JULIAN BRINKLEY, Ph.D., PMP   **CURRICULUM VITAE**

Dean's Associate Professor   JulianBrinkley@clemson.edu
Human-Centered Computing Division   www.julianbrinkley.com
School of Computing   (252) 548-9510
Clemson University

EDUCATION

University of Florida, Gainesville, FL, 2018
  Ph.D. in Human-Centered Computing
  Dissertation: *Autonomous Vehicles and Visually Impaired Operators*

Clemson University, Clemson, SC, 2023
  MBA in Entrepreneurship and Innovation
  Program Project: MyUI.AI – AI-based Digital Interface Adaptation Technology

East Carolina University, Greenville, NC, 2014
  M.S. in Software Engineering
  Thesis: *Social Networking Sites and Blind Users: Problem Description, System Evaluation and Semantic Web Solution*

University of North Carolina - Greensboro, Greensboro, NC, 2011
  B.A. in Humanities

EMPLOYMENT

Clemson University, Clemson, SC
  Human-Centered Computing Division:
  Associate Professor, 2024 – Present
  Assistant Professor, 2018 – 2024

  School of Computing:
  Graduate Research Assistant, 2015
  Graduate Teaching Assistant, 2014

  Youth Learning Institute:
  Senior Software Developer, 2014 – 2018

Santa Fe College, Gainesville, FL
  Information Technology Education:
  Adjunct Assistant Professor, 2016 – 2018

Harris Corporation, Melbourne, FL
  User Experience Researcher, 2016

University of Florida, Gainesville, FL
  Computer and Information Science and Engineering:
  Graduate Research Assistant, 2015 – 2016

East Carolina University, Greenville, NC
       School of Computing:
       Graduate Teaching Assistant, 2013 – 2014
       Graduate Research Assistant, 2012 – 2014

AFFILIATIONS AND APPOINTMENTS

Biomedical Data Science and Informatics, Clemson, SC
       Affiliate Faculty, 2024 – Present

Robert H. Brooks Sports Science Institute, Clemson, SC
       Faculty Fellow, 2024 – Present

GRADUATE AND PROFESSIONAL CERTIFICATES

Certificate in Current and Emerging Technologies: Connected and Automated Vehicles
       University of Michigan

Certificate of Cultural Competence in Computing (3C Fellow)
       Duke University
       Program project: Start with One – Designing and Prototyping Technologies for Persons with Disabilities

Certificate in Disability Inclusion and Accessible Design
       University of Michigan

PROFESSIONAL CERTIFICATIONS

Project Management Professional (PMP), 2022
       Project Management Institute

Certified Software Tester Foundation Level, 2022
       International Software Testing Qualifications Board

Microsoft Certified Professional (MCP), 2012
       Microsoft Corporation
       Certification Number: F309-4377

Microsoft Certified Professional Developer (MCPD), 2010
       Microsoft Corporation
       Certification Number: C311-3894

Microsoft Certified Technology Specialist (MCTS), 2010
       Microsoft Corporation

Journal Publications

[J.9]   Deng M., Gluck, A., Zhao, Y., Li, D. Menassa, C. C., Kamat V. R., & **Brinkley**, J. (2024). An Analysis of Physiological Responses as Indicators of Driver Takeover Readiness in Conditionally Automated Driving. Accident Analysis and Prevision, 195. [Impact Factor: 5.9]

[J.8]   **Brinkley, J.**, Huff, Jr., E., Posadas, B. Sherman, I., Woodward, J., Daily, S. B. & Gilbert, J. E. (2020). Exploring the Needs, Preferences and Concerns of Persons with Visual Impairments Regarding Self-Driving Vehicles. *ACM Transactions on Accessible Computing,* 13 (1), 1-34. [Impact Factor: 1.57]

[J.7]   Huff Jr., E., **Brinkley, J.** (2020). Ridesharing Drivers and Persons with Disabilities. *Journal on Technology and Persons with Disabilities* 8, 160-169.

[J.6]   Gluck, A., **Brinkley, J.** (2020). Implementing 'The Enclosing Dark': A VR Auditory Adventure. *Journal on Technology and Persons with Disabilities* 8, 149-159.

[J.5]   **Brinkley, J.**, Posadas, B. Sherman, I., Daily, S. B. & Gilbert, J. E. (2019). An Open Road Evaluation of a Self-Driving Vehicle Human-Machine Interface Designed for Visually Impaired Users. *International Journal of Human-Computer Interaction* 35 (11), 1018-1032. [Impact Factor: 1.905]

[J.4]   **Brinkley, J.**, Daily, S. B. & Gilbert, J. E. (2019). A Policy Proposal to Support Self-Driving Vehicle Accessibility. *Journal on Technology and Persons with Disabilities* 7, 35-43.

[J.3]   **Brinkley, J.**, Daily, S. B. & Gilbert, J. E. (2019). Implementing the ATLAS Self-Driving Vehicle Voice User Interface. *Journal on Technology and Persons with Disabilities* 7, 133-140.

[J.2]   **Brinkley, J.**, Daily, S. B. & Gilbert, J. E. (2018). A Survey of Visually Impaired Consumers About Self-Driving Vehicles. *Journal on Technology and Persons with Disabilities* 6, 273-282.

[J.1]   Shahbazi E., **Brinkley, J.** & Tabrizi, M. (2013). A Distributed Key-Based Security Framework for Private Clouds. *Journal of Applied Computer Science and Applications* 4 *(9),* 79-83.

Conference Proceedings

[C.47] Gluck, A., Solini, H., Maiti, K. & **Brinkley**, J.(2024). Don't Forget Our Presence: Exploring VR for Older Adults. *Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)* Orlando, Florida. [IDEATExR Workshop Best Paper Award]

[C.46] Lawson, C., Enam, M. A., Gluck, A. & **Brinkley**, J.(2024). Experiencing Start With One: Increasing Black Student Interest in Graduate Computer Science Education Using Accessibility Workshops. *Proceedings of the Black Issues in Computing Education Symposium 2024*, Santo Domingo, Dominican Republic. [To Appear].

[C.45] **Brinkley**, J., Huff Jr., E., Gluck, A. & Enam, M. A.. (2024). An Autoethnographic Study of the Waymo One Autonomous Ridesharing Ecosystem: Exploring Issues of Accessibility. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Toronto, Canada. [To Appear].

[C.44] Enam, M. A., Bastola, A. N. & **Brinkley**, J. (2024). An Inclusive Model for External Human Machine Interfaces of Autonomous Vehicles. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Toronto, Canada. [To Appear].

[C.43] **Brinkley**, J. & Enam, M. A. (2024). The ATLAS Autonomous Vehicle HMI: Leveraging Sensory Substition to Support the Accessibility Needs of Blind and Low Vision Users. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Toronto, Canada. [To Appear].

[C.42] Enam, M. A., Bastola, A. N. & **Brinkley**, J. (2024). Are the External Human-Machine Interfaces (eHMI) Accessible for People with Disabilities? A Systematic Review. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Toronto, Canada. [To Appear].

[C.41] **Brinkley**, J. & Ugboko, R. (2024). Accessible Autonomous Vehicles as Symbiotic Autonomous Systems for Users with Disabilities: Preliminary Design Guidelines. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Toronto, Canada. [To Appear].

[C.40] Bastola, A., Enam, M. A., Bastola, A. N., Gluck, A., & **Brinkley**, J. (2023). Multi-Functional Glasses for the Blind and Visually Impaired: Design and Development. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Los Angeles, California.

[C.39] Gluck, A., Golba, E. & **Brinkley**, J. (2023). Development of a VR Head-Mounted Display Strap Modification for Use by Individuals with a Cochlear Implant. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Los Angeles, California.

[C.38] Bastola, A., Gluck, A., & **Brinkley**, J. (2023). Feedback Mechanism for the Blind and Visually Impaired: A Review. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, Los Angeles, California.

[C.37] Huff Jr., E., & **Brinkley**, J. (2023). Perceptions of Readiness for Online Learning Between Sighted and Visually Impaired Students. *Proceedings of the 15th International Conference on Education and New Learning Technologies* (EDULearn23), Palma, Spain.

[C.36] Gluck, A., **Brinkley**, J., Solini, H., & Maiti K. (2022). Evaluating 3D Printed VR Controller Prototypes to Increase VR Accessibility for Older Adults. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Gainesville, Florida.

[C.35] Gluck, A., , Deng, M., Zhao, Y., Menassa, C., Li, D., **Brinkley**, J., & Kamat, V. (2022). Exploring Driver Physiological Response During Level 3 Conditional Driving Automation. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Gainesville, Florida.

[C.34] **Brinkley**, J., Huff Jr., E., & Gluck, A., (2022). Design Techniques for Exploring Accessible Human-Autonomous Vehicle Interaction in the Age of Vehicular Automation. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Gainesville, Florida.

[C.33] Gluck, A., , Huff Jr., E., Boateng, K. & **Brinkley**, J. (2022). Toward a Framework for Embodiment in Emerging Transportation Technologies for Facilitating In-Vehicle Experiences for Vulnerable and Disabled Road Users. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Gainesville, Florida.

[C.32] Huff Jr., E., Tucker, N., Grady, S. & **Brinkley**, J. (2022). What Can My Car Tell Me? Consumer Perceptions of Transparency in Self-Driving Vehicles. *Proceedings of the 3rd International IEEE Conference on Human-Machine Systems*, Gainesville, Florida.

[C.31] Gluck, A.., Solini, H.,. & **Brinkley**, J. (2022). It's Enactment Time!: High-fidelity Enactment Stage for Accessible Automated Driving System Technology Research. *Proceedings of the 24th International ACM SIG ACCESS Conference on Computers and Accessibility*, Athens, Greece.

[C.30] Huff Jr., E., Brewer, R.. & **Brinkley**, J. (2022). Where Are You Taking Me? Reflections from Observing Ridesharing Use By People with Visual Impairments. *Proceedings of the 24th International ACM SIG ACCESS Conference on Computers and Accessibility*, Athens, Greece.

[C.29] **Brinkley**, J, Huff Jr., E. & Enam, M. A.. (2022). Transforming Transportation in the Pursuit of Barrier Free Mobility: The State-of-the-Art in Autonomous Vehicle Interaction Technologies for People with Disabilities. *Proceedings of the ICT Accessibility Testing Symposium*, 11-26.

[C.28] Huff Jr., E., Grady, S. & **Brinkley**, J. (2021). Tell Me What I Need to Know: Consumers' Desire for Information Transparency in Self-Driving Vehicles. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 327-331.

[C.27] Carvalho, S., Gluck, A., Quinn, D., Zhang, M., Li, L., Groves, K. & **Brinkley**, J. (2021). An Accessible Autonomous Vehicle Ridesharing Ecosystem. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 342-346.

[C.26] Huff Jr., E., Gluck, A., Boateng, K. & **Brinkley**, J. (2021). The Daily Experiences of Facebook for Visually Impaired Users. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 221-225.

[C.25] Huff Jr., E. & **Brinkley**, J. (2021). A Diary Study of The Teaching and Learning Experience in A High School Programming Course. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 201-205.

[C.24] Gluck, A., Boateng, K. & **Brinkley**, J. (2021). Racing in the Dark: Exploring Accessible Virtual Reality by Developing a Racing Game for People who are Blind. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 1114-1118.

[C.23] **Brinkley**, J. (2021). Using Personas with Visual Impairments to Explore the Design of an Accessible Self Driving Vehicle Human-Machine Interface. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 65 (1), 337-341.

[C.22] Huff Jr., E., Boateng, K., Moster, M., Rodeghero, P. & **Brinkley**, J. (2021). Exploring the Perspectives of Teachers of the Visually Impaired Regarding Accessible K12 Computing Education. *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education,* 156-162.

[C.21] **Brinkley**, J., Huff Jr., E. & Boateng, K. (2021). Tough but Effective: Exploring the Use of Remote Participatory Design in an Inclusive Design Course Through Student Reflections. *Proceedings of the 52nd ACM Technical Symposium on Computer Science Education*, 170-176.

[C.20] Huff Jr., E., Boateng, K., Moster, M., Rodeghero, P. & **Brinkley**, J. (2020). Examining The Work Experience of Programmers with Visual Impairments. *Proceedings of International Conference on Software Maintenance and Evolution*, 707-711 [Acceptance Rate: 37%].

[C.19] Gluck, A., Boateng, K., Huff Jr., E. & **Brinkley**, J. (2020). Putting Older Adults in the Driver Seat: Using User Enactment to Explore the Design of a Shared Autonomous Vehicle. *Proceedings of the Automotive User Interface Conference*, 291-300.

[C.18] Carvalho, S., Ahire, S., Huff Jr., E. & **Brinkley**, J. (2020). UTT: A Conceptual Model to Guide the Universal Design of Autonomous Vehicles. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 87-91.

[C.17] **Brinkley**, J., Huff Jr., E., Boateng, K. & Ahire, S. (2020). Autonomous Vehicle Anti-Patterns: Making Emerging Transportation Technologies Inaccessible by Design. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 1038-1042.

[C.16] Huff Jr., E., Boateng, K. & **Brinkley**, J. (2020). Dear Diary: Conducting Diary Studies with Participants with Visual Impairments. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 1566-1570.

[C.15] Huff Jr., E., Zhang, M. & **Brinkley**, J. (2020). Enacting into Reality: Using User Enactment to Explore the Future of Autonomous Vehicle Design. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 1561-1565.

[C.14] **Brinkley, J.** & Huff Jr., E. (2020). Inclusion by Design: A 75-Minute Crash Course on Accessible Design. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 831-835.

[C.13] Huff Jr., E., Lucaites, K., Roberts, A. & **Brinkley**, J. (2020). Participatory Design in the Classroom: Exploring the design of an Autonomous Vehicle Human-Machine Interface with a Visually Impaired Co-Designer. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 1921-1925.

[C.12] Gluck, A., Huff Jr., E., Lucaites, Zhang, M. & **Brinkley**, J. (2020). Lights, Camera, Autonomy! Exploring the Opinions of Older Adults Regarding Autonomous Vehicles Through Enactment. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 64* (1), 1971-1975.

[C.11] Huff Jr., E., Stigall, B. **Brinkley, J.,** Pak, R. & Caine, K. (2020) Can Computer-Generated Speech Have an Age? *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, 1-7. Portland, OR. [Acceptance rate 41.8%]

[C.10] **Brinkley, J.** (2020) Participation at What Cost? Teaching Accessibility Using Participatory Design: An Experience Report. *Proceedings of the 51st ACM Technical Symposium on Computer Science Education*, 114-120. Portland, OR. [Acceptance rate 34%]

[C.9] Huff Jr., E., Dellamaria, N., Posadas, B. & **Brinkley, J.** (2019). Am I Too Old To Drive? Opinions of Older Adults on Self-Driving Vehicles. *Proceedings of the 21st International SIG ACCESS Conference on Computers and Accessibility*, 500-509*.* Pittsburgh, PA. [Acceptance rate 26%]

[C.8] **Brinkley, J.**, Posadas, B., Woodward, J. & Gilbert, J. E. (2017). Opinions and Preferences of Blind and Low Vision Consumers Regarding Self-Driving Vehicles: Results of Focus Group Discussions. *Proceedings of the 19th International SIG ACCESS Conference on Computers and Accessibility*, 290-299*.* Baltimore, MD [Acceptance rate 22%].

[C.7] **Brinkley, J.**, Dunbar, J. Smith, J. D. & Gilbert, J. E. (2017). A Usability Evaluation of the BMW Active Cruise Control System with "Stop and Go" Function. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 61* (1), 1536-1540*.* Sage Publications. Austin, TX.

[C.6] **Brinkley, J.** & Tabrizi, M. (2017). A Desktop Usability Evaluation of the Facebook Mobile Interface using the JAWS Screen Reader with Blind Users. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting 61* (1), 828-832*.* Sage Publications. Austin, TX. [Honorable Mention Marc Resnick Best Paper Award]

[C.5] **Brinkley, J.**, Hoffman, D. & Tabrizi, M. (2017). A Social Networking Site Portable Profile System for Blind and Visually Impaired Users Based on Cloud and Semantic Web Technologies. *Proceedings of the IEEE Conference on Cognitive Computing*, 104-111*.* Honolulu, HI.

[C.4] Dillon, E. C., **Brinkley, J.**, Moon, D., Gilbert, J. E., Kang, S. C. & Williams, B. N. (2016). Bridging The Safety Divide Through Technology To Improve The Partnership Between Students and Campus Law-Enforcement. *Proceedings of the International Conference on Urban Education.* San Juan, Puerto Rico.

[C.3] Rowe, F., **Brinkley, J.** & Tabrizi, M. (2013). Migrating Existing Applications to the Cloud. *Proceedings of the IEEE International Conference on Cloud Computing and Big Data*, 68-77*.* FuZhou, China.

[C.2] Bazargani, S., **Brinkley, J.** & Tabrizi, M. (2013). Implementing Conceptual Search Capability in a Cloud-Based Feed Aggregator. *Proceedings of the IEEE 3rd International Conference on Innovative Computing Technology*, 138-143*.* London, UK.

[C.1] Bazargani, S., **Brinkley, J.** & Tabrizi, M. (2012). Developing An Agent-Based Feed Analyzer in the Cloud. *Proceedings of the IEEE 4th International Conference on Cloud Computing, Technology and Science*, 217-224*.* Taipei, Taiwan [Acceptance Rate 19.7%].

Conference Posters (Peer Reviewed)

[CP.2] **Brinkley, J.**, Biswas, S., Gupta, V. & Gilbert, J. E. (2017). A Case Study Documenting the Development of Job Assist: A Speech-Based Job Search System for Individuals with Visual Impairments. *The Human Factors and Ergonomics Society Annual Meeting.* Austin, TX.

[CP.1] **Brinkley, J.** & Tabrizi, M. (2013). A Pilot Study Examining the Online Behavior of the Visually Impaired. *The Annual Symposium on Human-Computer Interaction and Information Retrieval.* Vancouver, BC. [Best Graduate Poster, East Carolina University Research Creative Achievement Week]

Workshop Papers (Lightly Reviewed)

[WS.3] Gluck, A., Solini, S., Maiti, K. & **Brinkley, J.** (2024). Don't Forget Our Presence: Exploring VR for Older Adults. *2024 IEEE Virtual Reality and 3D User Interfaces IDEATExR Workshop.* Orlando, Fl [To Appear].

[WS.2] **Brinkley, J.** (2018). Accessible Voice Interfaces in Self-Driving Vehicles. *Accessible Voice Interfaces Workshop at CSCW.* Jersey City, NJ.

[WS.1] **Brinkley, J.** (2018). Autonomous Trucks and Persons with Disabilities. *Impact of Autonomous Trucks on the US Economy.* Arlington, VA.

Book Chapters (Peer Reviewed)

[BC.1] Dillon, E. C., Williams, B. N., Kang, S. C., Gilbert, J. E. **Brinkley, J.** & Moon. (2017). Bridging The Safety Divide Through Technology To Improve the Partnership Between Students and Campus Law Enforcement: An 'App' Opportunity. In J.D. Ward (Eds.) *Policing and Race in America: Economic, Political and Social Dynamics.* Lexington Books, pp. 207-219.

Technical Reports

[TR.5] **Toxcel Corporation (Sub-contractor/co-PI)** (2020). *Considerations for Making ADS Vehicles Accessible to All Road Users: User Needs Analysis.* Washington, DC. United States Department of Transportation.

[TR.4] **Brinkley, J.** & Hynes P. (2016). *User Recognition of Emergency Operation Center Alert Notifications.* Melbourne, FL. Harris Corporation.

[TR.3] **Brinkley, J.** & Hynes P. (2015). *Understanding Emergency Operation Center Information Needs.* Melbourne, FL: Harris Corporation.

[TR.2] **Brinkley, J.**, Kasperzok, A. & Smith, J. D. (2015). *Towards Ad-Hoc Vehicle Interaction Networks Inspired By Ant Colony Behavior.* Melbourne, FL. Harris Corporation.

[TR.1] Eichelberger, J., **Brinkley, J.**, Bateman, D. S. (2015). *Operation of the National Information Management and Support System.* Washington, DC. United States Department of Agriculture.

PRESENTATIONS

[P.25] **Brinkley**, J. (October 2023). Autonomous Vehicles and Driver Assistance Technology: What Can They Do for Drivers with Vision Impairment Now and What Does the Future Hold? American Academy of Optometry Annual Convention.

[P.24] **Brinkley**, J. (April 2023). MyUI.AI. US Department of Transportation Inclusive Design Challenge Follow-Up (online).

[P.23] **Brinkley**, J. (April 2023). Autonomous Vehicle User Interface Adaptation Using Artificial

Intelligence as a Service. Clemson University.

[P.22]   **Brinkley**, J. (March 2023). Accessible Human-AV Interaction: Exploring the Evolution of In-Vehicle Information Systems and the Implications for Accessible Autonomous Vehicle Interaction. Indiana University.

[P.21]   **Brinkley**, J. (November 2022). (De)evolving Towards Inaccessibility? Exploring the Evolution of In- Vehicle Information Systems (IVIS) and the Implications for Human-Machine Interfaces in Emerging Self-Driving Vehicles. Carnegie Mellon University.
Link: https://scs.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=9cfc4238-fe4a-43ba-a7fe- af4300eef581

[P.20]   Panel and **Brinkley, J.** (August, 2021). *Webinar Series: Path to Academic Careers for HBCU Students.* Clemson University C^{2}M^2 (online).

[P.19]   **Brinkley, J.** (June, 2021). *Autonomous Vehicles and Persons with Disabilities: Current Work and Future Directions.* East Carolina University (online).

[P.18]   **Brinkley, J.** (April, 2021). *Inclusive Design Challenge: Autonomous Vehicles and Persons with Disabilities.* Depaul University (online).

[P.17]   **Brinkley, J.** (January, 2021). *Researching Accessible Autonomous Vehicles.* The National Federation of the Blind Smart Cities Conference (online).

[P.16]   **Brinkley, J.** (September, 2020). *Autonomous Vehicles and Persons with Disabilities: Current Work and Future Directions.* Tufts University (online).

[P.15]   **Brinkley, J.** (April, 2020). *The DRIVE Lab at Clemson University.* Access Computing. Seattle, WA (online).

[P.14]   **Brinkley, J.** (April, 2019). *Autonomous Vehicles, Accessibility and Visually Impaired Operators.* iAAMCS Distinguished Lecture Series. Morgan State University. Baltimore, MD.

[P.13]   **Brinkley, J.** (November, 2018). *Self-Driving Vehicles and Visually Impaired Operators.* University of North Carolina-Charlotte. Charlotte, NC.

[P.12]   **Brinkley, J.** (October, 2018). *Accessible Self-Driving Vehicles for Visually Impaired Operators.* Morehouse College. Atlanta, GA.

[P.11]   **Brinkley, J.** (July, 2018). *Autonomous Vehicle Accessibility.* The National Federation of the Blind Annual Convention. Orlando, FL.

[P.10]   **Brinkley, J.** (April, 2018). *Opinions and Preferences of Blind and Low Vision Consumers Regarding Self-Driving Vehicles: Results of Focus Group Discussions.* Research presentation to the SAE International task force on Identifying ADS-DV User Issues for Persons with Disabilities. Gainesville, FL.

[P.9]   **Brinkley, J.** (March, 2018). *A Survey of Visually Impaired Consumers About Self-Driving Vehicles.* Research presentation at the 33rd CSUN Assistive Technology Conference. San

Diego, CA.

[P.8]   **Brinkley, J.** (March, 2017). *A Crash Course in Design Thinking.* Lecture to graduate and undergraduate "Affective Computing" students at the University of Florida. Gainesville, FL.

[P.7]   **Brinkley, J.** (October, 2016). *The Benefits of Autonomous Vehicles for Disabled Users.* Presentation to the Alachua County Council of the Blind. Gainesville, FL.

[P.6]   **Brinkley, J.** (July, 2016). *A Multi-Method Usability Evaluation of the Facebook Mobile Interface Involving Blind Users.* Research presentation at the 7th International Conference on Applied Human Factors and Ergonomics. Orlando, FL.

[P.5]   **Brinkley, J.** (July, 2016). *User Recognition of Emergency Operation Center Alert Notifications: Study Results.* Research presentation to the user experience research leadership of Harris Corporation. Melbourne, FL.

[P.4]   **Brinkley, J.** & Hynes, P. (January, 2016). *Understanding Emergency Operation Center Information Needs.* Research presentation to the user experience research leadership of Harris Corporation. Melbourne, FL.

[P.3]   **Brinkley, J.** (April, 2015). *Results of the Usability Evaluation of the BMW Active Cruise Control System with "Stop and Go" Function*. Research presentation to the automotive user experience research leadership of Intel Corporation. Chandler, AZ.

[P.2]   **Brinkley, J.** (February, 2015). *Research Review of Interaction Network Algorithms Inspired By Nature*. Presentation to the user experience research leadership of Harris Corporation. Clemson University - ICAR, Greensville, SC.

[P.1]   **Brinkley, J.** (April, 2014). *Human-Computer Interaction and Electronic Health Records*. Invited presentation as part of the applied software engineering series at East Carolina University. Greenville, NC.

SELECTED MEDIA COVERAGE

[MC.7]   Tabitha Coulter (May 2021). **Partners for Automated Vehicle Education.** "Meet the Inclusive Design Challenge Semifinalists: Clemson University" https://www.youtube.com/watch?v=4IcnwSBQZpk

[MC.6]   Jason Dearan**.** (April 2018). **The New York Times.** "Driverless cars give hope to the blind – are automakers on board?" https://www.nytimes.com/aponline/2018/04/13/us/ap-us-autonomous-cars-the-blind.html

[MC.5]   Tamara Lush (April 2018). **The Associated Press.** "Self-Driving Cars to Potentially Aid the Blind" https://bit.ly/2HgH3DF

[MC.4]   Staff, Jason Dearan (April 2018). **The Daily Mail.** "Blind people demand the right to be behind the wheel of driverless cars and urge automakers to create technology that suits their needs" http://www.dailymail.co.uk/news/article-5610943/Driverless-cars-hope-blind-automakers-onboard.html

[MC.3]   Steve Orlando (April 2018). **UF News.** "For the visually impaired, a better autonomous vehicle experience" http://news.ufl.edu/articles/2018/04/for-the-visually-impaired-a-better-autonomous-vehicle-experience.php

[MC.2]   Vivian Nguyen (April 2018). **The Independent Florida Alligator.** "UF researcher's project to help blind, visually impaired" http://www.alligator.org/news/uf-researcher-s-project-to-help-blind-visually-impaired/article_67f5c97e-4698-11e8-92fa-af365daa5709.html

[MC.1]   Staff (April 2018). **Association for Unmanned Vehicle Systems International.** "University of Florida study seeks to ensure autonomous cars meet needs of the blind" http://www.auvsi.org/industry-news/university-florida-study-seeks-ensure-autonomous-cars-meet-needs-blind

TEACHING EXPERIENCE

Clemson University

HCC 8810/4510/6510 Inclusive Design and Accessible Technology, S2019, S2020, F2021, F2023

CPSC 4720 / 6720 Advanced Software Engineering Methodology: S2023

CPSC 3720 Introduction to Software Engineering, S2022, S2024

CPSC 1990 Creative Inquiry: Start with One, S2022

CPSC 1990 Creative Inquiry: Inclusive Design and Accessible Technology, S2019

CPSC 3990 Advanced Creative Inquiry: Inclusive Design and Accessible Technology, S2019

CPSC 2920 Computing, Ethics and Society, F2018 , F2019, F2020, S2021, F2021

Santa Fe College

CSCI 3303 Object Oriented Analysis and Design, 2016, 2018
CGS 1060 Computer Concepts, 2016

East Carolina University

CPSC 2120 Algorithms and Data Structures, Teaching Assistant, 2014
CSCI 1001 Intro. to Computer Science for Non-Majors, Teaching Assistant – Sole Course Instructor, 2013 - 2014
SENG 6255 Software Requirements Engineering, Teaching Assistant, 2013

FELLOWSHIPS, HONORS & AWARDS

Harris Corporation Fellowship ($26,000), 2015
NSF Scholarship in Science, Technology, Engineering and Mathematics ($10,000)**,** 2015
Outstanding Computer Science Graduate Student, East Carolina University Department of Computer Science, 2014

ACM Special Interest Group on Information Retrieval, Travel Grant, 2013

RESEARCH FUNDING

Funding Summary
- ▪ $5.5 Million Dollars as PI, Co-PI, Investigator or Senior Personnel
- ▪ Awards from the National Science Foundation (NSF), the National Highway Traffic Safety Administration (NHTSA), the US Department of Transportation (DOT), the South Carolina Research Authority (SCRA), the Clemson University Research Foundation (CURF), the Center for Connected and Automated Transportation (CCAT), the US Army Ground Vehicle Systems Center (US ARMY GVSC), and Google Research.

Agency	Title	Amount (total)	Amount (Brinkley)	Role	Year
SCRA	MyUI.AI	$34,500	$34,500	PI	2023-2024
SCRA	Accessibility Research Platform	$30,000	$30,000	PI	2023-2024
CURF	MyUI.AI	$15,000	$15,000	PI	2023-2024
CURF	Accessibility Research Platform	$5,000	$5,000	PI	2023-2024
US ARMY GVSC	Leveraging Emerging Natural User Interface Technology to Support Optimal Soldier-Vehicle Interaction in Next-Generation Autonomous Vehicles	$725,000	$290,000	PI	2023-2025
Google Research	Exploring the Design of Accessible Self- Driving Vehicles with T rained Co- Designers with Disabilities	$60,000	$60,000	PI	2023-2024
Google Research	Clemson Computing, Inclusion, and Identity Program	$10,000	$10,000	PI	2024
US ARMY GVSC	Future Focused Automated Ground Vehicle Human-Machine Interface	$100,000	$100,000	PI	2022-2024
Google Research	Clemson Computing, Inclusion, and Identity Program	$29,000	$29,000	PI	2022-2023
NHTSA	Additional Considerations for Making ADS Vehicles Accessible for All Road Users	$1,249,832	$261,151	PI	2022-2024
Google Research	Clemson Computing, Inclusion, and Identity Program	$18,000	$18,000	PI	2021-2022
CCAT	Predicting Driver Takeover Performance in Conditional Automation (Level 3) through Physiological Sensing	$149,278	$55,000	Co-PI	2021-2022
DOT	Accessible Technology Leveraged for Autonomous vehicles System: ATLAS II	$300,000	$300,000	PI	2021-2022
NHTSA	Vulnerable and Disabled Road Users: Considerations Inside and Outside the Vehicle	$1,855,934	$406,067	PI	2019-2023

NSF (CHS)	CRII: CHS: Understanding and Supporting the Use of Self-Driving Vehicles by Persons with Visual Disabilities	$175,000	$175,000	PI	2019-2021

SERVICE & VOLUNTEER WORK

Appointments
- National Academies of Science, Engineering, and Math Planning Committee on Leading Practices for Accessibility — 2021-2022
- Clemson Commission on the Black Experience — 2022-Present

Reviewing (Grant Funding)
- National Science Foundation
    - Division of Information and Intelligent Systems — 2018, 2021
    - Division of Computer and Network Systems — 2019, 2022
- Southeastern Transportation Research Innovation, Development and Education Center — 2018

Reviewing (Conference)
- ACM MobileHCI — 2022
- IEEE International Conference on Human-Machine Systems — 2022
- ACM Special Interest Group on Computer Science Education — 2020, 2021
- Human Factors and Ergonomics Society Annual Meeting — 2021, 2022
- Automotive User Interfaces (AutoUI) — 2019
- Richard Tapia Celebration of Diversity in Computing — 2019, 2020
- ACM Conference on Human Factors in Computing Systems — 2018, 2019, 2022
- International Driving Symposium on Human Factors in Driver Assessment — 2018
- Research on Equity & Sustained Participation in Engineering, Computing and Technology — 2019

Reviewing (Journals)
- Technovation — 2023
- International Journal of Human-Computer Interaction — 2022
- ACM Transactions on Accessible Computing — 2020, 2021
- Human Factors: The Journal of the Human Factors and Ergonomics Society — 2019
- The Journal of Applied Ergonomics — 2019
- The Journal of Safety Research — 2019
- The Journal of Multimodal Technologies and Interaction — 2019

Conference Committees and Roles
- ACM AutoUI Conference, Accessibility Co-Chair — 2024
- Human Factors and Ergonomics Society Annual Meeting, Session Chair — 2017

Other Professional Service
- National Science Foundation, Disability Inclusion in Workplaces Through Tech — 2021
- National Society of Black Engineers, Clemson Chapter Faculty Advisor — 2018-2021
- International Society of Blacks in Computing, President — 2020-2021
- University of Florida, Transportation Team Lead — 2016 – 2018
- East Carolina University

- Webmaster   2013 – 2014
  - Undergraduate Outreach and Student Recruitment   2014
  - Research Experiences for Undergraduates Student Supervisor   2014
- Five Star Commitment to Driver Safety, Software Developer   2012

PROFESSIONAL SOCIETY MEMBERSHIPS

American Association for the Advancement of Science (AAAS)
Association of Computing Machinery
Human Factors and Ergonomics Society
IEEE Computer Society Technical Council on Software Engineering
Institute of Electrical and Electronics Engineers
National Federation of the Blind
National Society of Black Engineers
Society of Automotive Engineers