Alexandra **To**

PhD Student · Human-Computer Interaction

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Education

Carnegie Mellon University — *Pittsburgh, PA*

PhD in Human-Computer Interaction — *Aug. 2015 - PRESENT*

- Human Computer Interaction Institute | School of Computer Science
- **Advisors:** Dr. Jessica Hammer and Dr. Geoff Kaufman

Stanford University — *Stanford, CA*

M.S. in Symbolic Systems — *Jun. 2014 - Jun. 2015*

- Symbolic Systems Program | School of Humanities and Sciences
- **Advisor:** Dr. Michael Bernstein

Stanford University — *Stanford, CA*

B.S. in Symbolic Systems — *Sept. 2010 - Jun. 2014*

- Symbolic Systems Program | School of Humanities and Sciences
- Minor: Asian American Studies
- **Advisor:** Dr. Michael Bernstein

Honors & Awards

2016 **Graduate Student Assembly/Provost Conference Funds**, Carnegie Mellon University

2014 **Best Paper**, ACM UIST 2014

B.S. Conferred with Honors, Stanford University

Publications

Peer-Reviewed Full Papers

[1] **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. TO APPEAR In Proc. Meaningful Play 2016.

[2] **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. of the 28th annual ACM symposium on Human Factors in Computing Systems (CHI '16).

[4] Retelny, D., Robaszkiewicz, S., **To, A.**, Lasecki, W., Patel, J., Doshi, T., Valentine, M., Bernstein, M. (2014). Expert Crowdsourcing with Flash Teams. In Proc. of the 27th annual ACM symposium on User Interface Software and Technology (UIST '14). **Best Paper Award**

Works-in-Progress, Posters

[1] **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. TO APPEAR In Proc. CHI Play 2016.

[2] Retelny, D., Robaszkiewicz, S., **To, A.**, Bernstein, M. (2013). Enabling Expert Crowdsourcing with Flash Teams. CrowdConf 2013.

Experience

Carnegie Mellon University HCII *Pittsburgh, PA*

PhD Student / Research Assistant *Aug. 2015 - Present*

- **Advisors:** Jessica Hammer and Geoff Kaufman
- SCIPR Project - designing, and researching a game-based intervention for marginalized science identity middle school students

Carnegie Mellon University HCII *Pittsburgh, PA*

Research Assistant *July. 2015 - Sept. 2015*

- With: Steven Dow, Jeff Bigham, Michael Nebeling
- WearWrite - explore shepherding the crowd through a smart watch. Contributed development to front end interface, design lab protocol, run study, and write paper submission.

Stanford University HCI Group *Stanford, CA*

Research Assistant *Jun. 2014 - Jun. 2015*

- With: Michael Bernstein, Daniela Retelny, Negar Rahmati, Tulsee Doshi
- Flash Organizations - Scaling up the team capabilities of the expert crowd. Combining HCI and organizational behavior research to examine how the online expert crowd can come together like an org. More work developing our online platform, Foundry, as well as developing and testing of theoretical framework.

Stanford University HCI Group *Stanford, CA*

CURIS Research Intern *Jun. 2013 - Sept. 2013*

- With: Michael Bernstein, Daniela Retelny, Sébastien Robaszkiewicz
- Flash Teams - Creating lightweight modular team structures to guide teams of expert crowd workers. Developed an online platform, Foundry, for the authorship and run-time coordination of these teams.

Stanford University Symbolic Systems Program *Stanford, CA*

Research Intern *Jun. 2012 - Sept. 2012*

- With: Todd Davies, Clay Carson
- Work jointly with the Symbolic Systems Program and the Martin Luther King Jr. Institute. Designing a collaborative history online platform to engage a wide audience with digital history as well as designing research studies.

Teaching Experience

Teaching Assistant, Minds and Machines (SymSys 100)

Symbolic Systems Program at Stanford University *2014*

Lead discussion section of the class, contributed to section curriculum and writing homework assignments, held office hours, and graded assignments.

Course Assistant, Human-Computer Interaction Seminar (CS 547)

Computer Science Department at Stanford University *2014*

Organized seminar, plan schedule for speaker, manage script to record attendance.

Workshops and Demos

*Workshops are non-archival, presented in the form of posters. Demos showcase live working prototypes to venue attendees.

[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 '16 Productivity Decomposed Workshop.

[2] 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 '15 Demos.

Relevant Coursework

CARNEGIE MELLON UNIVERSITY
05771 - HCI Process & Theory
05816 - Applied Research Methods
05818 - Design Educational Games

STANFORD UNIVERSITY
CS 107 - Computer Organization and Systems
CS 109 - Intro to Probability for Computer Scientists
CS 110 - Computer Systems
CS 142 - Web Applications
CS 154 - Intro to Automata and Complexity Theory
CS 196 - Computer Consulting

CS 147 - Intro to Human-Computer Interaction Design
Comm 120W - Digital Media in Society
CS 376 - Research Topics in Human-Computer Interaction
SYMSYS 245 - Cognition in Interaction Design

PoliSci 121L - Racial-Ethnic Politics in the U.S.
CSRE 196C - Intro to Comparative Studies in Race and Ethnicity
HIST 265 - Writing Asian American History
SYMSYS 201 - ICT, Society, and Democracy
SYMSYS 203 - Cognitive Science Perspectives on Conflict, Violence, Peace, and Justice

Relevant Skills

Programming	Javascript, HTML5, CSS, jQuery, Twitter Bootstrap, C/C++, D3
Research Methods	Interviewing, Grounded Theory, Controlled Lab Experiments, Think Aloud Study Protocols Studies with Children, Ethnomethodology, Surveys
User-Centered Design	Paper Prototyping, Rapid Iterative Prototyping, UI Wireframing, Heuristic Evaluation, Storyboards Playtesting, Cognitive Task Analysis, Transformational Game Design, Playtesting

Media

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