Sarah Sterman

Research Assistant Professor Department of Computer Science University of Illinois Urbana-Champaign

> ssterman@illinois.edu ssterman.web.illinois.edu

RESEARCH INTERESTS

Human-Computer Interaction · Education · Creative Process · Creativity Support Tools

EDUCATION

2022	Ph.D.	Computer Science	University of California, Berkeley	
		Designated Emphasis in New Media		
		Advisor: Eric Paulos		
		Thesis: Process-Sensitive Creativity		
		Support Tools		
2016	MS	Computer Science	Stanford University	
2014	BS	Engineering: Product Design	Stanford University	

PUBLICATIONS

Peer Reviewed Publications

CHI '23 ♀ Best Paper	Sterman, S., Nicholas, M., Vivrekar, J., Mindel, J., and Paulos, E. <u>Kaleidoscope: A</u> <u>Reflective Documentation Tool for a User Interface Design Course.</u> In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems.
C&C '22 ♥ Best Paper	Nicholas, M.*, Sterman, S .*, and Paulos, E. <u>Creative and Motivational Strategies of Expert Practitioners.</u> In Proceedings of the 2022 ACM Conference on Creativity and Cognition. (*denotes equal contribution)

CSCW '22	Sterman, S.*, Nicholas, M.*, and Paulos, E. 2022. <u>Towards Creative Version Control</u> . In Proceedings of the 2022 ACM Conference on Computer Supported Cooperative Work and Social Computing. (*denotes equal contribution)
CHI '20	Sterman, S., Huang, E., Liu., V, and Paulos, E. 2020. <u>Interacting with Literary Style through Computational Tools.</u> In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems.
DIS '18	Torres, C., Sterman, S. , Nicholas, M., Lin, R., Pai, E., and Paulos, E. 2018. <u>Guardians of Practice: A Contextual Inquiry of Failure-Mitigation Strategies within Creative Practices</u> . In Proceedings of the 2018 Designing Interactive Systems Conference.
CHI '18 Rest Paper Honorable Mention	Tian, R., Sterman, S. , Chiou, E., Warner, J., and Paulos, E. 2018. <u>MatchSticks:</u> <u>Woodworking through Improvisational Digital Fabrication</u> . In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems.
TEI '18	Dierk, C., Sterman, S. , Nicholas, M., and Paulos, E. 2018. <u>HäirlÖ: Human Hair as Interactive Material</u> . In Proceedings of the 12th International Conference on Tangible, Embedded, and Embodied Interaction.
CSCW '17	Kim, J., Sterman, S. , Cohen, A., and Bernstein, M. 2017. <u>Mechanical Novel:</u> <u>Crowdsourcing Complex Work through Reflection and Revision</u> . In Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing.

Lightly Reviewed Workshop Papers and Talks

CHI '23	Sterman, S. "Perceptions of Process Influence Creativity Support Tool Adoption." Position paper for ACM CHI Conference on Human Factors in Computing Systems workshop <i>Digital Skills for the Creative Practitioner: Supporting Informal Learning of Technologies for Creativity.</i>
CHI '23	Zhou, D. and Sterman, S. "Creative Struggle: Arguing for the Value of Difficulty in Supporting Ownership and Self-Expression in Creative Writing." Position paper for ACM CHI Conference on Human Factors in Computing Systems workshop <i>Intelligent and Interactive Writing Assistants</i> .
C&C '22	Sterman, S. "Creative Reflection through Interpretive Style Analysis." Position talk at ACM Creativity & Cognition workshop <i>Augmenting Personal Creativity with AI.</i>
CHI '18	Nicholas, M. and Sterman, S. "Between Technology and Nature: Blurring Boundaries in Outdoor HCI." Position paper for the ACM CHI Conference on Human Factors in Computing Systems workshop <i>HCI Outdoors: Understanding Human-Computer Interaction in the Outdoors.</i>

WORKSHOPS ORGANIZED

HASTAC '17 Stanfill, M., Li, J., Stenger, J., Sterman, S. (2017). Digital Humanities Methods and

Fan Studies. HASTAC '17.

AWARDS AND GRANTS

2023	Provost's Faculty Retreat Grant
	\$4000 grant for "Reflective Methods Modules: Growing Reflective Practice among Graduate Students"
2023	Best Paper Award – ACM CHI
	Conference on Human Factors in Computing Systems
2022	Best Paper Award – ACM C&C
	Conference on Creativity & Cognition
2020	BCNM Undergraduate Research Fellowship (Mentor)
2020	Outstanding Graduate Student Instructor Award, UC Berkeley
2018	Best Paper Honorable Mention – ACM CHI
	Conference on Human Factors in Computing Systems
2017	Figure Eight's AI for Everyone Challenge
	\$25,000 grant for crowdsourcing human judgments of literary style.
2016-2018	Berkeley Chancellor's Fellowship
2016	Berkeley EECS Excellence Award
2016	NSF GRFP Honorable Mention

ACADEMIC SERVICE

2023	Workshops and Tutorials Co-Chair C&C '24
2023	NSF Panel Reviewer
2023	Associate Chair DIS '23
2018	Student Volunteer TEI '18
2017-2023	ACM Reviewer DIS '19-23, CHI '19-24, CHI Play '17, C&C '19, CSCW '19-'21, UIST '23, ToCHI '23
	Special Recognition for Outstanding Reviews: DIS '20, CHI '23, DIS '23,
	UIST '23

OUTREACH AND DEI

2023	Invited Panelist: NSF CSGrad4US Fellows Mentoring Program Panel
	new PhD students returning from the workforce
2020-2022	UC Berkeley HCI Research Undergraduate Reading Group – Coordinator
	undergraduates seeking to get started in research
2017-2021	Bay Area Scientists in Schools – Elementary School Science Outreach Instructor
	4 th and 5 th grade classes
2020	Tech and Social Impact – Invited Speaker
	high school and undergraduate girls interested in STEM
2019	Center for Cyber Education at Mississippi State University, Summer Camp – Invited
	Author Talk: The Code Witch
	40 middle schoolers and 40 high schoolers in high poverty areas of Mississippi
2017	Skype a Scientist – Virtual Visit Host
	high school classes
2016	UC Berkeley Invention Lab Elementary School Outreach – Paper Robots Facilitator
	elementary school children
2016	UC Berkeley Invention Lab Athena Outreach – Paper Lanterns Facilitator
	middle school girls
2016	Girls Teaching Girls to Code – Arduino Instructor
	high school girls
2014	Girls Teaching Girls to Code – Web Development Instructor
	high school girls
2013	Girls in Tech Minneapolis – Invited Author Talk: The Code Witch

TEACHING

2023 Instructor	CS 598 SPH/SMC: Research Methods in HCI
-----------------	---

UC Berkeley

e e berkerey		
2021	Certificate of Teachin	ng and Learning in Higher Education
2019	Lecturer	CS160: User Interface Design and Development
2019	Graduate Student Instructor	NWMEDIA 203: Critical Making
2018	Graduate Student Instructor	CS61B: Data Structures

Stanford University

2016	Teaching Assistant	CS101: Introduction to Computing Principles
2016	Teaching Assistant	CS247: Human-Computer Interaction Design Studio
2015	Head Teaching Assistant	CS105: Introduction to Computers
2014	Teaching Assistant	CS122: Artificial Intelligence: Philosophy, Ethics & Impact
2014	Teaching Assistant	CS142: Web Applications
2014	Teaching Assistant	CS181: Computers, Ethics, and Public Policy
2013	Teaching Assistant	CS181: Computers, Ethics, and Public Policy
2013	Teaching Assistant	CS103: Mathematical Foundations of Computing
2012	Section Leader	CS106A: Programming Methodology
2012	Section Instructor	CS2C: Introduction to Multimedia Production
2011	Section Instructor	CS1C: Introduction to Computing

INVITED TALKS AND GUEST LECTURES

2023	Invited Panelist	In2Writing Workshop, CHI
		Interdisciplinary Perspectives on Writing Assistants
2023	Invited Talk	Siebel Center for Design, UIUC
		Engaging Design in Human Computer Interaction Research
2022	Invited Talk	University of California, Santa Barbara
		Designing for Process in Computational Creativity Support Tools
2022	Invited Talk	University of Illinois, Urbana-Champaign
		Designing for Process in Computational Creativity Support Tools
2022	Invited Talk	Purdue University
		Teaching and Learning Process in Computer Science and Design
2022	Invited Talk	Olin College of Engineering
		Designing for Process Values in Computational Creativity Support
		Tools
2022	Workshop	Teaching Conference for First-Time Graduate Student Instructors
		Teaching Computer Science
2021	Guest Lecture	Augmenting Human Dexterity (graduate level)
		Interviewing and Needfinding
2020	Workshop	Berkeley Masters in Design (graduate level)
	(2 day)	Encountering Programming: Hands on with Foundational Software
		Tools
2020	Guest Lecture	Augmenting Human Dexterity (graduate level)

		Interviewing and Needfinding
2019	Guest Lecture	The Beauty and Joy of Computing (undergraduate level)
		Human Computer Interaction
2019	Guest Lecture	Introduction to Data Visualization (graduate level)
		Heuristic Evaluation in Data Visualization

SELECTED PROFESSIONAL EXPERIENCE

2023-present	Research Assistant Professor, University of Illinois, Urbana-Champaign		
	PI of Process, Interaction, and Creativity Lab		
2021 - 2022	Student Researcher, Google		
	Group: Hearing Accessibility Mentor: Dimitri Kanevsky		
2021	Research Intern, Google		
	Group: Hearing Accessibility Mentor: Dimitri Kanevsky		
2014 - 2016	Research Assistant, HCI Group, Stanford University Computer Science		
	Advisor: Michael Bernstein Mentor: Joy Kim		
2014	Software Engineering Intern, Good Eggs		
	Local and sustainable food marketplace and delivery.		
2013	Author, The Code Witch		
	Novella for young readers.		
2012	Software Engineering Intern, Root-1		
	Software for K-12 education.		

RESEARCH MENTORSHIP

UIUC - Advising				
2023	David Zhou	PhD	Advisor	
2023	Mingyan Claire Tian	PhD	Independent Study	
2023	James Eschrich	PhD	Independent Study	
2023	Andrew Chen	MS	Advisor	
UIUC - PhD Committees				
2023	Wendy Shi	PhD	Prelim Committee	
2023	Yi-Shyuan Chiang	PhD	Quals Committee	
UIUC - Mentorship				
2023	Shon Shtern	iCAN	Summer Research	
2023	Chenyang Zhang	MCS	Independent Study	
2023	Zhuoru Li	MCS	Independent Study	

2023	Yasmin Isa	PhD	Research Project		
UC Berkeley - Mentorship					
2020-2021	Jessie Mindel	Undergraduate BCNM Fellowship	Next position: MS MIT Media Lab		
2019-2020	Angel Ibarra	Undergraduate			
2020	Michelle Gantos	Undergraduate Jacobs Design Scholar			
2020	Ryan Qiao	Undergraduate	Next Position: MS Berkeley ISchool		
2019	Alyse Jones	Undergraduate SUPERB REU	Next position: PhD Virginia Tech		
2019	Junghyun Choy	Undergraduate			
2019	Debbie Yuen	Undergraduate			
2019	Resham Khanna	Undergraduate			
2018	Shayna Kothari	Undergraduate			
2018	Tiffany Chien	Undergraduate			
2018	Weiwei Zhang	Undergraduate			
2016-2018	Vivian Liu	Undergraduate	Next position: PhD Columbia		
2016-2018	Evey Huang	Undergraduate	Next Position: PhD Northwestern		