Shandler A. Mason

Ph.D. Candidate

Human Factors + Experience Engineering Lab

(Discovering and Inventing for Human-Centered SE and AI)

Department of Computer Science North Carolina State University Raleigh, North Carolina, USA Phone: (757) 560-1456 Email: shandler.mason@gmail.com Website: https://tinyurl.com/sm-job-port

Professional Preparation

- Ph.D. Computer Science, North Carolina State University, Raleigh, NC, Expected Spring 2026.
- M.S. Computer Science, North Carolina State University, Raleigh, NC, 2024.
- B.S. Computer Science, Minor in Applied Mathematics (with Highest Distinction), North Carolina Agricultural and Technical State University, Greensboro, NC, 2022.

Appointments

- Graduate Research Assistant, North Carolina State University, Department of Computer Science, Raleigh, NC, (Fall 2023 to Present).
- Graduate Teaching Assistant, North Carolina State University, Department of Computer Science, Raleigh, NC, (Spring 2025, Spring 2026).
- Graduate Intern III, The Aerospace Corporation, Center for Space Policy and Strategy, Strategic Foresight Team, Washington, DC, (Summer 2025).
- Graduate Intern II, The Aerospace Corporation, Software Systems & Acquisition, (Summer 2024).
- Graduate Intern I and National Space Intern, The Aerospace Corporation, Software Systems & Acquisition, (Summer 2023).
- Graduate Intern BS, The Aerospace Corporation, Software Systems & Acquisition, (Summer 2022).
- Software Engineering Intern, Target Corporation, Stores Price and Presentation Team, (Summer 2021).
- Software Engineering Intern, The New York Times, NYT Games Team, (Summer 2020).
- Engineering Intern, Facebook, Facebook University, Menlo Park, CA, (Summer 2019).

Awards

- From Theory to Nia (Purpose) Award, NC State African American Cultural Center, 2025
- Carla Savage Award, NC State Department of Computer Science, 2025
- National Center for Women & Information Technology Aspirations in Computing High School Award, National Level, 2017
- The National GEM Consortium Employer PhD Fellowship, North Carolina State University and The Aerospace Corporation, 2022
- Provost's Doctoral Fellowship, North Carolina State University Office of the Provost and College of Engineering, 2022

Scholarships and Grants (Total: \$63,790)

- The National GEM Consortium Employer PhD Fellowship, North Carolina State University and The Aerospace Corporation, 2022, (\$16,000 for one year)
- Provost's Doctoral Fellowship, North Carolina State University Office of the Provost and College of Engineering, 2022, (\$31,200 for one year)
- IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC) Travel Grant, National Science Foundation, 2025, (\$920)
- University of North Carolina Campus Scholarship, NC State Graduate School, 2024-2025, (\$2,500)
- Diversity Enhancement Grant, University of North Carolina Campus and NC State Graduate School, 2024, (\$1,000)
- Grad Cohort Workshop for Inclusion, Diversity, Equity, Accessibility, and Leadership Skills Travel Grant, Computing Research Association, 2024, (\$785)
- Diversity Enhancement Grant, NC State Graduate School, 2023, (\$450)
- Conference Travel Grant, NC State College of Engineering, 2023, (\$1,000)
- Graduate Enhancement Grant, NC State College of Engineering, 2023, (\$2,850)
- Federal Civilian Employee Scholarship, First Command Educational Foundation, 2023, (\$1,000)
- Grad Cohort Workshop for Women Travel Grant, Computing Research Association, 2023, (\$785)
- Student Travel Grant, GEM Annual Board Meeting & Conference, 2023, (\$500)
- Diversity Graduate Assistance Grant, NC State Graduate School, 2022-2023, (\$800)
- Graduate Merit Grant, NC State College of Engineering, 2022-2023, (\$4,000)

Research

My research bridges Human-Computer Interaction, Human Factors, and Software Engineering, focusing on diverse individuals in solo, team-based, and human-AI collaboration contexts. I investigate differing cognitive and behavioral styles influence on individuals' use of software as a medium for collaboration. Through empirical methods, including lab studies, interviews, surveys, workshops, and case studies, I identify societal inequities in collaborative software, providing equitable, user-centered solutions for practitioners, researchers, and students to address technological gaps across academia and industry.

A. Peer-Reviewed Publications

- 1. **Mason, S. A.**, & Kuttal, S. K. (2025). *The Hidden Burden: Insights Into Women's Lived Experiences In Computing*. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC).
- 2. **Mason, S. A.** (2025). RemoteCollabEval: An Inspection Method for Evaluating Interpersonal Tensions in Remote Tools. IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC). (**Graduate Consortium**)
- 3. **Mason, S. A.**, & Kuttal, S. K. (2025). *Analyzing Gender-Based Dynamics in Remote Pair Programming Interactions*. IEEE/ACM Sixth Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering at 47th International Conference on Software Engineering (GE@ICSE).
- 4. **Mason, S. A.**, Lenham, H., & Kuttal, S. K. (2025). *Breaking the Silos: An Actionable Framework for Recruiting Diverse Participants in SE*. IEEE/ACM 47th International Conference on Software Engineering: Software Engineering in Society (ICSE-SEIS).

- 5. Kuttal, S. K., Hart, J., Ensley, M., & Mason, S. A. (2025). Pair Programming in the Lab vs. Wild: A Qualitative Analysis of Creativity Strategies and Dialogue Styles for Agent Training Data. Artificial Intelligence in HCI: Thematic Area, Held as Part of the 27th HCI International Conference (HCII).
- 6. **Mason, S. A.,** & Kuttal, S. K. (2024). *Diversity's Double-Edged Sword: Analyzing Race's Effect on Remote Pair Programming Interactions*. ACM Transactions on Software Engineering and Methodology (TOSEM). (**Journal-First; Presented at ICSE**)
- 7. **Mason, S. A.**, Nain, S., & Kuttal, S. K. (2024). *Bridging Perspectives: Unveiling Racial Dynamics in Remote Pair Programming Communication*. Human-Computer Interaction: Thematic Area, Held as Part of the 26th HCI International Conference (HCII).
- 8. Hart, J., AuBuchon, J., McAuliffe, A., **Mason, S. A.**, & Kuttal, S. K. (2024). *Navigating NLU Challenges in Pair Programming Agents: A Study on Data Size, Gender, Language, & Domain Effects*. Artificial Intelligence in HCI: Thematic Area, Held as Part of the 26th HCI International Conference (HCII).
- 9. **Mason, S. A.**, & Kuttal, S. K. (2023). *Investigating Interracial Pair Coordination During Remote Pair Programming*. IEEE Symposium on Visual Languages and Human-Centric Computing (2).

B. (In Submission) Publications

- 1. **Mason, S. A.**, & Kuttal, S. K. (2025). *Equity by Design: A New HCI Method for Surfacing Inclusivity Gaps in Remote Collaboration Software*. ACM Conference on Human Factors in Computing Systems (CHI).
- 2. Teke, M., **Mason, S. A.**, Heichman, R., & Kuttal, S. K. (2025). *Two Heads (with an Agent) Are Better: PairEquity for Reflective Remote Pair Programming*. ACM Conference on Human Factors in Computing Systems (CHI).

C. Workshop Organizer

- 1. Designing for Everyone: Advancing User Experience Through Human-Centric Design Methodologies, IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Raleigh, NC, USA, October 2025.
- 2. Designing for Inclusivity, Advancing User Experience Through Inclusive Design Methodologies, Human-Computer Interaction: Thematic Area, Held as Part of the 27th HCI International Conference (HCII), Gothenburg, Sweden, June 2025.

D. Media Coverage

- 1. **Mason, S. A.** (2025). "Congratulations to the Spring 2025 Carla Savage Award Winners." NC State CSC News. Link
- 2. Menzies, T., Geddam, R., Ramesh, A. K., Jayesh, K., Varma, S. K., & Mason, S. A. (2022). "Making the Pitch!" NC State CSC News. Link
- 3. Correa, M., Lu, S., Kim, J., Erjavec, N., Shaiva, R., & Mason, S. A. (2020). "Design, Prototype, Zoom: How New York Times Interns Built a Game Remotely." New York Times (NYT) Open. Link

Teaching and Service

I serve as a teaching assistant for Human-Computer Interaction courses aligned with my research, facilitating novice programmers. My teaching emphasizes collaboration and user-centered design by

integrating industry-standard tools with hands-on experiences to equip both undergraduate and graduate students with the technical, evaluative, and interpersonal skills needed for professional success in both academia and industry.

Courses at NC State

- 1. CSC 454/554: Human-Computer Interaction (Spring 2026)
- 2. CSC 454/554: Human-Computer Interaction (Spring 2025)

A. Mentorship

Graduate (2)

- Manali Teke, M.S. Computer Science, (Fall 2024, Spring 2025, Fall 2025)
- Raphael Phillips, M.S. Computer Science, (Summer 2023)

<u>Undergraduate (5)</u>

- Hank Lenham, NSF REU, (Summer 2024, Fall 2024, Spring 2025)
- Brennen Farrell, NC State REU, (Spring 2024)
- Sanket Nain, NC State REU, (Fall 2023, Spring 2024)
- Natalie Meuser, NSF REU, (Summer 2023)
- Senior Project Design Team, NC State Department of Computer Science, (Fall 2023)

High Schoolers (1)

• Taquan Dewberry, (Summer 2023)

B. Research & Academic Activities

- Session Chair of Programming Education & Assessment Research Papers, *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, 2025.
- Publicity and Social Media Co-Chair, *IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC)*, 2024-2025.
- Graduate Liaison, Code Black, NC State, 2025.