards, clickable prototypes, wireframes, and user journeys to reflect user preferences in product design for enhanced consumer experience with mobile health technology

- Published 20 peer-reviewed journal manuscripts, international conference papers, and research posters on usability and user experience design for health information technology

- Led two separate teams for international design competitions focused on improving the psychosocial exchange between Alzheimer's caregivers and patients as well as resolving challenges involving care coordination and navigation

Team Lead

2019 National Institute on Aging iCare-AD/ADRD Challenge 3rd Place Finalist (\$50,000 Award)

10/18-10/19

- Implemented user-centered design and participatory research methods to inform the development of a tailored mHealth application for Alzheimer's disease care coordination and/or navigation

HFES Health Care Symposium Mobile Application Design Competition 1/17

10/16 –

- Designed an Android mobile health application to improve the psychosocial exchange between caregivers and their loved ones with Alzheimer's disease

- Led a multi-disciplinary team to perform rapid prototyping, development, and improvement of the app prototype user interface and user experience

Consultant

Center for Outreach in Alzheimer's, Aging, and Community Health (COACH) mHealth App Design Human Factors Researcher and Consultant

10/18-10/19

- Oversaw the ideation of design solutions and communicated tactics to support user needs

- Aligned target user personas, market sizing, and business requirements towards app commercialization

- Collaborated with product owners and stakeholders on strategy sessions for user flows, wireframes, and market research

- Led a usability testing workshop and mixed methods research strategies with targeted end users to inform the design of the existing app prototype

Internships

Lenovo Group Ltd.

1. User Experience Design Intern

Morrisville, NC

5/18 – 8/18

User Research

- Translated user-generated preferences and issues into technical requirements for programmers
- Conducted 16 immersive usability tests with a global, cross-functional user base
- Facilitated several focus group sessions with sales teams, end-users, and UI/UX designers

User Interface Design

- Collaborated with cross-functional team members to create 35 instructional models for website user stories
- Fulfilled continual user interface design enhancement requests
- Consulted on various UI/UX digital design documents for optimal reader content and design standardization

The Boeing Company

2. Finance Systems and Project Management Intern St Louis, MO 5/13 - 8/13

- Applied Six Sigma practices and re-engineering principles to departmental processes, information systems for customer order fulfillment, issue resolution, and problem solving
- Saved the department approximately \$54,000 in overhead costs due to streamlined IT practices
- Identified operational gaps when analyzing risks, issues, and opportunities within IT practices

3. Business Systems Analysis Intern Seal Beach, CA 5/12 - 8/12

- Standardized a collaborative metrics collection system for business operations and logistics
- Constructed technical process flow documents for mission-critical policies and regulations

4. Technology Infrastructure Intern Bellevue, WA 5/11 - 8/11

- Administered software and technical concepts training for second and third level managers
- Ensured the integration of system requirements and components aligned to business needs
- Implemented improved process tactics in project visibility, integration, and metrics collection

5. Information Technology International Intern Bellevue, WA 6/10-8/10

- Developed new planning system strategies for the use of Microsoft SharePoint
- Designed preliminary prototype of a project management training module
- Led and constructed the implementation of Boeing Metrics Training Development

6. Information Technology (FOSTr) Intern Renton, WA 5/09-8/09

- Led Agile-influenced team meetings to update progression within FOSTr department
- Created automated test scripts to analyze and interpret customer usability performance
- Exceeded expectations and produced four times as many test scripts as required

INVITED TALKS

1. Aging Advantages Summit 10/2021

Central Indiana Council on Aging (CICOA) Aging & In-Home Solutions
Indianapolis, IN

2. Caregiver Crossing Podcast 9/2021

Central Indiana Council on Aging (CICOA) Aging & In-Home Solutions
Indianapolis, IN

3. Say “Hello” to Better Health: Community, Inclusion, & Ministry 8/2021

American Baptist Churches of Greater Indianapolis
Indianapolis, IN

4. Alzheimer’s and Brain Awareness 6/2021

Central Indiana Council on Aging (CICOA) Aging & In-Home Solutions, Radio Next Broadcast
Indianapolis, IN

5. “Caregiving and Technology” 4/2020

Senior Resources of Guilford Family Caregiver Support
Greensboro, NC

6. “Current Mobile Health Interventions for Caregiver Empowerment”	9/2019
Center for Outreach in Alzheimer’s Aging and Community Health (COAACH) Greensboro, NC	
7. “Alzheimer’s Disease Caregiver Resource (AICaRe): Tailored Mobile Health Application”	7/2019
Center for Outreach in Alzheimer’s Aging and Community Health (COAACH) Greensboro, NC	
8. Mobile App Prototype Usability Testing	6/2019
Center for Outreach in Alzheimer’s Aging and Community Health (COAACH) Greensboro, NC	
9. “Alzheimer’s Disease Context-Aware Mobile Health Application”	5/2019
2019 Institute of Industrial and Systems Engineers (IISE) Annual Doctoral Symposium Orlando, FL	
10. Mobile Health Application Interactive Workshop	10/2018
Senior Resources of Guilford Family Caregiver Support Greensboro, NC	

PUBLICATIONS

1. Werner, N. E., **Brown, J. C.**, Loganathar, P., Holden, R.J. Quality of Mobile Apps for Care Partner of People with Alzheimer’s Disease and Related Dementias. *J Med Internet Res* (submitted). doi:10.2196/33863
2. Hill, J. R., **Brown, J. C.**, Campbell, N. L., & Holden, R. J. (2021). Usability-in-place – Remote usability testing methods for homebound older adults: Rapid literature review, *JMIR Formative Research*, 5(11): e26181. doi: 10.2196/26181
3. **Brown, J.** (2021). Aligning and forecasting caregiver needs within CHI application design: A patient ergonomics perspective. International Ergonomics Association 21st Triennial Congress, Vancouver, BC.
4. Braly, T., Muriathiri, D., **Brown, J. C.**, Taylor, B. M., Boustani, M. A., Holden, R.J. (2021). Technology intervention to support caregiving for Alzheimer's disease (I-CARE): Study protocol for a randomized controlled pilot trial, *Pilot Feasibility Stud.* 7(1), 23. doi: 10.1186/s40814-020-00755-2. PubMed PMID: 33431027; PubMed Central PMCID: PMC7798342.
5. **Brown, J.** & Kim, H. N. (2020). *Exploring informational needs of Alzheimer’s caregivers: A participatory design approach*. Proceedings of the 2020 Institute of Industrial and Systems Engineers Annual Conference, New Orleans, Louisiana.
6. **Brown, J.** & Kim, H. N. (2020). *Validating the usability of an Alzheimer’s caregiver mobile app prototype*. Proceedings of the 2020 Institute of Industrial and Systems Engineers Annual Conference, New Orleans, Louisiana.
7. **Brown, J.** & Kim, H. N. (2019). *Lessons learned from conducting Alzheimer’s disease caregiver mHealth app training and focus group sessions*. Proceedings of the 2019 Human Factors and Ergonomics Society International Annual Meeting, Seattle, Washington.
8. **Brown, J.** & Kim, H. N. (2018). Usability of Alzheimer’s mHealth applications. *Journal of Best Practices in Health Professions Diversity: Research, Education, and Policy*, 11(1), 31-42.
9. **Brown, J.** & Kim, H. N. (2018). *User-centered designs of Alzheimer's mHealth applications*. Proceedings of the 2018 Human Factors and Ergonomics Society International Annual Meeting, Philadelphia, Pennsylvania.

10. Brown, J. (2017, October). *Student Chapter Spotlight: North Carolina A&T State University Student Chapter Executive Board*. Human Factors and Ergonomics Society Education Technical Group Student Newsletter.

11. Benedict, B., Stewart, G., Brown, J., Vinson, E., & Smith-Jackson, T. (2015). *Use of front-end evaluation to design an undergraduate industrial and systems engineering ambassador program (ISEAmP)*. Proceedings of Human Factors and Ergonomics Society 59th Annual Meeting (pp. 347-351), Los Angeles, California.

RESEARCH POSTERS

- 1. Brown, J.** (2021). *Usable Does Not Mean Used: Going Beyond Usability to Engage Dementia Caregivers with Mobile Health Technology*. Poster presented at the 2021 Human Factors and Ergonomics Society Virtual Healthcare Symposium.
- 2. Brown, J. & Kim, H. N.** (2019, July). *Challenges of today's mHealth apps supporting Alzheimer's caregivers*. Poster presented at the 2019 Institute of Industrial and Systems Engineers Annual Conference and Expo, Orlando, FL.
- 3. Brown, J.** (2019, May). *A personalized Alzheimer's disease context-aware recommendation engine*. Poster presented at the 2019 Institute of Industrial and Systems Engineers Annual Conference Doctoral Colloquium Poster Competition, Orlando, FL.
- 4. Brown, J. & Kim, H. N.** (2019, April). *Are the Immediate Technological Needs of Alzheimer's Caregivers Being Met?* Poster presented at the 2019 North Carolina A&T State University Graduate Student Research Poster Competition, Greensboro, NC.
- 5. Brown, J. & Kim, H. N.** (2018, July). *Are We Meeting the Immediate Needs of Alzheimer's Caregivers?* Poster presented at the 2018 Alzheimer's Association International Conference, Chicago, IL.
- 6. Brown, J. & Kim, H. N.** (2018, April). *How usable are mobile health applications for Alzheimer's caregivers?* Poster presented at the North Carolina A&T State University Graduate Research Poster Competition, Greensboro, NC.
- 7. Brown, J. & Kim, H. N.** (2018, February). *Mobile health (mHealth) usability: A heuristic evaluation on Alzheimer's mobile applications*. Poster presented at the UNC Chapel Hill Digital Health Symposium, Chapel Hill, NC.
- 8. Brown, J. & Kim, H. N.** (2018, April). *Usability of Alzheimer's mHealth applications*. Poster presented at the 2018 Southeastern Human Factors Applied Research Conference, Clemson, SC.
- 9. Brown, J. & Doss, C.** (2017, January). *Memory lane: Android mobile application for Alzheimer's caregiver support*. Research poster competition presentation at North Carolina A&T State University, Greensboro, NC.
- 10. Brown, J. & Doss, C.** (2017, April). *Utilizing android mobile health applications for Alzheimer's caregiver empowerment*. 2017 Ronald McNair Celebration Graduate Student Research Poster Symposium at North Carolina A&T State University, Greensboro, NC.
- 11. Jimerson, B., & Brown, J.** (2015, October). *Human performance modeling and user-centered design: Patient transfer device*. Research poster presentation at the 2015 Fluid Power Innovation and Corporate Research Conference, Chicago, IL.

SPONSORED RESEARCH

1. 7/1/19 – 6/30/22: A Specialized Automatic Speech Recognition and Conversational Platform to Enable Socially Assistive Robots for Persons with Mild-to-Moderate Alzheimer's Disease and Related Dementia-Refinement & Validation Studies. National Institute on Aging, PI: Wang, Victor, Co-PI: Boustani, Malaz, A., **\$1,502,690.**

2. 7/1/19 – 4/30/22: Technology Intervention to Support Caregiving for Alzheimer’s Disease (I-CARE). National Institute on Aging, PI: Holden, Richard J., Co-PI: Boustani, Malaz, A., **\$187,623**.

PATENTS

North Carolina A&T State University Invention Disclosure EN0116 0420 “Alzheimer’s Disease Caregiver Resource (AICaRe): Tailored Mobile Health Application”

LEADERSHIP

- | | |
|---|------------------------------|
| 1. HFES Annual Meeting Education Technical Group Session Chair | <i>Fall ‘17</i> |
| 2. Human Factors and Ergonomics Society, President | <i>Fall ‘16 - Spring ‘17</i> |
| 3. Institute of Industrial and Systems Engineers, Vice President | <i>Fall ‘14 - Spring ‘15</i> |
| 4. Industrial and Systems Engineering Department Ambassador | <i>Fall ‘14 - Spring ‘15</i> |
| 5. Human Factors and Ergonomics Society, Secretary | <i>Spring ‘14</i> |

AWARDS

- | | |
|---|-------------------|
| 1. Healthcare Technical Group Robert Wears Early Career Award, Nominee | <i>Fall ‘21</i> |
| 2. National Institute on Aging iCare-AD/ADRD Challenge, 3rd Place Finalist (\$50,000) | <i>Fall ‘19</i> |
| 3. Golden Key International Honor Society | <i>Spring ‘19</i> |
| 4. North Carolina A&T State University Dean’s List | <i>‘13 – ‘19</i> |
| 5. Human Factors and Ergonomics Society Student Chapter of the Year | <i>Summer ‘17</i> |
| 6. Graduate Student Advisory Council Mini Grant (\$500) | <i>Spring ‘17</i> |
| 7. Invoking the Spirit & Essence of Humanitarianism Award | <i>Spring ‘17</i> |
| 8. Business and Industry Safety and Environmental Certificate | <i>Fall ‘17</i> |
| 9. Title III HBGI Doctoral Fellowship (\$250,000) | <i>Summer ‘15</i> |
| 10. Fluid Power Innovation and Research Travel Grant (\$1,500) | <i>Summer ‘15</i> |
| 11. Most Outstanding Dual Degree Engineering Student ‘14-15 | <i>Spring ‘15</i> |
| 12. Tau Beta Pi Engineering Honor Society | <i>Fall ‘14</i> |
| 13. Alpha Pi Mu Industrial and Systems Engineering Honor Society | <i>Spring ‘14</i> |
| 14. Alpha Kappa Mu National Honor Society | <i>Spring ‘14</i> |
| 15. Phi Kappa Phi Honor Society | <i>Spring’ 14</i> |
| 16. Alpha Lambda Delta Honor Society | <i>‘08 – ‘14</i> |
| 17. National Society of Collegiate Scholars | <i>‘08 – ‘14</i> |
| 18. Boeing Scholar (\$7,500) | <i>‘08 – ‘14</i> |
| 19. General Motors Scholar (\$5,000) | <i>‘08 – ‘09</i> |