Niloufar Salehi

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University of California, Berkeley

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Interests Social Computing, Human Computer Interaction, Human-Centered AI

Education

- Ph.D., Computer Science, 2018
  Stanford University, CA, USA
- Master of Science, Computer Science, 2016
  Stanford University, CA, USA
- Bachelor of Science, Computer Engineering, 2013
  Sharif University of Technology, Tehran, Iran

Employment

- Assistant Professor, School of Information, July 2018-present
  Affiliated appointment at Electrical Engineering and Computer Science (EECS), Feb 2020-present
  Affiliated appointment at Computational Percision Health (CPH), Nov 2022-present
  University of California Berkeley, CA, USA
- Microsoft Research, July-September 2015
  Redmond, WA, USA

Honors and Awards

- W. T. Grant Foundation Scholar, class of 2027
- Outstanding Paper Award at EMNLP 2023
- Best Paper Honorable Mention Award at CHI 2015, CSCW 2017, CHI 2020
- Best Paper Award at CHI 2013
- Stanford Graduate Fellowship, 2014-2017
- Stanford School of Engineering Fellowship, 2013-2014

Publications Top-tier venues in human-computer interaction research include the ACM conferences CHI and CSCW as well as ACM FAccT. Students are typically named first in human-computer interaction research.

Refereed Articles

- Mehandru, M., Agrawal, S., Xiao, Y., Khoong, E., Gao, G., Carpuat, M., **Salehi, N.**, Physician Detection of Clinical Harm in Machine Translation: Quality Estimation Aids in Reliance and Backtranslation Identifies Critical Errors. *EMNLP 2023* **Outstanding Paper Award**
- Xiao, S., Jhaver, S., **Salehi, N.**, Addressing Interpersonal Harm in Online Gaming Communities: The Opportunities and Challenges for a Restorative Justice Approach *TOCHI 2023*
- Robertson, S., Nguyen, T., Hu, C., Albiston, C., Nikzad, A., **Salehi, N.**, Expressiveness, Cost, and Collectivism: How the Design of Preference Languages Shapes Participation in Algorithmic Decision-Making. *CHI 2023*
- **Salehi, N.**, Pakzad, R., Lajevardi, N., Asad, M., Sustained Harm Over Time and Space Limits the External Function of Online Counterpublics for American Muslims. *Proc. ACM Hum.-Comput. Interact, CSCW 2023* **Recognition for Contribution to Diversity and Inclusion**
- Warren, R. and **Salehi, N.**, Trial by File Formats: Exploring Public Defenders' Challenges Working with Novel Surveillance Data. *Proc. ACM Hum.-Comput. Interact. 6, CSCW 2022*
- Gak, L., Olojo, S., and **Salehi, N.**, The Distressing Ads That Persist: Uncovering The Harms of Targeted Weight-Loss Ads Among Users with Histories of Disordered Eating. *Proc. ACM Hum.-Comput. Interact. 6, CSCW 2022*
- Robertson, S., Nguyen, T. and **Salehi, N.**, Not Another School Resource Map: Meeting Underserved Families' Information Needs Requires Trusting Relationships and Personalized Care. *Proc. ACM Hum.-Comput. Interact. 6, CSCW 2022* **Recognition for Contribution to Diversity and Inclusion**

- Kaviani, D. and **Salehi, N.**, Bridging Action Frames: Instagram Infographics in U.S. Ethnic Movements. *Proc. ACM Hum.-Comput. Interact. 6, CSCW 2022*
- Park., J. S., Karahalios, K., **Salehi, N.**, Eslami, M., Power Dynamics and Value Conflicts in Designing and Maintaining Socio-Technical Algorithmic Processes. *Proc. ACM Hum.-Comput. Interact. 6, CSCW 2022*
- Mehandru N., Robertson S., and **Salehi, N.**, Reliable and Safe Use of Machine Translation in Medical Settings. *FAccT 2022*
- Xiao, S., Cheshire, C., and **Salehi, N.**, Sensemaking, Support, Safety, Retribution, Transformation: A Restorative Justice Approach to Understanding Adolescents' Needs for Addressing Online Harm. *CHI 2022*
- Robertson, S., Nguyen, T., and **Salehi, N.**, Modeling Assumptions Clash with the Real World: Transparency, Equity, and Community Challenges for Student Assignment Algorithms. *CHI 2021: SIGCHI Conference on Human Factors in Computing Systems*
- Xin, D., Wu, E., Lee, D., **Salehi, N.**, and Parameswaran, A., Whither AutoML? Understanding the Role of Automation in Machine Learning Workflows. *CHI 2021: SIGCHI Conference on Human Factors in Computing Systems*
- Xiao, S., Metaxa, D., Park, J., Karahalios, K., and **Salehi, N.**, Random, Messy, Funny, Raw: Finstas as Intimate Reconfigurations of Social Media. *CHI 2020: SIGCHI Conference on Human Factors in Computing Systems* **Best Paper honorable mention**
- Wu, E., E. Pedersen, and **Salehi, N.**, Agent, Gatekeeper, Drug Dealer: How Content Creators Craft Algorithmic Personas. *Proc. ACM Hum.-Comput. Interact. 2, CSCW, November 2019*
- **Salehi, N.** and M. Bernstein, Hive: Collective Design Through Network Rotation. *Proc. ACM Hum.-Comput. Interact. 2, CSCW, Article 151, November 2018*
- **Salehi, N.** and M. Bernstein, Ink: Increasing Worker Agency to Reduce Friction in Hiring Crowd Workers. *TOCHI: ACM Transactions on Computer-Human Interaction 2018.*
- Lin, Z. , **N. Salehi**, B. Yao, Y. Chen, and M. Bernstein, Better When It Was Smaller? Community Content and Behavior After Massive Growth *ICWSM 2017: AAAI Conference on Weblogs and Social Media.*
- **Salehi, N.**, A. McCabe, M. Valentine, and M. Bernstein, Huddler: Convening Stable and Familiar Crowd Teams Despite Unpredictable Availability. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work.*
- **Salehi, N.**, J. Teevan, S. Iqbal, and E. Kamar, Communicating Context to the Crowd for Complex Writing Tasks. *CSCW 2017: ACM Conference on Computer-Supported Cooperative Work.* **Best Paper honorable mention**
- Suzuki, R., **N. Salehi**, M. Lam, J. Marroqin, and M. Bernstein, Atelier: Repurposing Expert Crowdsourcing Tasks as Micro-internships. *CHI 2016: SIGCHI Conference on Human Factors in Computing Systems.*
- **Salehi, N.**, L. C. Irani, M. Bernstein, A. Alkhatib, E. Ogbe, K. Milland, and Clickhappier. We Are Dynamo: Overcoming stalling and friction in collective action for crowd workers. *CHI 2015: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper honorable mention**
- Zhao, X., **N. Salehi**, S. Naranjit, S. Alwaalan, S. Voida, and D. Cosley, The many faces of Facebook: Experiencing social media as performance, exhibition, and personal archive. *CHI 2013: SIGCHI Conference on Human Factors in Computing Systems.* **Best Paper Award**
- Joudaki, A., **N. Salehi**, M. Jalili, and M. Knyazeva. EEG-based functional brain networks: does the network size matter? *PloS one, 2012, 7(4), e35673.*

Funding

- W. T. Grant Foundation Mentorship grant (2023-2026), $60,000
- Meta Research Award (2022) $50,000
- W. T. Grant Foundation Scholar (2022-2027), $350,000

- NSF FAI: A Human-Centered Approach to Developing Accessible and Reliable Machine Translation (2022-2025), PI: Marine Carpuat, CO-PIs: Niloufar Salehi and Ge Gao $629,000 ($393K from NSF and $235K from Amazon),
- NSF FW-HTF-R: Human-Machine Teaming for Effective Data Work at Scale: Upskilling Defense Lawyers Working with Police and Court Process Data, PI: Aditya Parameswaran, CO-PIs: Niloufar Salehi, Sarah Chasins, Joseph Hellerstein, Erin Kerrison, $2,000,000
- NSF DASS: Legally & Locally Legitimate: Designing & Evaluating Software Systems to Advance Equal Opportunity, PI: Niloufar Salehi, CO-PIs: Cathrine Albiston and Afshin Nikzad, $750,000
- Google-Bair commons: Human-Centered Tools for Reliable Use of Machine Translation, Niloufar Salehi, Mark Díaz, Samantha Robertson, $34,375
- NSF CRII: CHS: Restoring Justice: New Designs for Moderating Social Media Platforms, PI: Niloufar Salehi (2019-2021)$175,000
- Meta Research Award (2019), Niloufar Salehi, Roya Pakzad, Nazita Lajevardi, $100,000

Select Invited Talks

- *Design for AI Reliability*
  - Keynote, BayLearn 2023, Oakland, 19 October 2023
  - Brown University, Computer Science Seminar, 9 November 2023
  - USC, Computer Science Seminar, 28 November 2023
  - AAAI Workshop: Public Sector LLMs: Algorithmic and Sociotechnical Design, Vancouver, 27 February 2023
- *Human-Centered Machine Translation*
  - Apple, 12 December 2022
  - Stanford HAI (Human-centered AI) conference, 15 November 2022
  - Berkeley AI Research (BAIR) lab, 10 March 2022
  - Keynote, Bridging HCI and NLP Workshop, EACL, 20 April 2021
- *From content moderation to school assignment: What do theories of justice teach us about design?*
  - Blueprint labs, MIT, 21 October 2022
  - CSAIL, MIT, 18 October 2022
  - Harvard University, 17 October 2022
  - University of Maryland, 17 February 2022
  - HCII seminar, CMU, 9 October 2020
  - Metagov seminar, Northwestern University, 20 July 2020
  - CAT Lab, Cornell University, 20 July 2020
- *Design for Collective Action*
  - Informatics, UC Irvine, 21 February 2019
  - Technology and Social Behavior Speaker Series, Northwestern University, 7 Feb 2019
  - USC Annenberg School for Communication and Journalism, 26 November 2018
  - Dean's Lecture, Berkeley School of Information, UC Berkeley, 21 Mar 2018

Select Invited Panels

- *Do We Fix it or Burn it Down? Towards Practicable Critique at CSCW*, CSCW 2021
  with Jacob Thebault-Spieker (moderator), Stevie Chancellor, Michael Ann DeVito, Alex Leavitt, David Karger, and Katta Spiel
- *UIST+ CSCW: A Celebration of Systems Research in Collaborative and Social Computing*
  CSCW and UIST joint panel, 20 October 2020
  with Michael Bernstein (moderator), Irene Greif, Wendy Mackay, Hiroshi Ishii, Jonathan Grudin, Karrie Karahalios, Meredith Ringel Morris, Aniket Kittur, Jaime Teevan, and Amy X. Zhang
- *Feminism in the Age of Big Data: Towards an Intersectional Data Justice*
  Global Women's Rights Forum, USF, 5 March 2019
  with Tamara Kneese (moderator) and Anna Lauren Hoffmann

◇ *Computer-Supported Career Development in The Future of Work*, CSCW 2018
with Julie Hui (moderator), Liz Gerber, Mary Gray, Lynn Dombrowski, and Adam Marcus

SELECT PRESS
◇ **STAT:** Doctors often turn to Google Translate to talk to patients. They want a better option, Mar 2022
◇ **VentureBeat:** UC Berkeley's Niloufar Salehi on restorative justice in social media, Aug 2020
◇ **Wired:** Amazon's Turker Crowd Has Had Enough, Sep 2017
◇ **Motherboard:** The Unknown, Poorly Paid Labor Force Powering Academic Research, Feb 2016
◇ **The Atlantic:** The Tragedy of the Digital Commons, Jun 2015
◇ **The Guardian:** Amazon's Mechanical Turk workers protest: 'I am a human being, not an algorithm', Dec 2014
◇ **The Daily Beast:** Amazon's Turkers Kick Off the First Crowdsourced Labor Guild, Dec 2014

PROFESSIONAL ACTIVITIES
◇ Faculty, Berkeley AI Research (BAIR)
◇ Co-director, AFOG (afog.berkeley.edu), with Deirdre Mulligan, 2021-2023
◇ NSF proposal panelist 2021, 2022, 2023
◇ Faculty advisor, AI Policy Hub, UC, Berkeley, 2022-present
◇ Program Committee:
- ACM FAAcT (2021)
- ACM CHI (2020-2022)
- ACM CSCW (2019-2020)
- ACM UIST (2019)
- AAAI ICWSM (2016-2018)

◇ Issue Editor: *The Future of Work*, ACM XRDS Magazine, Winter 2017 issue
◇ CSCW 2018 Diversity and Inclusion co-chair
◇ CSCW 2016 webmaster

TEACHING
◇ Info 290: Human-Centered AI, Spring 2023
◇ Info 213: User Interface Design and Development, Fall 2019-2022
◇ Info 217: HCI Research, Fall 2018, Spring 2020, Fall 2020, Fall 2021

STUDENTS
◇ Current PhD students
- Sabriya Alam
- Liza Gak
- Angela Jin
- Tonya Nguyen
- Seyi Olojo (co-advised with Jenna Burrell)
- Sijia Xiao (co-advised with Coye Cheshire)

◇ PhD alumni
- Samantha Robertson, dissertation: "Designing for Reliability in Algorithmic Systems," current: Abridge

◇ Master's students supervised (with publications)
- Rachel B. Warren (2021), current: PhD candidate, UC Irvine
- Sofia Dewar (2020), current: Research lead, Asana
- Eva Wu (2019), current: PhD student, University of Zurich
- Emily Pederson (2019), current: Engineering manager, Apple
- Soravis (Sun) Prakkamakul (2019), current: Software Engineer, Apple
- Qian Yu (2019), current: UX researcher, Google

◇ Undergraduate students supervised (with publications)
- Darya Kaviani (2021), current: PhD candidate, UC, Berkeley (EECS)
- Wesley Deng (2021), current: PhD candidate, CMU (HCII)
- Tonya Nguyen (2021), current: PhD candidate, UC, Berkeley (I School)