Veronica A. Rivera

Research Overview

I study the digital safety needs of marginalized and vulnerable populations, with an eye towards designing more effective digitally-mediated protections. I focus on those who face increased risk of harm online due to personal risk factors and/or engagement in high-risk contexts, such as certain labor. I employ a mixed-methods approach to data collection and analysis, including user interviews and large-scale surveys.

Academic Appointments

- Fall 2023- **Stanford University**, Embedded Ethics Postdoctoral Fellow, Institute for Human-Centered AI (HAI) & McCoy Family Center for Ethics in Society Advisor: Zakir Durumeric
 - 2023 University of Florida, Visiting Researcher, Computer and Information Science and Engineering
- 2022-2023 Max Planck Institute for Software Systems, Visiting Researcher, Safety and Society Group

Education

- 2017-2023 **PhD, University of California Santa Cruz**, *Computational Media Dissertation:* Safety & Harm in Social Computing Systems that Support Matching Markets *Committee:* David Lee, Chris Benner, Elizabeth Gerber, Elissa M. Redmiles, Norman Makoto Su
- 2013–2017 **BSc, Harvey Mudd College**, *Joint Computer Science and Mathematics* Concentration in Psychology

Fellowships and Awards

- 2024 Rising Star in AI Ethics, Women in AI Ethics (WAIE)
- 2021 ARCS Scholarship, UC Santa Cruz, excellence in academics and STEM research
- 2019 **Chancellor's Graduate Internship Fellowship**, *UC Santa Cruz* 1 out of 5 recipients in the university
- 2019 CRA Travel Scholarship, CRA, To attend CRA-W Grad Cohort Workshop for Women
- 2019 **CRA Travel Scholarship**, *CRA*, To attend CRA-URMD Grad Cohort Workshop for underrepresented students
- 2018 Summer Regent's Fellowship, UC Santa Cruz
- 2013 **President's Scholarship**, *Harvey Mudd College*, 4-year full-tuition 1 out of 8 recipients in the graduating class of 2017

Publications

* denotes equal first-authorship, listed alphabetically by last name

Peer-Reviewed Conference & Journal Papers

CSCW 2024 Huang, J., Ma, N.F., **Rivera, V.A.**, Somani, T., McGrenere, J., Yoon, D. *Design Tensions in Online Freelancing Platforms: Using Speculative Participatory Design to Support Freelancers' Relationships with Clients.* Proceedings of the ACM on Human-Computer Interaction.

- SIGCSE 2024 **Rivera, V.A.**, Su, N.M *Teaching Ethics and Activism in a Human-Computer Interaction Professional Master's Program.* The 2024 ACM Technical Symposium on Computer Science Education
 - CHI 2022 Ma, N.F.*, **Rivera, V.A.***, Yao, Z., Yoon, D. *"Brush it Off": How Women Workers Manage and Cope with Bias and Harassment on Gender-agnostic Gig Platforms.* The 2022 ACM Conference on Human Factors in Computing Systems.
- CSCW 2021 **Rivera, V.A.**, Lee, D.T. *I Want to, but First I Need to: Understanding Crowdworkers Career Goals, Challenges, and Tensions.* Proceedings of the ACM on Human-Computer Interaction.

In Review

2023 **Rivera, V.A.**, Wilkinson, D., Redmiles, E.M., Strohmayer, A. *Safer Algorithmically-Mediated Offline Introductions: Harms and Protective Behaviors*

Peer-Reviewed Workshop & Consortia Papers

- CSCW 2019 **Rivera, V.A.**, Lee, D.T. *It Takes a Village to Change Jobs: Towards Workplace Relationships that Support Reskilling in Crowdwork*. The Future of Work(places): Creating a Sense of Place for On-Demand Work. Workshop at ACM CSCW.
 - ITS 2018 **Rivera, V.** A New Approach to Testing Children with Autism Spectrum Disorder Using Affect. Doctoral Consortium at the International Conference on Intelligent Tutoring Systems.

Policy White Papers

- Georgetown Elissa M. Redmiles, Sarah Adel Bargal, Grace (Natalie) Brigham, Nina Grgic-Hlaca, Tadayoshi
- MDI 2024 Kohno, Jaron Mink, **Veronica A. Rivera**, Carmela Troncoso, Lucy Qin, Miranda Wei. *Formal Response on NIST AI Executive Order*. Published via the Georgetown University McCourt School of Public Policy's Massive Data Institute.

Mathematics & Computer Vision Publications

- JKTR 2017 Nelson, S., Orrison, M., **Rivera, V.** *Quantum Enhancements and Biquandle Brackets*. The Journal of Knot Theory and its Ramifications.
- ISVC 2015 Tenorio, D., **Rivera, V.**, Medina, J., Leondar, A., Gaumer, M., Dodds, Z. *Visual Autonomy via 2D Matching in Rendered 3D Models*. The International Symposium on Visual Computing.
- JKTR 2014 Nelson, S., **Rivera, V.** *Quantum Enhancements of Involutory Birack Counting Invariants.* The Journal of Knot Theory and its Ramifications

Teaching Experience

Instructor of Record

Ethics in Technology, *Stanford University Pre-Collegiate Summer Institutes*, Summer 2023 10 day intensive high school course I designed based on my UCSC HCI 220 course

Ethics & Activism in Technology & Design, *UCSC HCI 220*, Spring 2022; Winter 2023 I designed the course in Spring 2022 as an elective in the HCI Professional Master's program; it was made a required course in the program after the first offering

Teaching Assistant

Human-Centered Design Research, UCSC CMPM 178, Winter 2021; Winter 2022 Data Structures for Interactive Media, UCSC CMPM 35, Fall 2021 Beginning Programming in Python, UCSC CSE 20, Spring 2021 Introduction to Programming, Accelerated, UCSC CMPS 12A, Fall 2018 Introduction to Programming in Java, UCSC CMPS 5J, Winter 2018; Spring 2018 Introduction to Computer Science, *Harvey Mudd College CS 05*, Fall 2014 Embedded Ethics Teaching Fellow

Programming Methodology, *Stanford University CS 106A*, Winter 2024 **Programming Abstractions**, *Stanford University CS 106B*, Spring 2024

Computer Organization and Systems, *Stanford University CS 107*, Spring 2024; Winter 2024; Fall 2023

From Languages to Information, *Stanford University CS 124*, Winter 2024 Human-Centered Product Management, *Stanford University CS 177*, Fall 2023

Artificial Intelligence: Principles and Techniques, *Stanford University CS 221*, Spring 2024; Fall 2023

Guest Lectures

Data Ethics: Choices and Values, *Stanford University CS 106A*, March 2024 Privacy and End-to-End Encryption, *Stanford University CS 106A*, February 2024 Ethics and Problem Selection in Security, *Stanford University CS 356*, December 2023

Academic Service

Program Committees

2024 CSCW 2024, Associate Chair

Paper Reviewing

- 2023 USENIX Security 2024, Paper sub-reviewer
- 2023 CSCW 2024, Paper reviewer
- 2023 New Media and Society, Invited paper reviewer
- 2023 IMC 2023, Student travel grant application review committee
- 2021 CHI 2022, Paper reviewer, Outstanding reviewer recognition
- 2021 CSCW 2021, Paper reviewer, Outstanding reviewer recognition
- 2020 CSCW 2020, Paper reviewer
- 2019 CSCW 2019, Paper reviewer
- 2019 Human-Computer Interaction Journal, *Invited paper reviewer* Department and University Service
- 2023 Ethics & Society Review Coordinating Panelist, Stanford University, HAI Seed Grants Review Committee
- 2020-2021 Assistant Community Manager, UC Santa Cruz Computational Media Department
- 2018, 2020 Alumni Admissions Interviewer, Harvey Mudd College
 - 2018 **Graduate Student Mentor**, *UC Santa Cruz Department of Computational Media* Helped first year graduate student navigate the department and grad school

Research Mentoring

Sasha Ronaghi, Stanford University CS BS/MS '25 Annika Lin, Georgetown University CS BS '24 Leah Rosenbloom, Brown University CS PhD '24 Betros Abraha, UC Santa Cruz BS '23 Ashvini Bhupatiraju, UC Santa Cruz BS '22, Now: Software Engineer at Wells Fargo Jason Chan, UC Santa Cruz BS '20, Now: Product Designer at Adobe
Mark Gonzales, UC Santa Cruz BS '22, Now: Electronic Engineer at ZaiNar Tech
Gurdikhia Kaur, UC Santa Cruz BS ' 19, Now: MSc Student at UCL
Sonali Malik, UC Santa Cruz BS '21, Now: Product Manager at Microsoft
Taylor McPherson, UC Santa Cruz BS '20, Now: Frontend Engineer at Hightouch
Benjamin Paulsen, UC Santa Cruz BS '24
Saki Yokokawa, UC Santa Cruz BS '23, Now: Web Developer at Cubic Transportation
Celeste Zhao, UC Santa Cruz BS '22, Now: MS Student at University of Washington HCDE
Su Zin, UC Santa Cruz BS '23

Invited Talks

Safety in Algorithmically-Mediated Offline Introductions

- Stanford Computer Forum Security Workshop (April 2024)
- Stanford HAI Fellows Workshop (March 2024)
- NSF Site Visit for the Center on Privacy and Security of Marginalized and Vulnerable Populations (March 2024)
- O Georgetown University Massive Data Institute Tea Time (February 2024)
- University of Maryland HCIL Brown Bag Lunch Seminar (February 2024)
- Stanford University HCI Lunch (February 2024)

Post-Digital Safety in Digitally-Mediated Offline Interactions

- UC San Diego HCI Seminar (March 2023)
- Stanford University Security Lunch (February 2023)
- Stanford University Computing & Society Seminar (Janurary 2023)
- O Mensch und Computer (MuC) Workshop on Inclusive Security by Design (September 2022)

Long-Term Worker Well-Being in the Future of Work

• Stanford University HCI Lunch (April 2022)

Invited Panel Moderator

• Stanford University, Beyond Content Moderation Workshop (November 2023)

Professional Development

- 2021 **Teaching for Equity Certificate**, UC Santa Cruz Center for Innovations in Teaching and Learning
- 2020 Graduate Student Leadership Certificate, UC Santa Cruz Graduate Division
- 2019 Invited workshop attendee, JobKit Developer's Conference at the US White House
- 2019 **Invited workshop attendee**, Human-Computer Interaction Consortium on the Futures of Work