

SARAH MORRISON-SMITH | CURRICULUM VITAE

Assistant Professor • Computer Science
Department of Computer Science • Hamilton College
198 College Hill Road, Clinton, New York, 13323
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EDUCATION

UNIVERSITY OF FLORIDA, Gainesville FL Aug. 2016-Aug. 2019

Ph.D. in Human-Centered Computing

- Dissertation: E-Science Collaborations in the Life-Sciences: Challenges and Design Opportunities for Technology and Coordination
- Committee: Dr. Jaime Ruiz (advisor), Dr. Gregory Webster, Dr. Kristy Boyer, Dr. Christina Boucher

COLORADO STATE UNIVERSITY, Fort Collins CO Aug. 2013-Jul. 2016

M.S. in Computer Science

Emphasis: Human-Computer Interaction

- Thesis: Using Audio Cues to Support Motion Gesture Interaction on Mobile Devices
- Advisor: Jaime Ruiz

MONTANA STATE UNIVERSITY, Bozeman MT Aug. 2008-May 2013

B.S. in Computer Science

- Minor: Mathematics
- Institutional Honors

KYOTO UNIVERSITY May 2011-June 2011

Study Abroad

GRANTS, AWARDS, AND FELLOWSHIPS

ACM SIGCHI Development Fund 2023

The SIGCHI Development Fund (SDF) provides resources for the SIGCHI community to spur communication, innovation, and expansion of SIGCHI globally and locally. Award amount: \$5,000

NSF Computer and Information Science and Engineering Research Initiation Initiative (CRII) 2022

The NSF Directorate for Computer and Information Science and Engineering (CISE) seeks to award grants intended to support research independence among early-career academicians who specifically lack access to adequate organizational or other resources. Award amount: \$173,044

Google Explore CS Research (exploreCSR) 2020

Google's exploreCSR aids higher education efforts to support students from marginalized groups to pursue graduate studies and research careers in computing. Award amount: \$18,000.

Gartner Grad Scholarship 2018

Gartner, Inc. supports students in the College of Engineering at the University of Florida interested in learning about information technology. Award amount: \$1,000.

University of Florida Graduate School Fellowship Award 2016-2019

The Graduate School Fellowship assists PhD programs to offer highly competitive research/teaching assistantship stipends to their strongest PhD applicants

Colorado State University College of Natural Sciences Graduate Student Excellence in 2015

Undergraduate Research Mentoring Award

The Teaching and Mentoring Awards recognize faculty and graduate students that have set a standard of excellence in the teaching and mentoring of students. Award amount: \$500.

Colorado State University Computer Science Graduate Fellowship 2014-2015

Provides support to graduate students enrolled in the department

PUBLICATIONS

JOURNAL PAPERS (PEER REVIEWED)

- (J1) **S. Morrison-Smith**, C. Boucher, A. Sarcevic, N. Noyes, C. O'Brien, N. Cuadros, and J. Ruiz. 2022.
Challenges in large-scale bioinformatics projects.
Humanities and Social Sciences Communications 9, 125 (2022).
- (J2) **S. Morrison-Smith**, J. Ruiz. 2020.
Challenges and Barriers in Virtual Teams: A Literature Review
Springer Nature Applied Sciences (2020).
- (J3) **S. Morrison-Smith**, M. Hofmann, Y. Li, and J. Ruiz. 2016.
Using Audio Cues to Support Motion Gesture Interaction on Mobile Devices.
ACM Transactions on Applied Perception (TAP) 13.3 (2016): 16.
- (J4) **S. Morrison-Smith**, C. Marmon, S. Dighans, T. Daniels, C. Izurieta. 2012.
Technical Debt Reduction Using a Game Theoretic Competitive Source Control Approach
Council on Undergraduate Research (CUR), CUR Journal, (Winter 2012), Vol 33, No 2.
- (J5) J.M. Costantini, F. Beuneu, **S. Morrison-Smith**, R. Devanathan, and W. J. Weber. 2011.
Paramagnetic Defects in Electron-Irradiated Yttria-Stabilized Zirconia: Effect of Yttria Content
Journal of Applied Physics 110 (2011) 123506.

CONFERENCE PUBLICATIONS (PEER REVIEWED)

- (C1) X. Guo, Q. Li, **S. Morrison-Smith**, L. Anthony, A. Zare, Y. Song. 2024.
Elucidating Challenges and User Needs Associated with Annotation Software for Plant Phenotyping.
Proceedings of the 2024 International ACM Conference on Intelligent User Interfaces (IUI '24), ACM.
- (C2) A. Aloba, **S. Morrison-Smith**, A. Richlen, K. Suarez, Y.P. Chen, J. Ruiz, L. Anthony. 2023.
Multimodal User Authentication in Smart Environments: Survey of User Attitudes.
arXiv preprint arXiv:2305.03699.
- (C3) **S. Morrison-Smith**, L. Chilton, and J. Ruiz. 2021.
AmbiTeam: Providing Team Awareness Through Ambient Displays.
Proceedings of the 2021 International Conference on Graphics Interfaces (GI '21), ACM.
- (C4) **S. Morrison-Smith**, A. Aloba, H. Lu, B. Benda, S. Esmacili, G. Flores, J. Smith, N. Soni, I. Wang, R. Joy, D. L. Woodard, J. Ruiz, and L. Anthony. 2020.
MMGatorAuth: A Novel Multimodal Dataset for Authentication Interactions in Gesture and Voice.
Proceedings of the 2020 International Conference on Multimodal Interaction (ICMI '20), ACM.
- (C5) N. Soni, S. Gleaves, H. Neff, **S. Morrison-Smith**, S. Esmacili, I. Mayne, S. Bapat, C. Schuman, K. A. Stofer, and L. Anthony. 2020.
Adults' and Children's Mental Models for Gestural Interactions with Interactive Spherical Displays.
Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'2020), ACM.
- (C6) N. Soni, S. Gleaves, H. Neff, **S. Morrison-Smith**, S. Esmacili, I. Mayne, S. Bapat, C. Schuman, K. A. Stofer, L. Anthony. 2019.
Do User-Defined Gestures for Flatscreens Generalize to Interactive Spherical Displays for Adults and Children?
Proceedings of the International Symposium on Pervasive Displays (PerDIS '19), ACM.

- (C7) S. S. A. Shimon, C. Lutton, Z. Xu, **S. Morrison-Smith**, C. Boucher, and J. Ruiz. 2016.
Exploring Non-touchscreen Gestures for Smartwatches.
Proceedings of the 34th Annual ACM Conference on Human Factors in Computing Systems (CHI'16), ACM.
- (C8) **S. Morrison-Smith**, C. Boucher, A. Bunt, and J. Ruiz. 2015.
Elucidating the Role and Use of Bioinformatics Software in Life Science Research.
Proceedings of the 2015 British HCI Conference (British HCI '15). ACM, 230–238.
- (C9) S. S. A. Shimon, **S. Morrison-Smith**, N. John, G. Fahimi, and J. Ruiz. 2015.
Exploring Back-of-The Device Gestures for Mobile Interaction
Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Service (MobileHCI '15). ACM, 227-232.
- (C10) **S. Morrison-Smith**, C. Marmon, S. Dighans, T. Daniels, C. Izurieta. 2012.
Technical Debt Reduction Using a Game Theoretic Competitive Source Control Approach
ISCA 25th International Conference on Computer Applications in Industry and Engineering, (CAINE '12), New Orleans, LA, Nov. 14-16, 2012.

POSTERS AND EXTENDED ABSTRACTS (PEER REVIEWED)

- (AB1) D. A. Sur, N. Cuadros, C. O'Brien, J. Chang, Y. Wu, M. Zee, J. Frazier, H. Patel, **S. Morrison-Smith**. 2023.
DriveGroups: Transparency and Access Control in Life Science Data Sharing
In submission: CHI '23 Extended Abstracts on Human Factors in Computing Systems, ACM (2023).
- (AB2) A. Goldman, C. Espinosa, S. Patel, F. Cavuoti, J. Chen, A. Cheng, S. Meng, A. Patil, L. B. Chilton, **S. Morrison-Smith**. 2022.
QuAD: Deep-Learning Assisted Qualitative Data Analysis with Affinity Diagrams
CHI '22 Extended Abstracts on Human Factors in Computing Systems, ACM (2022).
- (AB3) **S. Morrison-Smith**, H. Yao, I. Wang, B. Lok, and J. Ruiz. 2018.
Staying Alive with Virtual Humans
CHI '18 Extended Abstracts on Human Factors in Computing Systems, ACM (2018).
- (AB4) **S. Morrison-Smith** and J. Ruiz. 2014.
Using Audio Cues to Support Motion Gesture Interaction on Mobile Devices.
CHI '14 Extended Abstracts on Human Factors in Computing Systems, ACM (2014).
- (P1) **S. Morrison-Smith**. 2009.
Data Analysis of Hydration in Fuel Cell Membranes
Department of Energy Science and Engineering Research Challenge (SERCh) (2009).

REFEREED WORKSHOPS

- (W1) **S. Morrison-Smith**, L. B. Chilton, J. Ruiz. 2020.
Facilitating Team Awareness through Ambient Displays
Proceedings of Microsoft's Symposium on the New Future in Work. (2020).
- (W2) **S. Morrison-Smith**, C. Boucher, I. Wang, and J. Ruiz. 2016.
Opportunities for Supporting Large-Scale Collaborative Projects.
Proceedings of Computer-Supported Cooperative Work and Social Computing (CSCW '16): Workshop on Large-scale Collaborative Projects to Affect Societal Change.

ARTICLES

- (AR1) **S. Morrison-Smith**, L. B. Chilton, J. Ruiz. 2020.
AmbiTeam: Enabling Awareness of Remote Team Activities Using Ambient Displays
ACM XRDS Magazine. (2021).

TEACHING

HAMILTON COLLEGE , Clinton NY CPSCI 410 Senior Seminar on HCI for Social Good Instructor	<i>Fall 2023</i>
CPCSI 101 Computer Science for All Instructor	<i>Spring 2024 & 2023</i>
CPCSI 220 Principles of Programming Languages Instructor	<i>Spring 2024, Fall 2022</i>
CPCSI 360 Developing Accessible User Interfaces Creator and Instructor	<i>Fall 2022 & 2023</i>
BARNARD COLLEGE , New York NY COMS BC 3162 Developing Accessible User Interfaces Creator and Instructor	<i>Spring 2020 & 2021</i>
COMS BC 3364 Introduction to Contextual Design for Technology Creator and Instructor	<i>Fall 2019, 2020, & 2021</i>
Pre-College Program: Accessibility in the World and on the Web Creator and Instructor	<i>Summer 2021</i>
Pre-College Program: User Experience Design for Technology Creator and Instructor	<i>Summer 2020</i>
UNIVERSITY OF FLORIDA , Gainesville FL COP 3502 Introduction to Programming 1 Instructor	<i>Summer 2019</i>
COLORADO STATE UNIVERSITY , Fort Collins CO CS 464 Introduction to Human-Computer Interaction Teaching Assistant	<i>Spring 2016 & 2015</i>
MONTANA STATE UNIVERSITY , Bozeman MT M 105Q Contemporary Mathematics Educational Methods Teaching Fellowship	<i>Fall 2012</i>
Tutoring Association for Women in Computing Tutor	<i>Fall 2012</i>

SERVICE

RESEARCH PROGRAM & ORGANIZING COMMITTEES

Reviewer , ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2023
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Assistant Chair , ACM SIGCHI Conference on Human Factors in Computing Systems Late Breaking Work (CHI)	2023
Reviewer , ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2022
Senior Program Committee , ACM International Conference on Multimodal Interaction (ICMI)	2022
Reviewer , ACM Conference on Computer-Supported Cooperative Work (CSCW)	2021
Reviewer , ACM Conference on Mobile Human-Computer Interaction (MobileHCI)	2021
Reviewer , ACM Conference on Designing Interactive Systems (DIS)	2021
Assistant Chair , ACM SIGCHI Conference on Human Factors in Computing Systems Late Breaking Work (CHI)	2021
Reviewer , ACM Conference on Designing Interactive Systems (DIS)	2020
Reviewer , ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)	2020
Reviewer , ACM Conference on Designing Interactive Systems (DIS)	2019
Reviewer , ACM International Conference on Intelligent User Interfaces (IUI)	2019
Reviewer , Graphics Interface (GI)	2014

DEPARTMENTAL & UNIVERSITY SERVICE

HAMILTON

Search Committee , Computer Science Department	2023-Present
SREB Recruiter , Hamilton College	2023-Present
Organizer , AccessHack	2023

BARNARD

Department Representative , Barnard Summer Research Institute	2021-2022
Judge , Columbia DivHacks	2021
Coordinator , Barnard Computer Science Summer Research	2020
Mentor , Design at Columbia	2020-2021
Organizer , Barnard BEARS: Better, Enhance, and Advance Research Series	2020-2021
Judge , Columbia Virtual Campus Design Challenge	2020

ORGANIZATIONS

Affiliate , Alliance for Identity-Inclusive Computing Education (AiiCE)	2022-Present
Member , American Association for the Advancement of Science	2017-Present
Member , Gator Women in Computer Science	2016-2017
Chair (2015), Cofounder and Vice-Chair (2014) , ACM's Women in Computing (ACM-W) Colorado State University	2014-2015
Member , Upsilon Pi Epsilon - Colorado State University Chapter	2014-2016

Member , Association for Computing Machinery (ACM)	<i>2014–Present</i>
Secretary (2011–2013), Member (2009–2011) , Association for Women in Computing (AWC) – Montana State University	<i>2011–2013</i>

OUTREACH

Colorado State University's ACM-W K-12 Outreach Series	<i>2014—2015</i>
Colorado State University's Math, Science, & Technology Day	<i>2013—2014</i>
Montana State University's Engineer-a-thon	<i>2012</i>

INVITED TALKS AND WORKSHOPS

Panel: Ada Lovelace Day Hamilton College Hamilton College Library	<i>Clinton, NY October 2023</i>
Workshop: Accessibility Columbia University DivHacks	<i>New York, NY October 2021</i>
Panel: Accessibility Columbia University DivHacks	<i>New York, NY October 2021</i>
Workshop: Fundamentals of Version Control using Git and GitHub Barnard College Vagelos Computational Science Center	<i>New York, NY October 2021</i>
Intro to Barnard CS and Hands-on Data Visualization Barnard College Science Pathways Scholars Program (SP ²)	<i>New York, NY July 2021</i>
Challenges and Barriers in Virtual Teams: A Literature Review AnnexBox	<i>New York, NY July 2021</i>
Career Paths in STEM Barnard College Summer Research Institute	<i>New York, NY June 2021</i>
“Why Are There So Many Students with Disabilities?”: Looking at Disability from a DEI Lens Barnard College Center for Engaged Pedagogy	<i>New York, NY March 2021</i>
Introduction to Source Control Barnard College Barnard BEARS: Better, Enhance, and Advance Research Series	<i>New York, NY March 2021</i>
Finding Your Mentor Barnard College Barnard BEARS: Better, Enhance, and Advance Research Series	<i>New York, NY January 2021</i>
	<i>New York, NY</i>

User Interface/User Experience Columbia University DivHacks Hackathon	<i>October 2020</i>
Quick Guide to Accessible Design Columbia University Design at Columbia	<i>New York, NY June 2020</i>
Eliciting Gestures from Users Barnard College	<i>New York, NY May 2019</i>
Supporting Biological E-Science Through HCI Center for Minorities and People with Disabilities in IT	<i>Houston, TX May 2019</i>
Exploring Users' Work Practices, Needs, and Mental Models to Build the Next Generation of Interactive Technology Future Faculty Workshop University of Notre Dame	<i>Notre Dame, IN April 2019</i>
Mental Health & Graduate School University of Florida	<i>Gainesville, FL February 2019</i>
Calming CHI Anxiety: A Mindfulness Approach University of Florida	<i>Gainesville, FL September 2018</i>
A Picture is Worth a Thousand Words: Making Informative Figures for Research Papers University of Florida	<i>Gainesville, FL October 2017</i>
Improving At-Home CPR Training with Virtual Feedback University of Florida	<i>Gainesville, FL July 2017</i>
RSIs or: How I learned to Stop Worrying and Love the Foot Mouse University of Florida	<i>Gainesville, FL July 2017</i>