Elena Leah Glassman

Assistant Professor of Computer Science 2019-present
Harvard John A. Paulson School of Engineering & Applied Sciences
Stanley A. Marks & William H. Marks Professor 2018-2022
Harvard Radcliffe Institute for Advanced Study

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Lab glassmanlab.seas.harvard.edu (Recently renamed ***The Variation Lab***)

Areas of specialization

Human-Computer Interaction • Programming Systems/Software• Human-AI Interaction

Education

2016-2018	EECS Postdoctoral Scholar	Berkeley Institute of Design, EECS Department, UC Berkeley
	Advised by Björn Hartmann, Associate Professor of EECS	
2012-2016	Graduate student	User Interface Design Group, EECS Department, CSAIL, MIT
	PhD Thesis: ***Clustering and Visualizing Solution Variation in Massive Programming Classes***	
	Advised by Robert Miller, Distinguished Professor of CS	
2008-2011	Graduate student	Robot Locomotion Group, EECS Department, CSAIL, MIT
	M.Eng. Thesis: *A quadratic regulator-based heuristic for rapidly exploring state space*	
	Advised by Russ Tedrake, Professor of EECS	
2010-2011	Visiting researcher	Biomimetics & Dexterous Manipulation Lab, Stanford University
2006-2008	Undergraduate researcher	Robot Locomotion Group, CSAIL, MIT
2004-2006	Undergraduate researcher	Networks & Mobile Systems, CSAIL, MIT
2003-2004	Volunteer research assistant	EEG Lab, Psychology Department, Princeton University

Research Internships

2015	User experience research intern	Search, Google
	Advised by Dan Russell, Senior Research Scientist	
2014	Design research intern	Microsoft Research
	Advised by M.R. Morris, Principal Researcher, and A. Monroy-Hernández, Researcher	

Selected fellowships and honors

2024	Kavli Fellow, National Academy of Sciences
2023-2025	Sloan Fellowship
2018-2022	Radcliffe Fellowship at the Radcliffe Institute for Advanced Study
2017-2018	Moore/Sloan Data Science Fellowship at the Berkeley Institute for Data Science (BIDS)
2014-2015	MIT Amar Bose Teaching Fellowship, for developing innovative tools for teaching CS at scale
2011-2014	NSF Graduate Research Fellow (NSF GRFP)
2008-2011	National Defense Science and Engineering Graduate Fellow (NDSEG)
2004	IEEE President's Scholarship ($10,000)

2003 Intel Foundation Young Scientist Award ($50,000), *awarded to the top 3 individual projects at the Intel International Science & Engineering Fair*

All Publications

Journal articles and refereed conference papers

Top-tier ACM and AAAI conferences in human-computer interaction and adjacent fields, e.g., CHI, CSCW, UIST, IUI, HRI, and ICWSM, are highly selective venues for archival papers only, comparable to many IEEE journals in their selectivity, visibility, and impact.

(The ACM is the largest professional society for computer scientists, and AAAI stands for the Association for the Advancement of Artificial Intelligence.)

Authors are typically ordered such that leading students are listed from largest to smallest contribution from the left. Supervising faculty and postdocs are typically ordered from the right.
The last author is the primary sponsor and supervisor.

* *indicates equal contribution.*
† *indicates a PhD advisee, Master's advisee, or predoctoral research assistant.*
‡ *indicates a Harvard undergraduate student I supervised.*
‖ *indicates a student who took or TF'd my graduate research seminar, CS279R.*
§ *indicates a current or former postdoctoral scholar.*
†† *indicates a current or former visiting scholar.*
‡‡ *indicates NSF grant co-PI.*
** *indicates a PhD student for whom I am or have been a doctoral thesis committee member.*

2024 ACM **CHI**: Conference on Human Factors in Computing Systems

Flagship HCI conference, 26.4% acceptance rate (33.9% for Late Breaking Work or LBW).

C35 Z Gu†, I Arawjo§, K Li‖, JK Kummerfeld††, **EL Glassman**
An AI-Resilient Text Rendering Technique for Reading and Skimming Documents
Provisional patent filed

C34 KI Gero§, C Swoopes†, Z Gu†, JK Kummerfeld††, **EL Glassman**
Supporting Sensemaking of Large Language Model Outputs at Scale

C33 I Arawjo§, C Swoopes†, P Vaithilingam†, M Wattenberg, **EL Glassman**
ChainForge: A Visual Toolkit for Prompt Engineering and LLM Hypothesis Testing

C32 P Vaithilingam†, **EL Glassman**, JP Inala, C Wang
DynaVis: Dynamically Synthesized UI Widgets for Visualization Editing
(Microsoft Internship Project)

C31 LBW Z Gu†, O Raymond, N Al Madi††, **EL Glassman**
Why Do Skimmers Perform Better with Grammar-Preserving Text Saliency Modulation (GP-TSM)? Evidence from an Eye Tracking Study

2023 ACM **CHI**: Conference on Human Factors in Computing Systems

Similar acceptance rates to 2024 CHI conference above, i.e., typically 20-25%.

C30 SA Gebreegziabher, Z Zhang, X Tang, Y Meng, **EL Glassman**, TJ Li
PaTAT: Human-AI Collaborative Qualitative Coding with Explainable Interactive Rule Synthesis
Cited 20 times since May 2023

C29 LBW H Heuer††, **EL Glassman**
Accessible Text Tools: Where They Are Needed & What They Should Look Like

2023 ACM **TOCHI**: Transactions on Computer-Human Interaction

Accepted papers are guaranteed a presentation at the authors' pick of several top-tier ACM HCI conferences.

J4 N Singh*‖, G Bernal*‖, D Savchenko*‖, **EL Glassman**
Where to Hide a Stolen Elephant: Leaps in Creative Writing with Multimodal Machine Intelligence
CS279R course final project, iterated on after the semester ended
Cited 74 times since pre-release in 2022

J3 H Heuer††, **EL Glassman**
Reliability Criteria for News Websites

2023 Other Peer-Reviewed Conference Papers

Acceptance rates at these conferences are typically 30-40%.

C28 P Vaithilingam†, **EL Glassman**, P Groenwegen, S Gulwani, AZ Henley, R Malpani, D Pugh, A Radhakrishna, G Soares, J Wang, A Yim
Towards More Effective AI-Assisted Programming: A Systematic Design Exploration to Improve Visual Studio Intelli-Code's User Experience
IEEE/ACM International Conference on Software Engineering: Software Engineering in Practice ***(ICSE-SEIP)*** *(Microsoft Internship Project)*

C27 H Heuer††, **EL Glassman**
Accessible Text Tools for People with Cognitive Impairments and Non-Native Readers: Challenges and Opportunities
Mensch und Computer

2022 ACM **UIST**: User Interface Software & Technology

Typically 20-25% acceptance rate.

C26 L Yan†, M Kim‡‡, B Hartmann‡‡, T Zhang§, **EL Glassman**
Concept-Annotated Examples for Library Comparison

2022 ACM/IEEE **HRI**: International Conference on Human-Robot Interaction

Typically 20-25% acceptance rate.

C25 S Booth**, S Sharma‖, S Chung, J Shah, **EL Glassman**
Revisiting Human-Robot Teaching and Learning Through the Lens of Human Concept Learning Theory

2022 ACM **CHI**: Conference on Human Factors in Computing Systems

C24 H Heuer††, **EL Glassman**
A Comparative Evaluation of Interventions Against Misinformation: Augmenting the WHO Checklist

C23 LBW P Vaithilingam†, T Zhang§, **EL Glassman**
Expectation vs. Experience: Evaluating the Usability of Code Generation Tools Powered by Large Language Models
Cited 299 times since May 2022

2022 AAAI **ICWSM**: International Conference on Web and Social Media

Approximately 20% acceptance rate.

C22 Z Epstein*‖, N Foppiani*‖, S Hilgard*‖, S Sharma*‖, **EL Glassman**, D Rand
Do explanations increase the effectiveness of AI-crowd generated fake news warnings?
CS279R course final project, iterated on after the semester ended

2021 ACM **UIST**: User Interface Software & Technology

C21 J Hu**, P Vaithilingam†, S Chong, M Seltzer, **EL Glassman**
ASSUAGE: Assembly Synthesis Using A Guided Exploration

2021 **CACM**: Communications of the ACM

Flagship magazine of the ACM.

M1 S Chasins, **EL Glassman**, J Sunshine
PL and HCI: Better Together
Vol. 64, Issue 8.

2021 ACM **CHI**: Conference on Human Factors in Computing Systems

C20 **Best of CHI Honorable Mention (top 5%)**
A Ross, N Chen‡, E Zhao Hang‡, **EL Glassman**, F Doshi-Velez
Evaluating the Interpretability of Generative Models by Interactive Reconstruction

C19 **Best of CHI Honorable Mention (top 5%)**
L Yan†, **EL Glassman**, T Zhang§
Visualizing Examples of Deep Neural Networks at Scale

C18 T Zhang§, Z Chen, Y Zhu, P Vaithilingam†, X Wang, **EL Glassman**
Interpretable Program Synthesis

2020 ACM **UIST**: User Interface Software & Technology

C17 T Zhang§, L Lowmanstone‡, X Wang, **EL Glassman**
Interactive Program Synthesis by Augmented Examples

2020 ACM **CHI**: Conference on Human Factors in Computing Systems

C16 T Zhang§, B Hartmann‡‡, M Kim‡‡, **EL Glassman**
Enabling Data-Driven API Design with Community Usage Data: A Need-Finding Study

2020 ACM **IUI**: International Conference on Intelligent User Interfaces (IUI)

23.4% acceptance rate.

C15 **Best Paper Award**
Z Bucinca*, P Lin*‖, K Gajos, **EL Glassman**
Proxy Tasks and Subjective Measures Can Be Misleading in Evaluating XAI Systems
ACM Intelligent User Interfaces
Cited 217 times since March 2020

2020 Other Peer-Reviewed Conference Papers

2020 FSE
C14 C Barnaby, K Sen, T Zhang§, **EL Glassman**, S Chandra
Exempla Gratis (E.G.): Code Examples for Free
ACM Joint European Software Engineering Conference & Symposium on the Foundations of Software Engineering (Industry Track)
Collaboration with Meta Engineers, designing an internal developer support tool

2019

2019
VL/HCC
C13 J Cambronero, J Shen, J Cito, **EL Glassman**, M Rinard
Characterizing developer use of automatically generated patches
IEEE Symposium on Visual Languages and Human-Centric Computing
31-33% acceptance rate.

Prior to starting faculty position

2018 CHI
C12 **EL Glassman***, T Zhang*, B Hartmann, M Kim
Visualizing API Usage Examples at Scale
ACM Conference on Human Factors in Computing Systems
25.8% acceptance rate.
Cited 56 times

2018 CHI
C11 **Best of CHI Honorable Mention (top 5%)**
A Head, **EL Glassman**, B Hartmann, M Hearst
Interactive Extraction of Examples from Existing Code
ACM Conference on Human Factors in Computing Systems
25.8% acceptance rate.

2017 L@S
C10 A Head*, **EL Glassman***, G Soares*, R Suzuki, L Figueredo, L D'Antoni, B Hartmann
Writing Reusable Code Feedback at Scale with Mixed-Initiative Program Synthesis
ACM Learning at Scale
13% acceptance rate.
Cited 136 times

2017
VL/HCC
C9 R Suzuki, G Soares, A Head, **EL Glassman**, R Reis, M Mongiovi, L D'Antoni, B Hartmann
TraceDiff: Debugging Unexpected Code Behavior Using Trace Divergences
IEEE Symposium on Visual Languages and Human-Centric Computing
29% acceptance rate.

2016 CSCW
C8 **EL Glassman**, A Lin, C Cai, R Miller
Learnersourcing Personalized Hints
ACM Computer-Supported Cooperative Work and Social Computing
25% acceptance rate.

2016 ASIST **EL Glassman**, D Russell
C7 DocMatrix: Self-Teaching from Multiple Sources
ASIS&T Annual Meeting
40% acceptance rate.

2015 UIST **EL Glassman**, L Fischer, J Scott, R Miller
C6 Foobaz: Variable Name Feedback for Student Code at Scale
ACM Symposium on User Interface Software & Technology
23.6% acceptance rate.

2015 CHI **Best of CHI Honorable Mention (top 5%)**
C5 **EL Glassman**, J Kim, A Monroy-Hernández, MR Morris
Mudslide: A Spatially Anchored Census of Student Confusion for Online Lecture Videos
ACM Conference on Human Factors in Computing Systems
23% acceptance rate.

2015 CHI J Kim, **EL Glassman**, A Monroy-Hernández, MR Morris
C4 RIMES: Embedding Interactive Multimedia Exercises in Lecture Videos
ACM Conference on Human Factors in Computing Systems
23% acceptance rate.

2015 TOCHI **EL Glassman**, J Scott, R Singh, P Guo, RC Miller
J2 OverCode: visualizing variation in student solutions to programming problems at scale
ACM Transactions on Computer-Human Interaction, 22 (2), April 2015.
Cited 196 times

2013 ICER **EL Glassman**, N Gulley, RC Miller
C3 Toward Facilitating Assistance to Students Attempting Engineering Design Problems
ACM International Computing Education Research
33% acceptance rate.

2012 ICRA **EL Glassman**, A Desbiens, M Tobenkin, M Cutkosky, R Tedrake
C2 Region of attraction estimation for a perching aircraft: A Lyapunov method exploiting barrier certificates
IEEE International Conference on Robotics and Automation
40% acceptance rate.

2010 ICRA **EL Glassman**, R Tedrake
C1 A quadratic regulator-based heuristic for rapidly exploring state space
IEEE International Conference on Robotics and Automation

2005 TBME **EL Glassman**
J1 A wavelet-like filter based on neuron action potentials for analysis of human scalp electroencephalographs
IEEE Transactions on Biomedical Engineering 52 (11), 1851-1862, Nov. 2005.

Technology Reports

2024 arXiv P Vaithilingam†, I Arawjo§, **EL Glassman**
T8 Imagining a Future of Designing with AI: Dynamic Grounding, Constructive Negotiation, and Sustainable Motivation

2024 arXiv A Cai†, I Arawjo§, **EL Glassman**
T7 Antagonistic AI

2023 arXiv **EL Glassman**
T6

Designing Interfaces for Human-Computer Communication: An On-Going Collection of Considerations

2023 arXiv
T6
Y Pu, S Vaduguru, P Vaithilingam†, **EL Glassman**, D Fried
Amortizing Pragmatic Program Synthesis with Rankings

2023 arXiv
T5
P Vaithilingam†, Y Pu, **EL Glassman**
The Usability of Pragmatic Communication in Regular Expression Synthesis

2023 arXiv
T4
A Cai‖, C Ardayfio‡, AP Nguyen‡, T Lin**, **EL Glassman**
AtomXR: Streamlined XR Prototyping with Natural Language and Immersive Physical Interaction

2023 arXiv
T3
J Zhou, **EL Glassman**, DS Weld
An Interactive UI to Support Sensemaking over Collections of Parallel Texts
Master's Thesis at University of Washington CS that I unofficially co-advised

2022 arXiv
T2
S Ali‖, S Upadhyay‖, G Hiranandani, **EL Glassman**, O Koyejo
Metric Elicitation; Moving from Theory to Practice
CS279R course final project, iterated on after the semester ended

2015 CSAIL
T1
B Kim, **EL Glassman**, B Johnson, J Shah
iBCM: Interactive Bayesian Case Model Empowering Humans via Intuitive Interaction
MIT CSAIL TR-2015-010, April 2015.

Posters, demos, and workshop papers

2024 NAS
W21
EL Glassman
AI-Resilient Interfaces and the Value of Variation
U.S. Kavli Frontiers of Science
National Academy of Sciences

2023 UIST
W20
I Arawjo§, P Vaithilingam†, M Wattenberg, **EL Glassman**
ChainForge: An open-source visual programming environment for prompt engineering
Poster @ ACM Symposium on User Interface Software and Technology (UIST)

2023 PLATEAU
W19
T Holloway†, C Swoopes†, I Arawjo§, H Peleg, **EL Glassman**
Reverse Sketching
Workshop on Evaluation and Usability of Programming Languages and Tools

2022 NeurIPS
W18
KI Gero§, JK Kummerfeld††, **EL Glassman**
Sensemaking Interfaces for Human Evaluation of Language Model Outputs
Human Evaluation of Generative Models Workshop @ NeurIPS

2022 ACL
W17
N Singh*‖, G Bernal*‖, D Savchenko*‖, **EL Glassman**
A Selective Summary of Where to Hide a Stolen Elephant: Leaps in Creative Writing with Multimodal Machine Intelligence
Workshop on Intelligent and Interactive Writing Assistants (In2Writing 2022) @ ACL
CS279R course final project, iterated on after the semester ended

2021 VIS
W16
Honorable Mention Award
T Zhang§, TH McCoy Jr., RH Perlis, F Doshi-Velez, **EL Glassman**
Interactive Cohort Analysis and Hypothesis Discovery by Exploring Temporal Patterns in Population-Level Health Records
12th Workshop on Visual Analytics in Healthcare (VAHC) @ IEEE VIS

2021 NeurIPS
W15
S Bridgers, **EL Glassman**, L Schulz, T Ullman
Loopholes: a Window into Value Alignment and the Learning of Meaning
Meaning in Context: Pragmatic Communication in Humans and Machines Workshop @ NeurIPS

2020 C+J **EL Glassman**, Janet Sung†, Katherine Qian‡, Yuri Vishnevsky, Amy Zhang
W14 Triangulating the News: Visualizing Commonality and Variation Across Many News Stories on the Same Event
Computation + Journalism Symposium

2019 Rebecca Hao‡, **EL Glassman**
PLATEAU "Approaching polyglot programming: what can we learn from bilingualism studies?"
W13 Workshop on Evaluation and Usability of Programming Languages and Tools
Co-located with ACM User Interface Software and Technology

2017 KDD S Tan, F Doshi-Velez, J Quiroz, **EL Glassman**
W12 "Clustering LaTeX Solutions to Machine Learning Assignments for Rapid Assessment"
Machine Learning for Education Workshop
ACM Conference on Knowledge Discovery and Data Mining

2017 CHI EA R Suzuki, G Soares, **EL Glassman**, A Head, L D'Antoni, B Hartmann
W11 "Exploring the Design Space of Automatically Synthesized Hints for Introductory Programming Assignments"
CHI EA '17: Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems

2017 L@S A Ju, **EL Glassman**, A Fox
W10 "Teamscope: Scalable Team Evaluation via Automated Metric Mining for Communication, Organization, Execution, and Evolution"
ACM Learning at Scale Conference

2016 ICML **EL Glassman**
W9 "Learning Latent Student Design Decisions in Python Programming Classes"
Workshop on Machine Learning for Digital Education and Assessment Systems
International Conference on Machine Learning

2016 NEML **EL Glassman**
W8 "Learning Latent Student Design Decisions in Massive Python Programming Classes"
New England Machine Learning Day

2016 CSCW **EL Glassman**, R Miller
W7 "Leveraging Learners for Teaching Programming and Hardware Design at Scale"
ACM Computer-Supported Cooperative Work and Social Computing

2016 CSCW **EL Glassman**, B Kim, J Shah
W6 "Scaling Up Qualitative Data Analysis With Interfaces Powered by Interpretable Machine Learning"
Human-Centered Data Science Workshop
ACM Computer-Supported Cooperative Work and Social Computing

2015 L@S **EL Glassman**, C Terman, R Miller
W5 "Learner-Sourcing in an Engineering Class at Scale"
ACM Learning at Scale Conference

2014 UIST **EL Glassman**
W4
"Interacting with Massive Numbers of Student Solutions"
ACM Symposium on User Interface Software & Technology

2014 L@S **EL Glassman**, R Singh, R Miller
W3 "Feature Engineering for Clustering Student Solutions"
ACM Learning at Scale Conference

2009 NIPS **EL Glassman**
W2 "A quadratic regulator-based heuristic for rapidly exploring state space"
Women in Machine Learning Workshop (WIML)
Neural Information Processing Systems

2006 EMBS **EL Glassman**, J Guttag
W1 "Reducing the number of channels for an ambulatory patient-specific EEG-based epileptic seizure detector by applying recursive feature elimination"
IEEE Engineering in Medicine and Biology Society

Book Chapters

2016 JJ Williams, J Kim, **EL Glassman**, A Rafferty, W Lasecki
"Making Static Lessons Adaptive through Crowdsourcing & Machine Learning"
Design Recommendations for Intelligent Tutoring Systems: Domain Modeling Vol. 4,
US Army Research Laboratory, July 2016.

Funding

NSF grants to Harvard

2021-25 Collaborative Research: FMitF: Track I: Usable Synthesis-based End-User Programming with Rich Interaction Modalities
Co-PI with Xinyu Wang (UMich CSE) $350,000

2021-25 HCC: Medium: Improving Human-AI Collaboration on Decision-Making Tasks
Co-PI with Krzysztof Gajos (Harvard CS), Finale Doshi-Velez (Harvard CS) $1,200,000

2021-24 FAI: Foundations of Fair AI in Medicine: Ensuring the Fair Use of Patient Attributes
Co-PI with Flavio du Pin Calmon (Harvard CS), Berk Ustun (UCSD) $714,000

2020-24 Collaborative Research: CHS: Medium: Code demography: Addressing information needs at scale for programming interface users and designers
Lead PI with Bjoern Hartmman (UC Berkeley EECS), Miryung Kim (UCLA CS) $200,000

2021-23 Collaborative Research: Loopholes as a window into the learning of meaning
Co-PI with Tomer Ullman (Harvard Psychology) $372,241

2020-23 Robust Intelligence (RI): Small: Human Validation in Batch Reinforcement Learning
Co-PI with Finale Doshi-Velez (Harvard CS)

2019-22 PI, WORKSHOP: Student Innovation Challenge at User Interface Software and Technology 2019

Industry

2023-24 Amazon Research Award $70,000 +$20,000 in AWS credit
2019-2023 Facebook/Meta $150,000

Harvard

2021 Harvard Data Science Initiative Trust in Science Award $30,000

Foundations

2023 Sloan Foundation Fellowship $75,000

Service

Founding Co-Organizer

2020, 2022	PL+HCI Swimmer School
2020	CambridgeCHI, a regional virtual symposium of accepted CHI talks
2017	Program Synthesis Hackathon at UC Berkeley
2012	MIT edTech reading group

External Advisory Boards

2021	Semantic Scholar, Allen Institute for Artificial Intelligence

Conference program committees

2024	ACM FAccT AC, Interaction Track
2024	Onward! Papers at the ACM SIGPLAN SPLASH conference
2023, 2024	Onward! Essays at the ACM SIGPLAN SPLASH conference
'19,21,23,24	ACM UIST AC
'17,19-21,23-24	ACM CHI Engineering Interactive Systems and Technologies subcommittee AC
2022	ACM CHI Computational Interactions subcommittee AC
2021	ACM UIST Best Paper Committee
2021, 2024	ACM DIS AC
2020, 2021	ACM CSCW AC
2020	ACM FAT
2017-2019	ACM Learning at Scale (L@S)
2015	ACM CHI Works-in-Progress subcommittee

Organizing Committees

2025	35th U.S. Kavli Frontiers of Science symposium	National Academy of Sciences
2024	Co-organizer, "History and Future of HCI'	HCIC
2023-24	Co-organizer, "Loopholes: Spirit-vs-Letter of the Law at the Dawn of AI" Exploratory Seminar	Harvard Radcliffe
2019-present	Workshop on Evaluation and Usability of Programming Languages and Tools (PLATEAU)	
2023, 2024	Workshops Co-Chair	ACM UIST
2020	Publicity Co-Chair	ACM UIST
2020-present	LIVE Steering Committee, for improving the usability of programming	SPLASH
2019	Doctoral Consortium Co-Chair	ACM UIST
2017-2018	Registration Chair	ACM UIST
2017	Text Across Domains (TextXD) Workshop	Berkeley Institute of Data Science

Workshop program committees

2024	Trust and Reliance in Human-AI Workflows	CHI
2023	Symposium on Machine Programming (MAPS) co-located with ESEC/FSE	
2020, 2023	Workshop on Human Aspects of Types and Reasoning Assistants (HATRA)	SPLASH
2022, 2023	Workshop on Trust and Reliance in AI-Human Teams (TRAIT)	CHI
2021	Workshop on Math AI for Education (MATHAI4ED)	NeurIPS
2019, 2020	Workshop on Knowledge Representation & Reasoning Meets Machine Learning	NeurIPS
2019-21	Workshop on Intelligent Textbooks (iTextbooks)	AIED

2018, 2019	LIVE Programming Workshop, for improving the usability of programming	SPLASH

Session chairing and panel moderation

2022	Co-chair of the working group on "Formal methods in HCC"	NSF FMitF Virtual PI Meeting
2019	Panel moderator, "Beyond Words: Gender and the Aesthetics of Communication"	Radcliffe
2017, 2019	ACM UIST "Code/Education Session" and "Software and Hardware Development"	
2015, 2017	ACM CHI "Social Media & Citizen Science" and "All About Data"	

Institute, School and University committees

2024-present	Working group on AI	Harvard SEAS
2023-24	Professor of the Practice in Innovation Search Committee	Harvard SEAS
2023	MDE Lecturer search committee	Harvard SEAS/GSD
2022-2025	Standing Committee on Degrees in Studies of Women, Gender, and Sexuality	Harvard FAS
2022	Support for Junior Faculty Working Group	Radcliffe Institute
2020	Enrollment Working Group member, planning for Harvard's reopening	Harvard
2005	Council on Educational Technology member	MIT

Department and School committees

2022-2024	Computer Science Curriculum Committee	CS, Harvard
'20-21,23-24	Committee on Higher Degrees (CHD)	CS, Harvard
2018-2019	PhD Diversity Admissions Committee member	SEAS, Harvard
2018-2019	Junior Faculty Search Committee member	CS, Harvard
2018-2019	Graduate Admissions Committee member	SEAS, Harvard
2018	Joint Degree Programs Committee member	CS, Harvard
2006-2008	Education Committee member	EECS, MIT

External Reviewing

Grants

2022	Site Visit Panel	NSF
2019	Grant Review Panel	NSF

Journals and Magazines

2022	Science Magazine	AAAS
2022, 2023	Communications of the ACM (CACM)	ACM
2021	Transactions on Software Engineering and Methodology (TOSEM)	ACM
2018	Empirical Software Engineering (EMSE)	
'17,21,23,24	Transactions on Computer-Human Interaction (TOCHI)	ACM

Conferences

2022	Human-Centered Natural Language Processing theme	NAACL

Mentoring and Advising

Postdoctoral Scholars

2023-2024	Katy Gero	Harvard CS
2023	Ian Arawjo	Harvard CS
2022-2023	Jonathan K Kummerfeld (Visiting Scholar)	UMich CS
2020-2022	Hendrik Heuer (Visiting Scholar)	University of Bremen CS
2019-2021	Tianyi Zhang	Harvard CS

Doctoral Students

2023-present	Chelse Swoopes	Harvard CS
2022-present	Ziwei Gu	Harvard CS
2022-2023	Sonia Murphy	Harvard CS
2020-present	Tyler Holloway	Harvard CS
2020-present	Priyan Vaithilingam	Harvard CS

PhD Thesis Committees

2021-2024	Edwin Chng	Harvard HGSE
2023-present	Hussein Mozannar	MIT EECS
2023-present	Amber Horvath	CMU HCII
2023-present	Simon Warchol	Harvard CS
2023-present	Mark Keller	HMS
2022-2023	Rebecca Krosnik	UMich CS
2020-2023	Serena Booth	MIT EECS
2023	Jackson Killian	Harvard CS
2022-23	Ziv Epstein	MIT Media Lab
2021-22	Jingmei Hu	Harvard CS
2021	Sophie Hilgard	Harvard CS
2021	Oscar Alvarado	KU Leuven CS
2021	Felix Gonda	Harvard CS
2021	Andrew Ross	Harvard CS
2020	Minsuk Chang	KAIST CS
2020	Hendrik Heuer	University of Bremen CS

Quals and Oral Comprehensive Exam Committees

2024	(Anticipated) Sonia Murthy	Harvard Psychology/CS
2023	Joanne Leong	MIT Media Lab
2023	Diana Feng	HGSE
2023	Stephanie Yang	HGSE
2023	Jakob Troidl	Harvard CS
2021	Ziv Epstein	MIT Media Lab
2021	Edwin Chng	HGSE
2021	Jamelle Watson-Daniels	Harvard CS
2020	Andrew Ross	Harvard CS
2019	Sophie Hilgard	Harvard CS
2019	Hsiang Hsu	Harvard CS
2019	Juntao Wang	Harvard CS
2019	Eric Lu	Harvard CS

Master's Thesis Advisor

2023-24	Daeun Yoo	Design Engineering
2023	Luke Reeve	Design Engineering
2023	Jiabin Wei	Design Engineering
2022	Erica Luzzi	Design Engineering
2021	Litao Yan	Computational Science & Engineering
2019	Janet Sung	Design Engineering

Master's Academic Advisor

2023	Vicki Xu	SEAS AB/SM
2023	Victor Goncalves	SEAS AB/SM
2023	Justin O'Dwyer	SEAS AB/SM
2021	Luke Kenworthy	Harvard GSAS MS in CS

Additional Student Research Mentees

2021-2023	Sharon Tai	Harvard Extension
2021-2023	Nikhil Singh	MIT Media Lab
2021-2022	Daria Savchenko	Harvard Anthropology
2021-2022	Guillermo Bernal	MIT Media Lab
2019-2022	Anna Zeng	MIT EECS
2021	Nicolo Foppiani	Harvard Physics
2020-2021	Sanjana Sharma	Harvard GSD
2019	Phoebe Lin	Harvard GSD

Undergraduate Senior Thesis Advisor

2023-2024	Leah Teichholtz	Harvard CS
2023-2024	Tara Nadella	Harvard CS
2022-2023	Karina Halevy	Harvard CS *&* History
2021	Wassim Marrakchi	Harvard CS
2020-2021	Cole Bateman	Harvard CS
2020-2021	Ahan Malhotra	Harvard CS
2020-2021	George Moe	Harvard CS
2020	Katherine Qian	Harvard CS
2020	Jake Cui	Harvard CS *&* Linguistics
2020	Rebecca Hao	Harvard CS *&* Linguistics
2019	Sam Oh	Harvard CS *&* Philosophy

Academic Year Undergraduate Researchers

2023	Alice Wu	Harvard CS
2021-2022	Karina Halevy	Radcliffe
2021-2022	Lauren Chen	Radcliffe
2021-2022	Maegan Jong	Radcliffe
2021-2022	Kayla Huang	Radcliffe
2021-2022	Kavya Kopparapu	Harvard CS
2021-2022	Eric Lin	Harvard CS
2021	Elizabeth Hu	Harvard CS

Summer Undergraduate and High School Researchers

2019, 2020	Cole Bateman	Harvard CS
2019	Jamie Lee	High School Student

Undergraduate Academic Advising

2023	FYRE (first-gen freshman pre-orientation) 'Academics Unlocked' Breakout session	Harvard
2019-present	Concentration advisor to ≈15 CS students, annually	Harvard CS
2019-2022	First year advisor to 3-4 freshman women with interest in CS	Harvard FAS

Extracurricular Enrichment

2024	Speaker/Panelist, Harvard x MIT Women in CS Research Event	Harvard WiCS
2023	Speaker, Responsible AI student group	Harvard
2013	Mentor, Women in CS "Women Engineers Code Hackathon"	Harvard

Teaching

Experience

2023, 2024	"Human-Computer Interaction and AI: What practitioners need to know to design and build effective AI systems from a human perspective"	CHI

2023, 2024	Course Head, CS178 Engineering Usable Interactive Systems (≈35-40 students)	Harvard CS
'20,22,23	Course Head, CS279R Research Topics in HCI (≈35-45 students)	Harvard CS
2020, 2021	Course Head, CS179 Design of Useful & Usable Interactive Systems (≈75, then ≈115 students)	Harvard CS
2019	Co-Led, CS279R PL/HCI Graduate Seminar (≈ 30 students)	Harvard CS
2019	Co-Led, CS179 Design of Useful & Usable Interactive Systems (≈75 students)	Harvard CS
2016	Co-lecturer, 6.831 User Interface Design & Implementation (≈175 students)	MIT EECS
2013	Instructor, introductory Python programming	MIT MEET, Jerusalem
2013	Video script writer & presenter, radio receiver technology	MIT Teaching & Learning Lab
2012-2014	Teaching assistant, 6.004 Computation Structures	MIT EECS
2011	Teaching assistant, Introduction to EECS 1	MIT EECS
2006-2011	Tutor, Signals, Systems, & Probabilistic Systems Analysis	MIT EECS Honor Society

Teacher Training

2022-23	LInc (Learning Incubator) Faculty Fellow	Harvard SEAS
2020	Course Planning Workshop	Harvard OUE and Bok Center
2019	Leadership Skills for Engineering and Science Faculty	MIT Professional Education
2011	Graduate Student Teaching Certificate	MIT Teaching & Learning Lab

Invited Keynote Talks

2024	Workshop on LLMs as Research Tools	CHI
2023	Generative AI for Education (GAIED) Workshop	NeurIPS
2023	IEEE Symposium on Visual Languages and Human-Centric Computing	VL/HCC
2022	Workshop on User-Centered Artificial Intelligence	UCAI
2021	ACM SIGPLAN International Conference on Functional Programming	ICFP
2020	ACM SIGPLAN conference on Systems, Programming, Languages, and Applications: Software for Humanity	SPLASH
2020	Workshop on Computer-Assisted Programming	NeurIPS

Conference Symposium Talks

2022	Advancing Human-AI Communication and Interaction	APS Annual Convention
2022	Misunderstanding and misalignment in children and machines	Cognitive Development Society

Harvard Executive Education Talks

2022, 2023	Leadership in AI	SEAS/HKS
2021, 2023	Technology and Social Impact	Advanced Leadership Initiative
2019	Real Colegio Complutense	Harvard

Invited Seminar Talks

2024	ETH CS Distinguished Colloquium	ETH
2024	MIT HCI Seminar	MIT
2024	University of Michigan Interactive and Social Computing (MISC)	UMich
2023	IBM Human-Centered AI Speaker Series	IBM
2023	Stanford Seminar on People, Computers and Design	Stanford CS

2022	Systems Lunch	UMass Amherst
2022	Intelligent Systems Center Seminar Series	Johns Hopkins Applied Physics Lab
2022	PROSE Group Meeting	MSR Redmond
2022	PAIR (People + AI Research) Talks	Google
2022	CS Department Seminar	Williams
2022	Special Seminar	UW Madison
2021	CS Department Seminar	Oxford
2021	Berkeley Programming Systems Seminar	UC Berkeley
2021	HCI Seminar	University of Washington
2021	Radcliffe Fellow's Talk	Harvard
2021	Radcliffe Dean's Advisory Board	Harvard
2021	IrisX	Cairo CHI
2021	BostonCHI	Cambridge, MA
2020	PurPL Seminar Series	Purdue
2019	Josh Tenenbaum's research group meeting	MIT BCS
2019	PROSE Group Meeting	MSR
2018	Computer Science Department seminar	UBC
2018	iSchool seminar	University of Washington
2018	Computer Science *&* Engineering Department seminar	UMich
2018	Computer Science *&* Engineering Department seminar	UCSD
2018	Computer Science Department seminar	UIUC
2018	Computer Science Department seminar	UMaryland
2018	Human-Computer Interaction Institute	CMU
2018	Electrical Engineering *&* Computer Science Department seminar	UC Berkeley
2018	Computer Science Department seminar	Stanford
2018	Computer Science Department seminar	ETH Zürich
2018	Computer Science Department seminar	Brown
2018	Computing and Information Science Department seminar	Cornell
2018	School of Computer and Communication Sciences seminar	EPFL
2018	Computer Science Department seminar	Harvard
2018	Computer Science Department seminar	Princeton
2018	Computer Science Department seminar	UW-Madison
2018	Computer Science Department seminar	UChicago
2018	Computer Science Department seminar	UToronto
2018	Dan Schwartz and Carl Wieman's lab	Stanford Graduate School of Education
2017	NSF Expeditions in Computer Augmented Program Engineering (ExCAPE) PI Meeting	UPenn
2017	Stanford HCI summer seminar	Stanford
2017	MIT CSAIL Machine Learning Tea	MIT CSAIL
2016	Special Seminar for CS61a Staff, UC Berkeley's largest CS class	UC Berkeley
2016	Berkeley Institute of Design	UC Berkeley
2015	Harvard Berkman Center Cooperation Group	Harvard
2015	Computer Science Department seminar	Duke
2015	HCI summer seminar	Stanford
2015	Lunch seminar	HarvardX
2015	Computer Science Department seminar	Wellesley
2014	DUB Seminar on HCI *&* Design	UWashington
2001	Special Seminar on International Science *&* Engineering Fair project	Schlumberger-Doll

Invited Panelist

2023	Harvard Law AI Summit, organized by the Library Innovation Lab	Harvard Law School
2022	Navigating Tech and Society at Harvard	Harvard
2021	Society for Science Signature Event	Virtual
2021	Doctoral Consortium panelist/mentor	ACM UIST
2018, 2021	Rising Stars workshop for aspiring female EECS professors	MIT EECS
2021	Panel on the Future of the Unix shell	HotOS
2021	Tech for Social Good Mid-Term Presentations	Harvard
2020	Academic Job Search Seminar	MIT EECS
2020	Path to the Professorship	MIT
2020	Celebrating IUI's 25th anniversary, *canceled due to COVID-19*	ACM IUI
2019	MIT GW6 (Graduate Women in EECS) Research Summit conference	MIT EECS
2016	SuperUROP (Undergraduate Research) Seminar	MIT EECS
2015	Women Techmaker's Summit	Google Cambridge

Workshop Presentations

Academic conferences

2022	Educational Programming Languages and Systems	Schloss Dagstuhl
2020	SE4ML - Software Engineering for AI-ML-based Systems	Schloss Dagstuhl
2017, 2019	Approaches and Applications of Inductive Programming	Schloss Dagstuhl
2017	Workshop on Advancing Education with Data	ACM KDD
2017	Diverse Ways of Inferring Missions	DARPA
2017	Augmented Developers: Tools for Hybrid Human-Machine Software Eng.	DARPA

Doctoral Consortiums

2015	Interacting with massive numbers of student solutions	ACM UIST
2013	Visualizing & classifying multiple solutions to engineering design problems	ACM ICER

Selected Outreach

2024	Invited Speaker, Visitas Thinks Big	Harvard Visitas
2023	Invited Speaker, Saturday of Symposia	Harvard Alumni Association
2022	Panelist, Presidents' Scholarship session	IEEE STEM Summit
2022	Panelist, "How Humans Can Understand Robot Behaviors"	MIT Horizon
2020, 2021	Panelist, session for high school science students	Branson High School
2020	Keynote speaker, 2020 High School Conference	Harvard WECode
2020	Creator, Podcast "Design of Useful and Usable Interactive Systems"	
2018	Invited lecturer, software engineering course for underrepresented college students	Google
2016	Invited speaker, HCI course	Bucknell
2015	Invited speaker, summer camp for girls	GirlTechPower
2014, 2015	Invited speaker, Hour of Code event for local schools	MIT CSAIL
2008, 2011	Invited speaker, Women's Technology Program	MIT
2008	Invited speaker, Campus Preview Weekend	MIT CSAIL

Selected press

2023	*A case for making our AI chatbots more confrontational*	FastCompany
2020	*Scenes from the socially distant*, teaching profile	The Harvard Gazette
2020	*Bringing additional expertise to class via remote instruction*, teaching profile	Harvard SEAS
2015	*Reviewing online homework at scale*, research profile	MIT News Homepage Spotlight
2015	*It takes a network*, quoted	MIT News
2015	Guest on Upvoted podcast	Reddit
2004	*Not Too Young for a Patent*, profile	New York Times
2003	*America's Bright Future* on Lou Dobbs Tonight, profile	CNN
2003	Guest on American Morning	CNN
2003	*Rising Stars* Vol. 300, Issue 5624, p. 1368, profile	*Science*

Athletics Program Involvement

2020-present	Faculty sponsor of the Harvard Women's Wrestling Club	Harvard
2019-present	Active participant in the Harvard Running community	Harvard
2010, 2012	US Olympic Wrestling Training Camp participant	Colorado Springs, CO
2009-2012	Competitor, regional & national women's wrestling tournaments	US & Canada
2010	All-American Wrestler, National Collegiate Wrestling Association	Hampton, VA
2008	Team Member, NCAA Div. III Varsity Wrestling Team	MIT

Earlier selected honors & awards

2016	Audience Choice Award	MIT Can Talk speech competition
2009	Masterworks Oral Thesis Presentation Award	MIT EECS
2008	Vice President and member, EECS Honor Society	Eta Kappa Nu
2004	Valedictorian & commencement speaker	Central Bucks High School West
2004	Inducted, National Gallery for America's Young Inventors	
2003	Best of Category: Computer Science	Intel International Science & Engineering Fair

Harvard's Faculty of Arts and Sciences grants appointment extensions and teaching relief to tenure-track faculty, in keeping with policies related to the COVID-19 pandemic, medical leave, and parental leave. Accordingly, Harvard delayed my associate review.