

Alexandra To

ASSISTANT PROFESSOR · NORTHEASTERN UNIVERSITY

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🔗 Google Scholar Profile

Academic Appointment

Northeastern University

ASSISTANT PROFESSOR

Boston, MA

August 2020 - PRESENT

Jointly appointed in the Games group in the Art + Design department in the College of Arts, Media, & Design and the Khoury College of Computer Science

Education

Carnegie Mellon University

PHD IN HUMAN-COMPUTER INTERACTION

Pittsburgh, PA

Aug. 2015 - Jul. 2020

- Human Computer Interaction Institute | School of Computer Science
- Thesis: *"Empowering Uncertainty Resolution for Marginalized Populations through Social Technology"*
- **Advisors:** Jessica Hammer and Geoff Kaufman

Stanford University

B.S. IN SYMBOLIC SYSTEMS, HCI CONCENTRATION, MINOR IN ASIAN AMERICAN STUDIES

Stanford, CA

Sept. 2010 - Jun. 2015

M.S. IN SYMBOLIC SYSTEMS

- Symbolic Systems Program | School of Humanities and Sciences
- Honors Thesis: *"Foundry: Managing Teams of Experts Online"*
- Masters Thesis: *"Experts On Demand: Enabling Flash Organizations with Rapid Onboarding"*
- **Advisor:** Michael Bernstein

Honors & Awards

- 2020 **Award Recognizing Contribution to Diversity & Inclusion**, ACM CSCW
Best Paper Award, ACM CSCW
SIGCHI Development Fund Grant (\$15,000), *"Engaging in Race in HCI"*, ACM SIGCHI
Best Paper Award, ACM CHI 2020 (top 1%)
- 2018 **Graduate Student Small Project Funding Award (\$750)**, CMU GSA / Vice Provost's Office
- 2017 **Best Paper Award**, ACM CHI 2017 (top 1%)
University/Post-Secondary Student Honorable Mention, Carnegie Science Awards
- 2016 **Best Student Non-Digital Game, "Outbreak"**, Meaningful Play 2016
People's Choice Game, "Outbreak", Meaningful Play 2016
Graduate Student Assembly/Provost Conference Funds, Carnegie Mellon University
- 2014 **Best Paper Award**, ACM UIST 2014
B.S. Conferred with Honors, Stanford University

Peer-Reviewed Articles

*Indicates shared authorship position

20. Bennett, C. L., Gleason, C., Klaus Scheuerman, M., Bigham, J. P., Guo, A., **To, A.** *"It's Complicated": Negotiating Accessibility and (Mis)Representation in Image Descriptions of Race, Gender, and Disability.* [CONDITIONAL ACCEPT] In Proc. CHI 2021
19. **To, A.**, Carey, H., Kaufman, G., Hammer, J. *Reducing Uncertainty and Offering Comfort: Designing Technology for Coping with Interpersonal Racism.* [CONDITIONAL ACCEPT] In Proc. CHI 2021
18. Carey, H., **To, A.**, Hammer, J., Kaufman, G. *Fictional, Interactive Narrative as a Foundation to Talk about Racism.* In Proc. DIS 2020 Work-in-Progress.

17. **To, A.**, Sweeney, W., Hammer, J., Kaufman, G. "They Just Don't Get It": Towards Social Technologies for Coping with Interpersonal Racism. In Proc. CSCW 2020. **Best Paper Award** 🏆, **Award Recognizing Contribution to D&I** 🏆
16. [**To, A.**, Ogbonnaya-Ogburu, I.F., Smith, A.]*, Toyama, K. *Critical Race Theory for HCI*. In Proc. CHI 2020. **Best Paper Award** 🏆
15. Holmes, J., **To, A.**, Zhang, F., Park, S.E., Ali, S., Bai, Z., Kaufman, G., Hammer, J. (2019). *A Good Score: Leveraging Game Theming and Narrative to Impact Player Experience*. In Proc. CHI 2019 Late-Breaking Work.
14. **To, A.**, Holmes, J., Fath, E., Zhang, E., Kaufman, G., Hammer, J. (2018). *Modeling and Designing for Key Elements of Curiosity: Risking Failure, Valuing Questions*. In Proc. ToDiGRA Special Issue, Selected Papers from DiGRA 2017, Vol 4.2
13. Fath, E., **To, A.**, Kaufman, G., Hammer, J., (2018). *Designing an Inclusive Playtesting Process Using Cognitive Load Theory*. In Proc. Meaningful Play 2018
12. Ali, S., **To, A.**, Bai, Z., Holmes, J., Fath, E., Kaufman, G., Hammer, J. (2018). *Transition from Goal Driven Game Design to Game Driven Goal Delineation in Tandem Transformational Game Design*. In Proc. Meaningful Play 2018
11. **To, A.**, McDonald, J., Holmes, J., Hammer, J., Kaufman, G. (2018). *Character Diversity in Digital and Non-Digital Games*. In Proc. ToDiGRA Diversity Special Issue, Vol 4.1
10. **To, A.**, Holmes, J., Fath, E., Zhang, E., Kaufman, G., Hammer, J. (2017). *Modeling and Designing for Key Elements of Curiosity: Risking Failure, Valuing Questions*. In Proc. DiGRA 2017.
9. **To, A.**, Hammer, J., Kaufman, G. (2017). *Character Diversity in Digital and Non-Digital Games*. In Proc. DiGRA 2017 Gaming the Systems: Towards a More Inclusive DiGRA Workshop.
8. **To, A.**, Kaufman, G., Hammer, J. (2017). *Scaffolding Conversation through the Design and Implementation of Board Games*. In Proc. DiGRA 2017 Boardgame Studies Round Table Workshop.
7. Valentine, M., Retelny, D., **To, A.**, Rahmati, N., Doshi, T., Kim, M., Fonua, M., Bernstein, M. (2017). *Flash Organizations: Crowdsourcing Complex Work by Structuring Crowds as Organizations*. In Proc. CHI 2017. **Best Paper Award** 🏆
6. **To, A.**, Fath, E., Zhang, E., Ali, S., Kildunne, C., Fan, A., Hammer, J., Kaufman, G. (2016). *Tandem Transformational Game Design: A Game Design Process Case Study*. In Proc. Meaningful Play 2016.
5. **To, A.**, Fan, A., Kildunne, C., Zhang, E., Kaufman, G., Hammer, J. (2016). *Treehouse Dreams: A Game-Based Method for Eliciting Interview Data from Children*. In Proc. CHI Play 2016.
4. **To, A.**, Ali, S., Kaufman, G., Hammer, J. (2016). *Integrating Curiosity and Uncertainty in Game Design*. In Proc. DiGRA/FDG 2016.
3. Nebeling, M., **To, A.**, Guo, A., de Freitas, A., Teevan, J., Dow, S., Bigham, J. (2016). *WearWrite: Crowd-Assisted Writing from Smartwatches*. In Proc. CHI '16.
2. Retelny, D., Robaszkiewicz, S., **To, A.**, Lasecki, W., Patel, J., Doshi, T., Valentine, M., Bernstein, M. (2014). *Expert Crowdsourcing with Flash Teams*. In Proc. UIST '14. **Best Paper Award** 🏆

1. Retelny, D., Robaszkiewicz, S., **To, A.**, Bernstein, M. (2013). *Enabling Expert Crowdsourcing with Flash Teams*. In Proc. CrowdConf 2013.

Other Publications

BOOK CHAPTERS

2. Smith, A.D.R., Williams, I.F., **To, A.** (CURRENTLY UNDER REVIEW). *"Racial Justice and Scholar-Activism". Networked Feminisms: Activist Assemblies and Digital Practices*.
1. Hammer, J., **To, A.**, Schrier, K., Bowman, S.L., Kaufman, G. (2018). *"Learning and Role-Playing Games". Role-Playing Game Studies*.

WORKSHOPS & WORKSHOP PAPERS

7. Smith, A., Ahmed, A., Alvarado Garcia, A., Dosono, B., Ogbonnaya-Ogburu, I., Rankin, Y., **To, A.**, Toyama, K. *What's Race Got to Do With It? Engaging in Race in HCI*. In CHI 2020 Workshops [organized virtually].
6. **To, A.**, Hammer, J., Kaufman, G. *The Role of Trust in Technology in Coping with Experiences with Racism*. In Proc. CSCW 2019 Social Technologies for Digital Wellbeing Among Marginalized Communities Workshop.
5. **To, A.**, Kaufman, G., Hammer, J. *Mitigating Vicarious Trauma in Conducting Sensitive Research*. In Proc. CHI 2019 Sensitive Research, Practice, and Design in HCI Workshop.
4. **To, A.**, Hammer, J., Kaufman, G. *Promoting Digital Wellbeing by Empowering Users from Racial Minority Groups*. In Proc. CHI 2019 Designing for Digital Wellbeing Workshop.
3. Deterding, S., Smith, D., Powley, E.J., Hammer, J., **To, A.**, Guckelsberger, C. 2018. *Curiosity in Games: An Interdisciplinary Workshop*. In Proc. FDG 2018 Workshops.
2. **To, A.**, Kaufman, G., Hammer, J. 2017. *Designing Affective Supports for Curiosity in Games*. In Proc. CHI 2017 Designing for Curiosity Workshop.
1. Nebeling, M., **To, A.**, Guo, A., de Freitas, A., Teevan, J., Dow, S., Bigham, J. 2016. *WearWrite: Crowd-Assisted Writing from Smartwatches*. In Proc. CHI 2016 Productivity Decomposed Workshop.

OTHER PUBLICATIONS

5. Hammer, J., **To, A.**, Principe Cruz, E. *Lab Counterculture*. In CHI 2020 alt.CHI.
4. **To, A.**, Ali, S., Kaufman, G., Hammer, J. *Integrating Curiosity and Uncertainty in Game Design*. 2018 Curiosity Research in HCI.
3. Nebeling, M., Guo, A., **To, A.**, Dow, S., Teevan, J., Bigham, J. 2015. *WearWrite: Orchestrating the Crowd to Complete Complex Tasks from Wearables*. In Proc. UIST 2015 Demos.
2. **To, A.**. 2015. *Experts On Demand: Enabling Flash Organizations with Rapid Onboarding*. Masters Thesis, Symbolic Systems Program. Readers: Michael Bernstein, Melissa Valentine
1. **To, A.**. 2014. *Foundry: Managing Teams of Experts Online*. Senior Honors Thesis, Symbolic Systems Program. Readers: Michael Bernstein, Daniela Retelny

Creative Activity - Games

FOUNDATIONAL FICTION

2018-PRESENT

Twine Interactive fiction about racial microaggressions. Primer to facilitate generative conversations about coping with racism in follow-up design workshops as well as tool for prototyping and allowing people to use and critique speculative future technologies for coping with racism.

OUTBREAK

2015 - 2018

Tabletop game that encourages curiosity as a skill set to increase comfort with STEM for underrepresented adolescents (women and/or BIPOC students).

Teaching Experience

Instructor of Record, Game Concept Dev. and Prod. (GAME 3800)

ART + DESIGN AT NORTHEASTERN UNIVERSITY

2021

Instructor of Record, Human-Computer Interaction (IS 4300)

KHOURY COLLEGE OF COMPUTER SCIENCE AT NORTHEASTERN UNIVERSITY

2020

TA, User-Centered Research & Evaluation (05-410/05-610)

HUMAN-COMPUTER INTERACTION INSTITUTE AT CARNEGIE MELLON UNIVERSITY

2019

Instructors of Record: Amy Ogan and Raelin Musuraca

TA, Programming Usable Interfaces (05-430/05630)

HUMAN-COMPUTER INTERACTION INSTITUTE AT CARNEGIE MELLON UNIVERSITY

2017

Instructor of Record: Jason Hong

TA, Navigating Race and Identity in America (85-357)

PSYCHOLOGY DEPARTMENT AT CARNEGIE MELLON UNIVERSITY

2017

Instructor of Record: Kody Manke

TA, Minds and Machines (SymSys 100)

SYMBOLIC SYSTEMS PROGRAM AT STANFORD UNIVERSITY

2014

Instructors of Record: Dan Lassiter, Thomas Icard, Todd Davies

CA, Human-Computer Interaction Seminar (CS 547)

COMPUTER SCIENCE DEPARTMENT AT STANFORD UNIVERSITY

2014

Instructor of Record: Michael Bernstein

Advising & Mentorship

PHD STUDENTS - COMMITTEE

1. Hillary Carey, Transition Design PhD, Carnegie Mellon University

UNDERGRADUATE RESEARCH ASSISTANTS

2. Jamie Camera, BFA CS and Game Dev
1. Chris Brooks, BS in CS

Relevant Work Experience

UX Research Intern

FACEBOOK, INC.

May 2018 - Aug. 2018

Working on the Emerging Verticals team conducting qualitative research (e.g., diary studies, interviews) with small business owners and consumers.

Design Intern

SHELL GAMES

May 2017 - Aug. 2017

Working on an interdisciplinary team with eleven game designers, artists, and developers working on transformational game design for a digital app. Gathered and synthesized research related to the project's transformational goals, contributed to design brainstorming and iteration, and wrote narrative content.

Selected Invited Presentations

UNIVERSITY OF MINNESOTA CSCI 8115 GUEST LECTURE <i>"Qualitative Research - Interview Method Tips"</i>	03/2021
MIT CSAIL HCI SEMINAR <i>"Designing to Empower Marginalized Communities through Social Technology"</i>	03/2021
DEPAUL UNIVERSITY HCD 450 GUEST LECTURE <i>"Critical Race Theory for HCI" & "Reducing Uncertainty and Offering Comfort: Designing Technology for Coping with Interpersonal Racism"</i>	02/2021
UNIVERSITY OF BRITISH COLUMBIA DESIGNING FOR PEOPLE (DFP@UBC) SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	02/2021
MICROSOFT RESEARCH CAMBRIDGE HCI COMMUNITY TALK <i>"Critical Race Theory for HCI" - Co-Presented with Angela Smith</i>	02/2021
INDIANA UNIVERSITY INFORMATICS COLLOQUIUM SERIES <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	01/2021
UNIVERSITY OF WASHINGTON DUB SEMINAR <i>"Designing to Empower Marginalized Communities through Social Technology"</i>	01/2021
NORTHEASTERN UNIVERSITY - KHOURY COLLEGE <i>"Coded Bias Viewing & Panel Discussion"</i>	12/2020
STANFORD HCI SEMINAR <i>"Designing to Empower Marginalized Communities through Social Technology"</i>	10/2020
CORNELL INFO SCI COLLOQUIUM <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	10/2020
WELLESLEY CS220 HCI GUEST LECTURE <i>"Designing to Empower Marginalized Communities through Social Technology" & "Critical Race Theory for HCI"</i>	09/2020
UCHICAGO HCI SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
UNIVERSITY OF MARYLAND HCIL <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
SNAP HCI RESEARCH SPECIAL SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
UC BERKELEY AFOG GROUP <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
CHICAGOCHI <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
ADOBE RESEARCH HCI/VIS SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	08/2020
THUMB TACK DEI, DESIGN, RESEARCH SPECIAL SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	07/2020
UNIVERSITY OF MICHIGAN MISC SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	07/2020
FACEBOOK <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	07/2020
STANFORD UNIVERSITY HCI GROUP LUNCH SEMINAR <i>"Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith</i>	07/2020

CARNEGIE MELLON HCII AND ROBOTICS INSTITUTE SPECIAL SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	07/2020
UNIVERSITY OF WASHINGTON DUB SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	07/2020
NORTHEASTERN UNIVERSITY - KHOURY COLLEGE OF COMPUTER SCIENCE "Designing to Empower Marginalized Communities through Social Technology"	06/2020
MICROSOFT RESEARCH HCI SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	05/2020
INNOVATION WITH IMPACT, CARNEGIE MELLON UNIVERSITY "Fictional, Interactive Narrative as a Foundation to Talk about Racism"	04/2020
WOMEN IN DATA SCIENCE (WiDS) @ CMU Virtual Panel	03/2020
NORTHEASTERN UNIVERSITY - COLLEGE OF ARTS, MEDIA & DESIGN "Designing to Empower Marginalized Communities through Social Technology"	02/2020
CMU HCII/PHILIPS HEALTH FUNDER MEETING "SleepyGames Research Presentation" - Co-Presented with Adela Kapuścińska	10/2019
MOSAIC ANNUAL CONFERENCE ON INTERSECTIONALITY, CARNEGIE MELLON UNIVERSITY "Incorporating Intersectionality in Your Research" - Co-Facilitated with Judeth Oden Choi	10/2019
INNOVATION WITH IMPACT, CARNEGIE MELLON UNIVERSITY " "They Just Don't Get It": Support Seeking for Racist Experiences"	04/2019
STANFORD UNIVERSITY HCI GROUP LUNCH SEMINAR "Supporting Curiosity-Driven Question-Asking with a Transformational Game"	07/2018
IN MEDIA RES, THEME WEEK: TRANSFORMATIVE GAMES "Tandem Transformational Game Design"	04/2017
INNOVATION WITH IMPACT, CARNEGIE MELLON UNIVERSITY "Treehouse Dreams: A Game-Based Method for Eliciting Interview Data from Children"	04/2017

Service

Professional Service

Associate Chair	CSCW 2021
Program Committee	DiGRA 2018 “Users” Track, DiGRA 2019 “Making Sense of Play and Players” Track, DiGRA 2020 “Game History and Cultural Context” Track
LBW/WiP Assoc. Chair	CHI: 2021 CHI Play: 2019, 2020
Paper Reviewer	CHI: 2018, 2020, 2021 CSCW: 2020 CHI Play: 2020 DIS: 2020 IDC: 2019, 2020 Meaningful Play: 2018 DiGRA/FDG: 2016 Creativity & Cognition: 2017
LBW/WiP Reviewer	CHI: 2019, 2020 alt.CHI: 2020 CHI Play: 2017 MobileHCI: 2017 Creativity & Cognition: 2019
Student Game Reviewer	CHI: 2016, 2020
Student Volunteer	CHI Play 2016, DiGRA 2017

Northeastern University Institutional Service

2020-2021	Diversity, Equity, Inclusion & Belonging (DEIB) Ad Hoc Committee, Game Science and Design (GSND) Program Committee, Joint CAMD + Khoury Faculty Hiring Committee, Women of Color in the Academy (WoCiA) Conference Planning Committee
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Carnegie Mellon Institutional Service

2019-2020	HCII Faculty Hiring Committee
2016-2018	HCII PhD Open House Volunteer
2015-2020	OH!Lab 2015-2020 Lab Historian, eHeart Lab 2015-2020 Lab Historian

Community Service

Selection Committee	Carnegie Science Awards 2018, 2019, 2020
Logistics Committee	Pittsburgh Racial Justice Summit 2019 (<i>Signs, Logistics, Accessibility Co-Chair</i>), Pittsburgh Racial Justice Summit 2020 (<i>Evaluations Chair</i>)
Alumni Volunteer Interviewer	Stanford University Undergraduate Admissions 2019, 2020

Skills & Methods

Research Methods	Interviewing, Grounded Theory, Controlled Lab Experiments, Think Aloud Study Protocols, Studies with Children, Ethnomethodology, Surveys, Research Through Design, Co-Design
User-Centered Design	Paper Prototyping, Rapid Iterative Prototyping, UI Wireframing, Heuristic Evaluation, Storyboards, Cognitive Task Analysis, Transformational Game Design, Competitive Analysis, Contextual Inquiry
Game Design	Transformational, Educational, Tabletop, Interactive Narrative Games (e.g., Inform, Twine), Playtesting, Participatory Design with Children

Selected Media

- 11/2020 **Khoury News**, New faculty member Alexandra To designs social technologies for coping with racism
- 06/2020 **UMSI News**, U-M research reveals racism challenges in human-computer interaction
- 01/2019 **CMU News**, Alumnus, Students Join Pittsburgh Community at Racial Justice Summit
- 07/2017 **New York Times**, The Pop-Up Employer: Build a Team, Do the Job, Say Goodbye
- 11/2016 **HCII News & Events**, HCII & ETC Student Game Brings Home Best Student Game and People's Choice Award
- 08/2014 **Stanford News**, Stanford's Symbolic Systems program bridges the gap b/t humanity and technology
- 08/2014 **Stanford News**, Stanford team looks to take crowdsourcing to a whole new level