Academic Appointment _

Northeastern University

Boston, MA

Assistant Professor

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

Pittsburgh, PA

PhD in Human-Computer Interaction

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

Stanford, CA

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

M.S. IN SYMBOLIC SYSTEMS

Sept. 2010 - Jun. 2015

- 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

- 2021 Honourable Mention Paper Award, ACM CHI (top 5%)
- 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 (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

Grants

INTERNAL

Funded

3. Faculty Innovations Grant in Diversity and Academic Excellence for "The Conversation Game: Training students in Residence Life roles to respond to difficult conversations" for \$11k. Role: Co-PI with Michael Arnold Mages.

Period: Sept 2021 - Aug 2022.

2. Khoury College Teaching Innovation Grant for "Can Team-based Learning Support Remote Indigenous Groups in Computer Science?" for \$10k.

Role: Co-PI with Bethany Edmunds, Logan Schmidt, Yvonne Coady, Derek Jacoby.

Period: June 2021 - Sept 2021.

1. Tier-1 Northeastern University FY22 for "Visualizing Spatial Violence (VSV): Tools for Social Justice Advocacy" for \$50k.

Role: Co-PI with Angel David Nieves, Liza Weinstein, Margaret Burnham.

Period: July 2021 - Sept 2022.

Peer-Reviewed Articles _

- 20. Brooks, C., Principe Cruz, E., Camera, J., **To, A.** *Uplifting Us: A BIPOC Game Design Case Study.* In Proc. FDG 2021 Late-Breaking Work
- 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. In Proc. CHI 2021. **Honorable Mention**Award
- 18. **To, A.**, Carey, H., Kaufman, G., Hammer, J. *Reducing Uncertainty and Offering Comfort: Designing Technology for Coping with Interpersonal Racism.* In Proc. CHI 2021
- 17. 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.
- 16. **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** **
- 15. [**To, A.**, Ogbonnaya-Ogburu, I.F., Smith, A.]*, Toyama, K. *Critical Race Theory for HCI*. In Proc. CHI 2020. **Best Paper Award** *First three authors contributed equally
- 14. Holmes, J., **To, A.**, Zhang, F., Park, S.E., Ali, S., Bai, Z., Kaufman, G., Hammer, J. (2019). *A Good Scare: Leveraging Game Theming and Narrative to Impact Player Experience*. In Proc. CHI 2019 Late-Breaking Work.
- 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.** (UNDER REVIEW). "Racial Justice and Scholar-Activism". Networked Feminnisms: 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 Games Studies.

INVITED JOURNAL ARTICLES

- 2. Brown, Q., Kumar, N., Thomas, J., **To, A.**, Rankin, Y. (2021) "Discovering intersectionality part I: researcher interrupted". Interactions, Vol. 28, No. 3
- 1. **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

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 _____

MYPWI 2020-PRESENT

Adventure RPG developed in Unity that addresses the experiences of students of color at predominantly white institutions.

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

1 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 Instructor of Record: Kody Manke TA, Minds and Machines (SymSys 100) SYMBOLIC SYSTEMS PROGRAM AT STANFORD UNIVERSITY Instructors of Record: Dan Lassiter, Thomas Icard, Todd Davies CA, Human-Computer Interaction Seminar (CS 547)

Advising & Mentorship

Instructor of Record: Michael Bernstein

PHD STUDENTS - Advising (2)

Current Shereen Bellamy, Computer Science, Northeastern University

COMPUTER SCIENCE DEPARTMENT AT STANFORD UNIVERSITY

Current Dilruba Showkat, Computer Science, Northeastern University

PHD STUDENTS - Committee (2)

Current Nathan Partlan, Computer Science, Northeastern University

Current Hillary Carey, Transition Design, Carnegie Mellon University

MASTERS STUDENTS - Research Assistants (3)

Current **Doxa Asibey**, Computer Science, Northeastern University

Current Xinyu Hou, Transition Design, Carnegie Mellon University

Current Heng Su, Computer Science, Northeastern University

UNDERGRADUATE STUDENTS - Research Assistants (2)

2021 **Jamie Camera**, BFA CS and Game Dev, Northeastern University

Current Chris Brooks, Computer Science, Northeastern University

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

Schell 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 brainstorms and iteration, and wrote narrative content.

Selected Invited Presentations

TWITCH "GAMES, COMMUNITIES, AND SOCIETY" SPEAKER SERIES "Exploring Game Design for BIPOC Joy and Empowerment"	05/2021
NORTHEASTERN UNIVERSITY CENTER FOR DESIGN CONVERSATION SERIES "Rethinking Design Thinking in the Pluriverse" Talk & Panel Discussion	04/2021
UCONN CSE DIVERSITY & INCLUSION TALK "Designing to Empower Marginalized Communities through Social Technology"	04/2021
NORTHEASTERN UNIVERSITY ART+DESIGN FACULTY DEIB WORKSHOP "Critical Race Theory for HCI (And Art + Design)"	04/2021
UNIVERSITY OF MINNESOTA CSCI 8115 GUEST LECTURE "Qualitative Research - Interview Method Tips"	03/2021

2014

MIT CSAIL HCI SEMINAR "Designing to Empower Marginalized Communities through Social Technology"	03/2021
DEPAUL UNIVERSITY HCD 450 GUEST LECTURE "Critical Race Theory for HCI" & "Reducing Uncertainty and Offering Comfort: Designing Technology for Coping wit Interpersonal Racism"	02/2021 h
University of British Columbia Designing for People (DFP@UBC) Seminar "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	02/2021
MICROSOFT RESEARCH CAMBRIDGE HCI COMMUNITY TALK "Critical Race Theory for HCI" - Co-Presented with Angela Smith	02/2021
INDIANA UNIVERSITY INFORMATICS COLLOQIUM SERIES "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	01/2021
University of Washington DUB Seminar "Designing to Empower Marginalized Communities through Social Technology"	01/2021
Northeastern University - Khoury College "Coded Bias Viewing & Panel Discussion"	12/2020
Stanford HCI Seminar "Designing to Empower Marginalized Communities through Social Technology"	10/2020
CORNELL INFO SCI COLLOQIUM "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	10/2020
Wellesley CS220 HCl Guest Lecture "Designing to Empower Marginalized Communities through Social Technology" & "Critical Race Theory for HCl"	09/2020
UCHICAGO HCI SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
University of Maryland HCIL "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
SNAP HCI RESEARCH SPECIAL SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
UC Berkeley AFOG Group "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
CHICAGOCHI "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
Adobe Research HCI/VIS Seminar "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	08/2020
THUMBTACK DEI, DESIGN, RESEARCH SPECIAL SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	07/2020
University of Michigan MISC Seminar "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	07/2020
FACEBOOK "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	07/2020
STANFORD UNIVERSITY HCI GROUP LUNCH SEMINAR "Critical Race Theory for HCI" - Co-Presented with Ihudiya Finda Ogbonnaya-Ogburu, Angela Smith	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

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 (Signs, Logistics, Accessibility Co-Chair),

Pittsburgh Racial Justice Summit 2020 (Evaluations Chair)

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 A. 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

 $\textbf{HCII News \& Events}, \ \ \mathsf{HCII} \& \ \mathsf{ETC} \ \mathsf{Student} \ \mathsf{Game} \ \mathsf{Brings} \ \mathsf{Home} \ \mathsf{Best} \ \mathsf{Student} \ \mathsf{Game} \ \mathsf{and} \ \mathsf{People's}$

Choice Award

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