

Haoqi Zhang

CONTACT INFORMATION	Northwestern University Delta Lab Design, Technology, & Research EECS & Segal Design Institute Evanston, IL 60208	(917) 445-2626 http://delta.northwestern.edu http://dtr.northwestern.edu http://haoqizhang.com hq@northwestern.edu
RESEARCH INTERESTS	My research advances the design of integrative human-machine systems that solve complex human problems and advance desired values at scale. Specifically, I design, build, and study <i>Computational Ecosystems</i> that interweave community process, social structures, and intelligent systems to unite people and machines to overcome large challenges. My work bridges the fields of Human-Computer Interaction, Artificial Intelligence, Social & Crowd Computing, Learning Science, and Decision Science.	
APPOINTMENTS	Northwestern University , Evanston, IL <i>Allen K. and Johnnie Cordell Breed Junior Professor of Design</i>	9/2015 to 8/2018
	Northwestern University , Evanston, IL <i>Assistant Professor, EECS and Segal Design Institute</i>	9/2013 to present
	MIT CSAIL , Cambridge, MA <i>Postdoctoral Associate, User Interface Design Group</i>	9/2012 to 7/2013
	Microsoft Research , Redmond, WA <i>Research Intern, Adaptive Systems and Interaction Group</i>	5/2010 to 8/2010
EDUCATION	Harvard University , Cambridge, MA Ph.D. in Computer Science, September 2012 Thesis: <i>Computational Environment Design</i> Advisor: David C. Parkes Harvard College , Cambridge, MA A.B. in Computer Science and Economics with highest honors, June 2007 Thesis: <i>Policy Teaching through Reward Function Learning</i>	
HONORS AND AWARDS	UIST Best Paper Award Honorable Mention, 2018. Office of the Provost Award for Digital Learning, 2016-2017. Murphy Award for Advancing Undergraduate Engineering, 2014, 2015, 2016. Searle Teaching Fellow, 2014 CHI Best Paper Award Honorable Mention, 2012, 2014. HCOMP Notable Paper Award, 2013. NSF Graduate Research Fellowship, 2011-2012. NDSEG Fellowship, 2008-2011. Derek C. Bok Award for Excellence in Teaching of Undergraduates at Harvard, 2009. Certificate of Distinction in Teaching at Harvard, received five times from 2005-2009. Thomas Temple Hoopes Prize for senior thesis at Harvard, 2007.	
CONFERENCE AND JOURNAL PAPERS	Haoqi Zhang. Designing Computational Ecosystems to Advance Human Values. Submitted to <i>Communications of the ACM (CACM)</i> (under review), 2018.	

Josh Hibschan, Darren Gergle, Eleanor O'Rourke, and Haoqi Zhang. Isopleth: Supporting Sensemaking in Professional Web Applications to Create Readily Available Learning Experiences. Submitted to *ACM Transactions on Computer-Human Interaction (TOCHI)* (under review), 2018.

Sarah Lim, Josh Hibschan, Haoqi Zhang, and Eleanor O'Rourke. Ply: A Visual Web Inspector for Learning from Professional Webpages. In *Proceedings of the 31st Symposium on User Interface Software and Technology (UIST '18)*, 2018. Best Paper Award Honorable Mention.

Yongsung Kim, Darren Gergle, and Haoqi Zhang. Hit-or-Wait: Coordinating Opportunistic Low-effort Contributions to Achieve Global Outcomes in On-the-go Crowdsourcing. In *Proceedings of the ACM CHI Conference on Human Factors and Computing Systems (CHI '2018)*, 2018.

Haoqi Zhang, Matthew W. Easterday, Elizabeth Gerber, Daniel Rees Lewis, and Leesha Maliakal. Agile Research Studios: Orchestrating Communities of Practice to Advance Research Training at Scale. In *Proceedings of the 20th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17)*, 2017.

Yongsung Kim, Aaron Shaw, Haoqi Zhang, and Elizabeth Gerber. Understanding Trust amid Delays in Crowdfunding. In *Proceedings of the 20th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17)*, 2017.

Yongsung Kim, Emily Harburg, Shana Azria, Aaron Shaw, Elizabeth Gerber, Darren Gergle, and Haoqi Zhang. Studying the Effects of Task Notification Policies on Participation and Outcomes in On-the-go Crowdsourcing. In *Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP '16)*, 2016.

Katherine Lin, Henry Spindell, Scott Cambo, Yongsung Kim, and Haoqi Zhang. Habit-sourcing: Sensing the Environment through Immersive, Habit-Building Experiences. In *Proceedings of the 29th Symposium on User Interface Software and Technology (UIST '16)*, 2016.

Joshua Hibschan and Haoqi Zhang. Telescope: Fine-Tuned Discovery of Interactive Web UI Feature Implementation. In *Proceedings of the 29th Symposium on User Interface Software and Technology (UIST '16)*, 2016.

Josh Hibschan and Haoqi Zhang. Unravel: Rapid Web Application Reverse Engineering via Interaction Recording, Source Tracing, and Library Detection. In *Proceedings of the 28th Symposium on User Interface Software and Technology (UIST '15)*, 2015.

Kevin Chen and Haoqi Zhang. Remote Paper Prototype Testing. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '15)*, 2015.

Anant Bhardwaj, Juho Kim, Steven P. Dow, David Karger, Sam Madden, Robert C. Miller, Haoqi Zhang. Attendee-sourcing: Exploring the Design Space of Community-Informed Conference Scheduling. In *Proceedings of the AAAI Conference on Human Computation and Crowdsourcing (HCOMP '14)*, 2014.

Haoqi Zhang, Andrés Monroy-Hernández, Aaron Shaw, Sean Munson, Elizabeth Gerber, Benjamin Mako Hill, Peter Kinnaird, Shelly Diane Farnham, and Patrick Minder. WeDo: End-To-End Computer Supported Collective Action. *Proceedings of the Eighth*

International AAI Conference on Weblogs and Social Media (ICWSM '14), 2014.

Aaron Shaw, Haoqi Zhang, Andrés Monroy-Hernández, Sean Munson, Benjamin Mako Hill, Elizabeth Gerber, Peter Kinnaird, and Patrick Minder. Computer Supported Collective Action. *interactions*, 21, 2, March 2014.

Lydia B. Chilton, Juho Kim, Paul André, Felicia Cordeiro, James Landay, Dan Weld, Steven P. Dow, Robert C. Miller, and Haoqi Zhang. Frenzy: Collaborative Data Organization for Creating Conference Sessions. *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '14)*, pp. 1255–1264, 2014. Best Paper Award Honorable Mention.

Robert C. Miller, Haoqi Zhang, Eric Gilbert, and Elizabeth Gerber. Pair Research: Matching People for Collaboration, Learning, and Productivity. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '14)*, 2014.

Paul André, Haoqi Zhang, Juho Kim, Lydia B. Chilton, Steven P. Dow, and Robert C. Miller. Community clustering: Leveraging an academic crowd to form coherent conference sessions. In *Proceedings of the 1st AAI Conference on Human Computation and Crowdsourcing (HCOMP '13)*, 2013. Notable Paper Award.

Haoqi Zhang, Eric Horvitz, and David C. Parkes. Automated Workflow Synthesis. In *Proceedings of the 27th AAI Conference on Artificial Intelligence (AAAI '13)*, 2013.

Juho Kim, Haoqi Zhang, Paul André, Lydia Chilton, Wendy MacKay, Michel Beaudouin-Lafon, Robert C. Miller, Steven P. Dow. Cobi: A Community-Informed Conference Scheduling Tool. In *Proceedings of the 26th Symposium on User Interface Software and Technology (UIST '13)*, 2013.

Haoqi Zhang, Edith Law, Robert C. Miller, Krzysztof Z. Gajos, David C. Parkes, and Eric Horvitz. Human Computation Tasks with Global Constraints. In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '12)*, pp. 217–226, 2012. Best Paper Award Honorable Mention.

Haoqi Zhang, Eric Horvitz, Yiling Chen, and David C. Parkes. Task Routing for Prediction Tasks. To appear in *Proceedings of the 11th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS '12)*, 2012.

Ian A. Kash, John K. Lai, Haoqi Zhang, and Aviv Zohar. Economics of BitTorrent Communities. In *Proceedings of the 21st International Conference on World Wide Web (WWW '12)*, 2012.

Jon Noronha, Eric Hysen, Haoqi Zhang, and Krzysztof Z. Gajos. PlateMate: Crowdsourcing Nutrition Analysis from Food Photographs. In *Proceedings of the 24th Symposium on User Interface Software and Technology (UIST '11)*, pp. 1–11, 2011.

Edith Law and Haoqi Zhang. Towards Large-Scale Collaborative Planning: Answering High-Level Search Queries Using Human Computation. In *Proceedings of the 25th AAI Conference on Artificial Intelligence (AAAI '11)*, pp. 1210–1215, 2011.

Yiling Chen, Jerry Kung, David C. Parkes, Ariel Procaccia, and Haoqi Zhang. Incentive Design for Adaptive Agents. In *Proceedings of the 10th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS '11)*, pp. 627–634, 2011.

Pavithra Harsha, Cynthia Barnhart, David C. Parkes, and Haoqi Zhang. Strong Activity Rules for Iterative Combinatorial Auctions. In *Computers & Operations Research*, vol. 37, no. 7, pp. 1271–1284, 2010.

Haoqi Zhang, Yiling Chen, and David C. Parkes. A General Approach to Environment Design with One Agent. In *Proceedings of the 21st International Joint Conference on Artificial Intelligence (IJCAI '09)*, pp. 2002–2008, 2009.

Haoqi Zhang, David C. Parkes, and Yiling Chen. Policy Teaching Through Reward Function Learning. In *Proceedings of the 10th ACM Conference on Electronic Commerce (EC '09)*, pp. 295–304, 2009.

Haoqi Zhang and David C. Parkes. Value-based Policy Teaching with Active Indirect Elicitation. In *Proceedings of the 23rd AAAI Conference on Artificial Intelligence (AAAI '08)*, pp. 208–214, 2008. Oral presentation and poster paper.

WORKSHOP
PAPERS AND
DEMOS

Yongsung Kim, Emily Harburg, Shana Azria, Elizabeth Gerber, Darren Gergle, Haoqi Zhang. Enabling Physical Crowdsourcing On-the-go with Context-Sensitive Notifications. *HCOMP Work-in-Progress*, 2015.

Emily Harburg, Yongsung Kim, Elizabeth Gerber, and Haoqi Zhang. CrowdFound: A Mobile Crowdsourcing System to Find Lost Items On-the-Go. *CHI Work-in-Progress*, 2015.

Haoqi Zhang, Paul André, Lydia Chilton, Juho Kim, Steven P. Dow, Robert C. Miller, Wendy MacKay, and Michel Beaudouin-Lafon. Cobi: Communitysourcing Large-Scale Conference Scheduling. Demo at *CHI Interactivity (CHI '13)*, 2013.

Haoqi Zhang, John Lai, and Moritz Baecher. Hallucination: a Mixed-Initiative Approach for Efficient Document Reconstruction. In *Proceedings of the AAAI workshop on Human Computation (HCOMP '12)*, 2012.

Andrew Mao, Yiling Chen, Krzysztof Gajos, David Parkes, Ariel Procaccia, and Haoqi Zhang. TurkServer: Enabling Synchronous and Longitudinal Online Experiments. In *Proceedings of the AAAI workshop on Human Computation (HCOMP '12)*, 2012.

Beatrice Liem, Haoqi Zhang, and Yiling Chen. An Iterative Dual Pathway Structure for Speech-to-Text Transcription. In *Proceedings of the AAAI workshop on Human Computation (HCOMP '11)*, 2011.

Ian A. Kash, John K. Lai, Haoqi Zhang, and Aviv Zohar. Economics of BitTorrent Communities. In *Proceedings of the 6th Workshop on the Economics of Networks, Systems, and Computation (NetEcon '11)*, 2011.

Haoqi Zhang, Eric Horvitz, Yiling Chen, and David C. Parkes. Task Routing for Prediction Tasks. In the *ACM EC Workshop on social computing and user-generated content*, 2011.

Haoqi Zhang, Eric Horvitz, Robert C. Miller, and David C. Parkes. Crowdsourcing General Computation. In the *CHI workshop on crowdsourcing and human computation*, 2011. Also available as Microsoft Research Technical Report MSR-TR-2011-6.

Eric Huang, Haoqi Zhang, David C. Parkes, Krzysztof Z. Gajos, and Yiling Chen.

Toward Automatic Task Design: A Progress Report. In *Proceedings of the KDD workshop on Human Computation (HCOMP '10)*, 2010.

Haoqi Zhang and David C. Parkes. Enabling Environment Design via Active Indirect Elicitation. In *the 4th Multidisciplinary Workshop on Advances in Preference Handling (MPREF '08)*, 2008.

PHD THESIS Haoqi Zhang. Computational Environment Design. Ph.D. dissertation, *Harvard University*, 2012.

UNDERGRADUATE THESIS Haoqi Zhang. Policy Teaching through Reward Function Learning. Undergraduate thesis in Computer Science and Economics, *Harvard University*, 2007. Thomas Temple Hoopes Prize Winning Thesis.

INVITED TALKS Computational Ecosystems: Tech-enabled Communities to Advance Human Values at Scale.
Berkeley BiD Seminar, Berkeley, CA, Jan 2018.
Michigan School of Information Seminar, Ann Arbor, MI, Jan 2018.
Harvard EconCS/HCI Seminar, Cambridge, MA, Nov 2017.
MIT HCI Seminar, Cambridge, MA, Nov 2017.
CMU HCII Seminar, Pittsburgh, CA, Nov 2017.
Stanford Seminar on People, Computers and Design, Stanford, CA, Oct 2017.
Microsoft Research Seminar, Seattle, WA, Oct 2017.
UW Dub Seminar, Seattle, WA, Oct 2017.
UCSD Design@Large, San Diego, CA, Oct 2017.

Agile Research Studios: Orchestrating Communities of Practice to Advance Research Training.
Berkeley WISE Seminar, Berkeley, CA, Jan 2018.
Northwestern Learning, Teaching, and Assessment Forum, Evanston, IL, Nov 2016.

Pair Research: Matching People for Collaboration, Learning, and Productivity.
Northwestern TEACHx, Evanston, IL, May 2017.

Design, Technology, and Research.
Northwestern Mobile Meetup, Evanston, IL, Feb 2015.

Crowds, Communities, and Mixed-Initiative Systems.
Microsoft Faculty Summit, Bellevue, WA, July 2014.
Northwestern Institute on Complex Systems, Evanston, IL, May 2014.
AAAS Annual Meeting, Chicago, IL, Feb 2014.
CMU Human Computer Interaction Institute, Pittsburg, PA, October 2013.

FUNDING Haoqi Zhang. CAREER: Mixed-Initiative Orchestration Technologies for Advancing Community-Based Learning and Problem Solving in Research Communities. *NSF CAREER* (under review), 2019-2024.

Haoqi Zhang and Nell O'Rourke. Readily Available Learning Experiences: Turning the Entire Web into Progressive Examples to Bridge Conceptual Knowledge Gaps for Novice Web Developers. *NSF Cyberlearning*, 2017-2020, \$549,815.

Haoqi Zhang, Matt Easterday, and Liz Gerber. Agile Research Studios: Scaling Cognitive Apprenticeship to Advance Undergraduate and Graduate Research Training in STEM. *NSF Cyberlearning*, 2016-2019, \$549,944.

Haoqi Zhang and Darren Gergle. Coordination of Opportunistic Actions to Produce Globally Effective Behaviors for Physical Crowdsourcing. *NSF Cyber-Human Systems*, 2016–2019, \$496,380.

Haoqi Zhang and Liz Gerber. Pair Research: Matching People for Collaboration, Learning, and Productivity. *Northwestern’s Office of the Provost Award for Digital Learning*, 2016–2017, \$20,000.

Haoqi Zhang. HCOMP Doctoral Consortium. *NSF IIS*, 2016-2017, \$23,772.

Haoqi Zhang. Remote Paper Prototype Testing. *NSF CISE Research Initiation Initiative*, 2015–2017, \$147,536.

Haoqi Zhang. Design, Technology, and Research. *Northwestern’s Murphy Society Grant*, 2014–2016, \$100,000.

Haoqi Zhang, Aaron Shaw, and Elizabeth Gerber. Sharing Human-powered Mobility to Improve Societal Efficacy and Efficiency. *Microsoft Fuse Labs Research Award*, 2014–2015, \$25,000.

TEACHING	EECS 315/497: Design, Technology, and Research <i>Instructor & Program Director at Northwestern</i>	2014–now (quarterly)
	EECS 397/497: Social & Crowd Computing <i>Instructor at Northwestern</i>	2014, 2015, 2017, 2018
	DSGN 401-2: Interaction Design <i>Instructor at Northwestern</i>	2015, 2016, 2017, 2018
	EECS 330: Human Computer Interaction <i>Instructor at Northwestern</i>	2014
	EECS 101: Intro to Computer Science for Everyone <i>Instructor at Northwestern</i>	2013, 2014
	6.831: User Interface Design and Implementation <i>Instructor at MIT</i>	2013
	Derek Bok Center for Teaching and Learning <i>Teaching Consultant at Harvard</i>	2009–2011
PHD RESEARCH ADVISING	Kapil Garg - Advise research on Computational Ecosystems.	Fall 2018 to present
	Gobi Dasu - Advise research on Readily Available Learning Experiences (RALE).	Fall 2018 to present
	Ryan Louie - Advise research on Opportunistic Collective Experiences (OCE).	Fall 2017 to present
	Leesha Maliakal - Advise research on Agile Research Studios (ARS).	Fall 2016 to present
	Yongsung Kim	Fall 2014 to present

- Advise research on On-the-Go Crowdsourcing (OTG).

Josh Hibschan Fall 2014 to June 2017

- Advise research on Readily Available Learning Experiences (RALE).
- Dissertation: *Readily Available Learning Experiences in Production Code*.

Emily Harburg Summer 2014 to Spring 2015

- Advise research on crowdsourced lost and found for TSB rotation.

Scott Cambo Spring 2015 to Summer 2015

- Advise research on on-the-go citizen science for TSB rotation.

Julian Vicens (visiting student) Summer 2016

- Advise summer research on “Patterns: Teaching the Scientific Method through a Citizen Science application”

UNDERGRADUATE
RESEARCH
ADVISING

Agile Research Studios (ARS)

Victoria Cabales, Maggie Lou, and Nneoma Oradiegwu Fall 2017 to present

- Advise research on “Tools and Processes for Supporting Meta-cognitive Reflection.”

Shankar Salwan and Sehmon Burnam Spring 2017 to present

- Advise research on “Understanding and Promoting Collective Skill Development and Growth in Learning Communities.”

Bomani McClendon and Sameer Srivastava Winter 2016 to Spring 2017

- Advise research on “Polaris: Scaffolding the Creation & Evaluation of Design Arguments for Undergraduate Researchers”

Readily Available Learning Experiences (RALE)

Maxine Whitely, David Latimore, and Aaron Leon Spring 2017 to present

- Advise research on “Scaffolded Exercises on Professional Code Examples.”

Daniel Zhu and Suzy Lee Winter 2018 to present

- Advise research on “Knowledge Maps: An Interactive Tool for Learners to Curate Similar and Contrasting Professional Code Examples.”

Sarah Lim Fall 2016 to Spring 2018

- Advise research on “Ply: A Visual Web Inspector for Learning from Complex Professional Examples.”
- Work led to presentation at ACM CHI Student Research Competition (1st place), CHI 2017
- Work led to “Ply: A Visual Web Inspector for Learning from Complex Professional Examples” at *UIST '18*. Best Paper Award Honorable Mention.

Jon Rovira Winter 2016 to Spring 2016

- Advise research on “Intelligent Code Matching: Using Professional Examples to Help Novice Programmers Write Better Code.”

Sarah Lim and Christina Kim Fall 2015 to Spring 2016

- Advise research on “Dynamic Tutorials: Using Professional Web Examples to Providing When-To-Do Intuitions.”

Nicole Zhu and Michael Wang Fall 2015 to Spring 2016

- Advise research on “Reverse Engineer Professional Web Layouts for Authentic Learning.”

Philip House, Alex Hollenbeck, Ben Rothman, Sarah Lim Spring 2014 to Spring 2015

- Advised research on “Programming with a purpose.”
- Prototyped a web application that teaches Bootstrap components. Students contribute to generating CSS style guides while learning.

On-The-Go Crowdsourcing (OTG)

Olivia Barnett, Priya Shah, and Eli Cohen

Fall 2017 to present

- Advise research on “Dynamic Habitsourcing: Incorporating the 4X framework into Habit-Building Activities.”

Sam Naser and Maggie Lou

Winter 2018 to present

- Advise research on “The Last Mile Problem in On-the-Go Crowdsourcing: Challenges and Models.”

Sasha Weiss

Spring 2016 to Fall 2018

- Advise research on “Context-Aware Micro-reminders.”

Kapil Karg

Winter 2016 to Spring 2018

- Advise research on “4X: Scaffolding Low-Effort Sensing.”

Aaron Loh

Fall 2015

- Advise research on “Scaffolding Low-Effort Sensing.”

Shana Azria

Fall 2015 to Winter 2016

- Advise research on “Liberio: On-the-Go Package Delivery.”
- Work led to paper “Studying the Effects of Task Notification Policies on Participation and Outcomes in On-the-go Crowdsourcing” at *HCOMP '16*.

Zachary Allen

Spring 2014 to Spring 2015

- Advised research on “Engage with a purpose: using mobile and wearable devices to promote exploration and discovery.”
- Work led to presentation at ACM CHI Student Research Competition (3rd place) on “GAZE: Using Mobile Devices to Promote Discovery and Data Collection.”, CHI 2015.

Stephen Chan, Nicole Zhu

Winter 2013 to Spring 2015

- Advised research on “Low-effort crowdsourcing.”
- Co-developed iOS app *Tapshare*, which allows for low-effort, participatory community-sensing through simple gestures such as Knocks. Also led design and needfinding efforts.

Nicholas Scoliard

Spring 2014

- Advised research on “Crowdsourcing desirable walking paths.”
- Developed iOS app for collecting and presenting desirable walking routes around campus.

Situational Crowdsourcing (SC)

Katherine Lin, Hyung-Soon Kim, and Alaina Kafkes

Spring 2016 to Winter 2017

- Advise research on “Scaffolding Habitsourcing: Interactions and Methods.”

Katherine Lin and Henry Spindell

Spring 2015 to Spring 2016

- Advise research on “Habitsourcing: Build personal habits with immersive experiences that collect environmental data.”
- Work led to paper “Habitsourcing: Sensing the Environment through Immersive, Habit-Building Experiences” at *UIST '16*.

Shawn Caeiro and Jennie Werner Fall 2015 to present
 - Advise research on “Physical Games with a Purpose.”

Leesha Maliakal, Scott Cambo, Christina Kim Winter 2015 to Spring 2016
 - Advise research on “Crowdcheer: motivating marathon runners with timely cheers from the crowd.”
 - Work led to presentation at Grace Hopper 2015 Student Research Competition (2nd place) on “CrowdCheer: Situational Crowdsourcing of Motivation for Runners”

Frank Avino and Henry Spindell Winter 2015 to Spring 2015
 - Advised research on “RinkTalk: parentsourcing event detection at hockey games to support coaches and players.”

Jonah Ruffer Spring 2014
 - Advised research on “Waitsourcing: using dead time for crowd work.”
 - Developed ‘I spy’ games for waiting at bus stops. Games collect as a by-product a rich dataset of photos and census information.

Opportunistic Collective Experiences (OCE)

Gino Wang, Sanfeng Wang, and Eunice Lee Spring 2017 to present
 - Advise research on “Collective Narratives: An API for Opportunistic Storytelling and Immersive Interactive Narratives.”

Ryan Jeon, Matthew Wang, Allison Sun and Jennie Werner Fall 2016 to present
 - Advise research on “Cerebro: Programming Opportunistic Interactions Across People”
 - Work led to presentation at ACM CHI Student Research Competition (2nd place), CHI 2018

Kevin Chen, Ryan Madden, and Shannon Nachreiner Fall 2015 to Spring 2016
 - Advise research on “Collective Experience API.”

Breaking Boundaries (BB)

Meg Grasse, Andrew Finke, and Alex Kaldjian Fall 2016 to Spring 2018
 - Advise research on “McGonagall: Transfiguring Mixed-Fidelity Paper Prototypes to Remotely Test Mobile App Experiences.”

Katie George, Greg Kim, Nikhil Pai, and Alex Wang Fall 2015 to Winter 2017
 - Advise research on “On-demand Action Plans for Personal Projects”

Kalina Silverman Fall 2014 to Spring 2015
 - Advised research on “Big Talk: An online platform for deep, meaningful interactions between people.”

Kevin Chen Spring 2014
 - Advised research on “Glass Prototyping: using Google Glass as a lens for testing mobile application prototypes.”
 - Work led to paper “Remote Paper Prototype Testing” at *CHI '15*.

Corey Grief Spring 2014 to Winter 2015
- Advised research on “Secrets: information sharing through quests.”
- Developed and studied a system that supports people sharing tips/secrets with others who complete tasks to access information.

Prior to Northwestern

Joey Rafidi Fall 2012 to Spring 2013
- Co-advised research on “Crowdcierge: Real-time Trip Planning with the Crowd.”
- Work led to presentation at CHI Undergraduate Student Research Competition (tied for 2nd place), *CHI '13*

Andy Cooper Fall 2012
- Co-advised UAP research on “True Rank: Improving College Basketball Rankings.”
- Developed an user interface to visualize upsets in non-transitive rankings and allow users to contribute their opinions about the outcome.

Jon Noranha and Eric Hysen Spring 2011
- Co-advised research on “Crowdsourcing Nutritional Analysis.”
- Work led to paper “PlateMate: Crowdsourcing Nutrition Analysis from Food Photographs” in *UIST '11*.

Beatrice Liem Fall 2010 to Spring 2011
- Co-advised undergraduate thesis, “Designing a Transcription Game.”
- Work led to paper “An Iterative Dual Pathway Structure for Speech-to-Text Transcription” in *HCOMP '11*.

Jerry Kung Summer 2009 to Spring 2011
- Co-advised undergraduate thesis, “Incentive Design for Adaptive Agents.”
- Work led to paper “Incentive Design for Adaptive Agents” in *AAMAS '11*.

Eric Huang Summer 2009 to Spring 2010
- Co-advised undergraduate thesis, “Automatic Task Design on Amazon Mechanical Turk.”
- Work led to paper “Toward Automatic Task Design: A Progress Report” in *HCOMP '10*.

Dylan Lake Summer 2009
- Co-advised summer research on “k-Implementation with Unknown Rewards.”
- Work extended results from *EC '09* policy teaching paper to a multi-agent setting.

SELECT STUDENT HONORS DTR students, Undergraduate Research Grant, awarded 33 times between 2014–present.

Sarah Lim, UIST Best Paper Award Honorable Mention, 2018.

Josh Shi and Armaan Shah, CHI Student Research Competition, 1st Place, 2018.

Jennie Werner and Allison Sun, CHI Student Research Competition, 2nd Place, 2018.

Ryan Louie, Segal Design Cluster Fellowship, 2018.

Yongsung Kim, Microsoft Research Internship, 2017.

Leesha Maliakal, Segal Design Cluster Fellowship, 2017.

Sarah Lim, CHI Student Research Competition, 1st Place, 2017.
Josh Hibsichman, Segal Design Cluster Fellowship, 2016.
Josh Hibsichman, Google Research Internship, 2016.
Sarah Lim, Google Lime Scholarship, 2016.
Yongsung Kim, Segal Design Cluster Fellowship, 2015.
Leesha Maliakal, Grace Hopper Student Research Competition, 2nd Place, 2015.
Yongsung Kim, CHI Student Research Competition, 1st Place, 2015.
Zachary Allen, CHI Student Research Competition, 3rd Place, 2015.
Kalina Silverman, OZY Genius Award, 2015.
Kevin Chen, KPCB Fellow, 2015.

PROFESSIONAL
ACTIVITIES

Founder and Director, Agile Research University, 2017–present
Creator, Pair Research Platform, 2016–present
Member, HCOMP Steering Committee, 2014–present
Co-chair, HCOMP Doctoral Consortium, 2016
Mentor, HCOMP Doctoral Consortium, 2014, 2015
Co-organizer, CrowdCamp, 2014, 2015
Scheduling Chair, CHI & CSCW, 2013, 2014
Chair, HCOMP Works-in-Progress and Demo track, 2014
Co-organizer, Human Computation Workshop (HCOMP), 2011, 2012
Co-editor & advisor, CrowdResearch.org blog, 2011–2016.

Program committee: Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) 2018; Collective Intelligence (CI) 2017; Conference on Artificial Intelligence (AAAI) 2014; International Conference on World Wide Web (WWW) 2014, 2017; International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2014; International Joint Conferences on Artificial Intelligence (IJCAI) 2013; Conference on Human Computation and Crowdsourcing (HCOMP) 2013, 2014, 2017; NIPS Workshop on Computational Social Science & the Wisdom of Crowds 2011; North East Student Colloquium on Artificial Intelligence 2010.

Refereeing: Machine Learning (ML) 2012; Artificial Intelligence (AIJ) 2012; ACM Symposium on User Interface Software and Technology (UIST) 2012, 2013, 2014; ACM Conference on Human Factors in Computing Systems (CHI) 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018; ACM Conference on Computer Supported Collaborative Work and Social Computing (CSCW) 2015, 2017; ACM Transactions on Computer-Human Inter-

action (TOCHI) 2013; IEEE Internet Computing 2012; Transactions on Economics and Computation (TEAC) 2012; International Conference on World Wide Web (WWW) 2010, 2015, 2016; Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS) 2009; Journal of Artificial Intelligence Research (JAIR) 2009, 2015, 2016; International Journal on Human Computer Studies (IJHCS) 2016, 2017.

UNIVERSITY AND
DEPARTMENTAL
SERVICE

Director, Design Technology and Research, 2014–present.

CS curriculum committee, Northwestern CS, 2015–present.

URG selection committee, Northwestern University, 2015–2017.

Organizer, Segal Design Seminar Series, 2013–present.

Segal research council, Northwestern University, 2013–present.

Mentor & judge, WildHacks, 2016.

Co-chair, Northwestern NICO working group on Internet and Society, 2014–2016.

CS admissions committee, Northwestern CS, 2017–present.

TSB admissions committee, Northwestern TSB, 2013–2017.

PhD Committee Chair: Josh Hibschan

PhD Committee Member: Yi Yang, Michael Lucas

Member, CS+X strategic committee, Northwestern CS, 2016–present.

Member, CS Professor of instruction search committee, 2017–2018.

Member, TSB Faculty search committee, 2016–2017.

Member, CS Postdoc of instruction search committee, 2017.

Co-chair, CS search planning committee, Northwestern CS, 2016.

Theory search committee, Northwestern University, 2013.