

# Kristen Vaccaro

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## Education

- 2013-2019 PhD in Computer Science, University of Illinois Urbana-Champaign  
*Advisor:* Karrie Karahalios  
*Dissertation Title:* Designing for User Agency and Control in Algorithmic Systems
- 2011-2013 NONDEGREE graduate work in Computational Social Science, George Mason University
- 2005-2009 BA in Physics, Reed College

## Research experience

- 2013-2019 Research Assistant, University of Illinois  
*Research:* the user experience of machine learning systems, with a focus on designing for user agency and control
- 2015 Research Intern, Adobe Research  
*Research:* modeled compatibility in the fashion domain, investigating whether a third item could “make or break” an outfit
- 2009-2013 Software Engineer, MITRE Corporation  
*Research:* developed and evaluated systems dealing with identity resolution, social network analysis and natural language processing. Also contributed to the design, development and evaluation of radar systems

## Publications

### CONFERENCE PROCEEDINGS (PEER-REVIEWED)

- 2019 User Attitudes Towards Algorithmic Opacity and Transparency in Online Reviewing Platforms  
Motahhare Eslami, **Kristen Vaccaro**, Min Kyung Lee, Amit Elazari Bar On, Eric Gilbert, and Karrie Karahalios  
*CHI* DOI: [10.1145/3290605.3300724](https://doi.org/10.1145/3290605.3300724)

- 2018 The Illusion of Control: Placebo Effects of Control Settings  
**Kristen Vaccaro**, Motahhare Eslami, Christian Sandvig, Kevin Hamilton, and Karrie Karahalios  
*CHI* DOI: [10.1145/3173574.3173590](https://doi.org/10.1145/3173574.3173590)
- 2018 Designing the Future of Personal Fashion  
**Kristen Vaccaro**, Tanvi Agarwalla, Sunaya Shivakumar, and Ranjitha Kumar  
*CHI* DOI: [10.1145/3173574.3174201](https://doi.org/10.1145/3173574.3174201)
- 2017 “Be careful; things can be worse than they appear”: Understanding Biased Algorithms and Users’ Behavior around Them in Rating Platforms  
 Motahhare Eslami, **Kristen Vaccaro**, Karrie Karahalios, and Kevin Hamilton  
*ICWSM*
- 2016 The Elements of Fashion Style  
**Kristen Vaccaro**, Sunaya Shivakumar, Ziqiao Ding, Karrie Karahalios, and Ranjitha Kumar  
*UIST* DOI: [10.1145/2984511.2984573](https://doi.org/10.1145/2984511.2984573)
- 2016 First I “like” it, then I hide it: Folk Theories of Social Feeds  
 Motahhare Eslami, Karrie Karahalios, Christian Sandvig, **Kristen Vaccaro**, Aimee Rickman, Kevin Hamilton and Alex Kirlik  
*CHI* DOI: [10.1145/2858036.2858494](https://doi.org/10.1145/2858036.2858494)
- 2016 Not by Money Alone: Social Support Opportunities in Medical Crowdfunding Campaigns  
 Jennifer Kim, **Kristen Vaccaro**, Karrie Karahalios, and Hwajung Hong  
*CSCW* DOI: [10.1145/2998181.2998245](https://doi.org/10.1145/2998181.2998245)
- 2015 “I always assumed that I wasn’t really that close to [her]”: Reasoning About Invisible Algorithms in the News Feed  
 Motahhare Eslami, Aimee Rickman, **Kristen Vaccaro**, Amir Hossein, Christian Sandvig, Kevin Hamilton and Karrie Karahalios  
*CHI* DOI: [10.1145/2702123.2702556](https://doi.org/10.1145/2702123.2702556)  
 Best paper award

#### WORKSHOP PUBLICATIONS (LIGHTLY PEER-REVIEWED)

- 2017 Algorithmic Appeals  
**Kristen Vaccaro** and Karrie Karahalios  
 NSF Workshop on Trustworthy Algorithmic Decision Making
- 2017 An Experimentation Engine for Data-Driven Fashion Systems  
**Kristen Vaccaro** and Ranjitha Kumar  
 AAAI Spring Symposium: The User Experience of Machine Learning
- 2015 Agree or Cancel? Research and Terms of Service Compliance  
**Kristen Vaccaro**, Karrie Karahalios, Christian Sandvig, Kevin Hamilton, and Cedric Langbort  
 CSCW Workshop on Ethics for Studying Sociotechnical Systems in a Big Data World

## UNDER REVIEW

Fairness Perceptions of Algorithmic Systems

**Kristen Vaccaro**, Christian Sandvig and Karrie Karahalios

Contestability in Content Moderation Systems

**Kristen Vaccaro**, Christian Sandvig and Karrie Karahalios

Adaptability of Folk Theories of Control Settings

Lucy Chang, **Kristen Vaccaro**, and Karrie Karahalios

Understanding the Use and Perceptions of Control Settings

Silas Hsu, **Kristen Vaccaro**, Aimee Rickman and Karrie Karahalios

Effects of Transparency on Opaque Algorithmic Systems

Motahhare Eslami, Joon Park, **Kristen Vaccaro**, and Karrie Karahalios

## Workshops, panels & invited talks

- 2019 Contestability in Algorithmic Decision Making Systems  
Workshop at *CSCW*  
Organizer with Karrie Karahalios, Dierdre Mulligan, Daniel Kluttz and Tad Hirsch
- 2018 Designing Social Media Systems for User Control  
Invited talk at *Parkland College*
- 2017 Fairness, Accountability and Transparency in Algorithmic Decision Making  
Panel at *TAPIA*  
Organizer with Sanmi Koyejo
- Guest lecturer
- 2018 Placebo Effect of Control Settings *CS 591: Human-Computer Interaction Seminar*
- 2017 Deception Online *CS 598: Social Spaces Online*
- 2016 Internationalization in Web Development *CS 498: Art of Web Programming*
- 2016 Design Alternatives and Heuristic Evaluation *CS 498: Art of Web Programming*
- 2016 Elements of Fashion Style *CS 591: Human-Computer Interaction Seminar*
- 2016 Ethical Web Scraping *CS 205: Problem Solving with Data Structures*

## Mentoring

Project mentor for graduate and undergraduate students

(Coauthors in bold, <sup>T</sup>: Senior Thesis, <sup>I</sup>: Independent Study)

### UNDERSTANDING CONTROL SETTINGS

*Goals:* Students conducted graduate level research exploring users' knowledge of and engagement with control settings.

*Students:* **Silas Hsu** (graduate student), **Lucy Chang** (graduate student)

### PLACEBO EFFECTS OF CONTROL SETTINGS

*Goals:* Students helped develop an application showcasing a user's Twitter feed along with real and placebo control settings.

*Technologies:* Twitter API, React, PHP, Ruby, SQL, MongoDB

*Students:* **Dylan Huang**, Chen Qian<sup>T</sup>, Will Koster<sup>I</sup>, Annabelle Shih<sup>I</sup>, Nandini Iyer<sup>T</sup>, Ji Yeon In, Rahul Shah, Yujie Shao

#### PERSONAL STYLIST CHATBOTS

*Goals:* Students helped build a Facebook Messenger chatbot to connect users with personal stylists, used in a needfinding study.

*Technologies:* Facebook API, Javascript

*Students:* **Tanvi Agarwalla**, **Sunaya Shivakumar**, Dana Nikolaeva Chambourova<sup>T</sup>, Lisa Huang

#### MACHINE LEARNING MODELS FOR FASHION

*Goals:* Students helped develop two systems to showcase outfit and item recommendations for users based on the Polylingual Topic Model published at UIST 2016 as well as a word embedding based model demoed for major fashion brands.

*Technologies:* Python, React, Flask, SQL

*Students:* **Ding Ziqiao**<sup>T</sup>, **Sunaya Shivakumar**, Kevin Ly, Hanzi Amber Shen<sup>T</sup>

Mentor first-year graduate students for the Computer Science department

2018

Aiyu Cui (Machine Learning)

2016

Hyo Jin Gina Do (Human-Computer Interaction)

2014

Helen Wauck (Human-Computer Interaction)

Speaker for events for undergraduates for:

Women in Computer Science (WCS)

Society of Women Engineers (SWE)

Speaker at our local community college to help students explore the idea of graduate school

## Teaching experience

2016-2017

Selected to teach in the Graduate Academy for College Teaching, the University of Illinois' campus-wide TA training program

2013-2016

Teaching assistant, University of Illinois Urbana-Champaign

*CS 598 Data Driven Design (2016)*

Helped develop the syllabus for and led discussion in an upper-level graduate course

*CS 498 Art of Web Programming (2016)*

Occasional lectures, designed and graded homework assignments, quizzes and exams, held office hours in mixed graduate/undergraduate course

*CS 210 Ethics in Technology (2013-2014)*

Co-instructed a large (~200 student), mandatory ethics in technology class

*CS 205 Problem Solving with Data Structures (2015)*

Helped design a new course in a two-year series for non-majors

*CS 102 Little Bits to Big Ideas (2014)*

Designed and led two lab sessions, wrote and graded homework and exams, and held office hours in an undergraduate survey course for non-majors

## Grants, honors & awards

2019	George Mason University Technologist Fellowship
2017-2019	ARCS Foundation Scholar Award
2016	Feng Chen Memorial Award
2014	Women in Computer Science Grace Hopper Scholarship
2009	Phi Beta Kappa

## Service

### PROFESSIONAL SERVICE

Reviewer

*CHI* 2018, 2017, 2016

*CSCW* 2019, 2018

*UIST* 2019, 2018, 2017

*Information, Communication and Society* 2019

*IUI* 2017

*Creativity & Cognition* 2017

*TIIS* 2017

### INSTITUTIONAL SERVICE

Mentor for the Computer Science department

    Mentor first-year graduate students in the department

    Graduate Ambassador, supporting recruitment for the department

    Selected as the *2019 Graduate Student Outstanding Ambassador Award*

Speaker for the Research Experiences for Undergraduates (REU) Program