Jackie Chan

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Research Objective

My research relates to analyzing online communities to identify strategies that make them more successful, whether that be through creating evidence-based guidelines to help reduce community moderator workload or developing computational-based tools to detect undesired behavior. My work falls within human-computer interaction, specifically social computing, but I also employ methods from natural language processing and machine learning in my research. Currently, I am analyzing the behaviors of online communities, specifically Reddit, during disruptive periods to identify features that make them more resilient towards instability.

Topics: social computing, online communities, content moderation

Education

University of Illinois Urbana Champaign **Urbana, IL**
Ph.D. in Computer Science *Sep. 2020 – Jun. 2026 (Expected)*
Advisor: Dr. Eshwar Chandrasekharan

Carleton College **Northfield, MN**
B.A. in Computer Science & Mathematics; Cum Laude *Sep. 2016 – Jun. 2020*

Research Experience

Graduate Research Assistant **Urbana, IL**
Department of Computer Science, University of Illinois Urbana-Champaign *Sep. 2021 – Present*
Advisor: Dr. Eshwar Chandrasekharan

Undergraduate Research Assistant **Northfield, MN**
Department of Computer Science, Carleton College *Mar. 2018 – Sep. 2019*
Advisor: Dr. Amy Csizmar Dalal

Research Projects

Quantifying the Disruptive Effects of Sudden Spikes in Activity within Online Communities **Urbana, IL**
Advisor: Dr. Eshwar Chandrasekharan & Dr. Stevie Chancellor *Jan. 2021 – Present*
- Collecting and analyzing Reddit data to measure the effects of elevated activity levels on multiple communities by observing shifts in moderation and membership behaviors.
- Running statistical models to identify correlations between disruptive periods and community metrics (e.g. aggregate number of comments, moderator interventions).

Exploring Wikipedia's Response to the 2019–2020 Hong Kong Protests **Northfield, MN**
Advisor: Dr. Sneha Narayan *Jan. 2020 – Jun. 2020*
- Observed documentation patterns on Wikipedia articles related to the 2019-2020 Hong Kong protests to investigate the underlying dynamics of collective memory and collaborative documentation in social computing systems.

Guiding Mathematical Discovery with Middle School Students **Northfield, MN**
Advisor: Dr. Deanna Haunsperger *Sep. 2019 – Jun. 2020*
- Constructed and taught weekly sessions with sixth graders to explore traditionally undergraduate-level mathematics topics (e.g. combinatorics, graph theory, topology) from a rediscovery-based approach.

Understanding Non-Expert Home Networking Terminology Using Open Card Sorting Analysis **Northfield, MN**
Advisor: Dr. Amy Csizmar Dalal *Mar. 2018 – Sep. 2019*
- Conducted and analyzed surveys and interviews related to home networking troubleshooting terminology to understand their mental models.

Publications

Jackie Chan, Aditi Atreyasa, Stevie Chancellor, and Eshwar Chandrasekharan. 2022. *Community Resilience: Quantifying the Disruptive Effects of Sudden Spikes in Activity within Online Communities.* In Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22). **[Accepted, Undergoing Revisions]**

Amy Csizmar Dalal, **Jackie Chan,** and Kirby Mitchell. 2019. *A Preliminary Study of the Role of Language in Home Network Troubleshooting.* In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19). Association for Computing Machinery, New York, NY, USA, Paper LBW0272, 1–6. DOI: https://doi.org/10.1145/3290607.3312856

Jackie Chan and Kirby Mitchell. 2019. *Understanding the Usage and Familiarity of Home Network Terminology Using Open Card Sorting Analysis.* In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19). Association for Computing Machinery, New York, NY, USA, 1293. DOI: https://doi.org/10.1145/3287324.3293716

Teaching

CS 125: Introduction to Computer Science **Urbana, IL**
Graduate Teaching Assistant *Aug. 2020 – Jun. 2021*
Instructor: Dr. Geoffrey Werner Challen

- Provided weekly office hours, created review session material, proctored weekly quizzes, and monitored an active course forum that sees thousands of students a year.
- Responsible for content production and co-instructor for CS 199–a supplementary course that built upon the content in the course.

Professional Experience

Thomson Reuters **Eagan, MN**
Software Engineering Intern *Jun. 2019 – Nov. 2019*

- Maintained and developed an internal web-page application using Aurelia, TypeScript, Express, and MariaDB.
- Collaborated with an international team to ensure the reliability of microservices both on and off the cloud using continuous integration and deployment practices.

Awards & Honors

Outstanding Teaching Assistant Award **Urbana, IL**
Department of Computer Science, University of Illinois Urbana-Champaign *Spring 2021*

- Awarded for service in CS 125 based on recognition by faculty and student evaluations.

Page Scholar **Northfield, MN**
Page Education Foundation *Sep. 2016 – Jun. 2020*

- Ran annual service projects helping students become first-generation college students.

Professional Service & Volunteering

Reviewer **Remote**
Computer-Supported Cooperative Work and Social Computing (CSCW) *Jun. 2021*

TORCH Mentor **Northfield, MN**
Tackling Obstacles & Raising College Hopes (TORCH) Program *Sep. 2016 – Jan. 2020*

- Tutored low-income, traditionally under-served, first-generation college students at Northfield Middle School.

Technical Skills

Programming Languages: Python, Java, JavaScript, C++, C

Web Development: HTML, CSS, Node.js, TypeScript, React

Other Technologies: LaTeX, Git, MongoDB