Assistant Professor Department of Library and Information Science Rutgers University

≸ sj917@rutgers.edu

https://shagunjhaver.com

## **RESEARCH INTERESTS**

My research examines the governance mechanisms of online platforms to understand how their design, technical affordances, and policies affect public discourse. I use a mixed methods approach, combining system building, casual inference of large-scale community data, surveys, and interviews to explore how platforms can address societal issues such as online harassment and the rise of hate groups.

**Topics:** Data Science, Computational Social Science, Human-Computer Interaction, Content Moderation, Online Harassment, Fair and Transparent AI, Social Media Analytics, Quantitative & Qualitative Data Analysis

## **EDUCATION**

GEORGIA INSTITUTE OF TECHNOLOGY, Atlanta, GA USA

Ph.D., Computer Science Aug 2015 – May 2020

Dissertation: Identifying Opportunities to Improve Content Moderation GPA: 4.0/4.0

Advisors: Amy Bruckman and Eric Gilbert

Committee: Scott Counts, Neha Kumar, Keith Edwards

University of Texas at Dallas, Richardson, TX USA

M.S., Computer Science Aug 2012 – Dec 2014

Thesis: Large Scale Data Mining with Applications in Social Computing

Advisor: Latifur Khan

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY, Mumbai, India

B.Tech., Electrical Engineering Aug 2006 – May 2010

## **EMPLOYMENT**

FALL 2021 TO DATE	Rutgers University
	Assistant Professor, Department of Library and Information Science
2020-21	University of Washington
	Postdoctoral Scholar, Paul G. Allen School of Computer Science & Engineering
2020-21	Harvard University
	Affiliate, Berkman Klein Center for Internet & Society
SPRING 2021	Research Advisor, Twitch, Seattle, WA (USA)
Summer 2020	Research Intern, Max Planck Institute for Software Systems, Saarbrücken, Germany
Summer 2018	Research Intern, Microsoft Research, Redmond, WA (USA)
Summer 2017	Research Intern, Airbnb, San Francisco, CA (USA)
Mar-Jul 2015	Software Developer, Amazon, Seattle, WA (USA)
Summer 2013	Research Intern, Brown University, Providence, RI (USA)
2011-12	Software Developer, Future Group, Mumbai, India
Summer 2009	Research Intern, INRIA Research Center, Paris-Rocquencourt, France

#### AWARDS AND RECOGNITION

 Best Paper Honorable Mention x2 (two independent honorable mentions on different papers), CSCW (2021)

- Special Reviewer Recognition for Outstanding Reviews x 2, CHI 2020-21
- Best Paper Award, CSCW (2019)
- Best Paper Honorable Mention Award, CSCW (2019)
- Featured in Editor's Spotlight, TOCHI (2018)
- Best Paper Award, ICWSM (2016)

#### **PUBLICATIONS**

Link to Google Scholar

# PEER-REVIEWED JOURNAL AND CONFERENCE PUBLICATIONS

- [15] **Shagun Jhaver**, Quan Ze Chen, Detlef Knauss, and Amy Zhang. "Designing Word Filter Tools for Creator-led Comment Moderation." Accepted in *Proceedings of the ACM CHI Conference on Human Factors in Computing Systems* (CHI 2022).
- [14] **Shagun Jhaver**,\* Eshwar Chandrasekharan,\* Amy Bruckman, and Eric Gilbert. (2022). "Quarantined! Examining the Effects of a Community-Wide Moderation Intervention on Reddit" (\* coprimary authors). ACM Transactions on Computer-Human Interaction (TOCHI).
- [13] **Shagun Jhaver**, Christian Boylston, Diyi Yang, and Amy Bruckman. "Evaluating the Effectiveness of Deplatforming as a Moderation Strategy on Twitter." In *Proceedings of the ACM Human-Computer Interaction (CSCW 2021)*.
  - **Best Paper Honorable Mention Award**
- [12] Manoel Horta Ribeiro, **Shagun Jhaver**, Savvas Zannettou, Jeremy Blackburn, Emiliano De Cristofaro, Gianluca Stringhini, and Robert West. (2021). "Does Platform Migration Compromise Content Moderation? Evidence from r/The\_Donald and r/Incels." In *Proceedings of the ACM Human-Computer Interaction (CSCW 2021)*.
  - **Best Paper Honorable Mention Award**
- [11] **Shagun Jhaver**, Amy Bruckman, and Eric Gilbert. (2019). "Does Transparency in Moderation Really Matter?: User Behavior After Content Removal Explanations on Reddit." In *Proceedings of the ACM Human-Computer Interaction (CSCW 2019)*.
  - **Best Paper Award**
- [10] **Shagun Jhaver**, Scott Appling, Eric Gilbert, and Amy Bruckman. (2019). ""Did You Suspect the Post Would be Removed?": User Reactions to Content Removals on Reddit." In *Proceedings of the ACM Human-Computer Interaction (CSCW 2019)*.
  - **Best Paper Honorable Mention Award**
- [9] Maya Holikatti, **Shagun Jhaver**, and Neha Kumar. (2019). "Learning to Airbnb by Engaging in Online Communities of Practice." In *Proceedings of the ACM Human-Computer Interaction (CSCW* 2019).
- [8] **Shagun Jhaver**, Justin Cranshaw, Scott Counts. (2019). "Measuring Professional Skill Development in U.S. Cities Using Internet Search Queries." In *Proceedings of the 13th International AAAI Conference on Web and Social Media (ICWSM 2019)*.

[7] **Shagun Jhaver**, Iris Birman, Eric Gilbert, Amy Bruckman. (2019). "Human-Machine Collaboration for Content Regulation: The Case of Reddit Automoderator." *ACM Transactions on Computer-Human Interaction (TOCHI)*.

- [6] **Shagun Jhaver**, Yoni Karpfen, and Judd Antin. (2018). "Algorithmic Anxiety and Coping Strategies of Airbnb Hosts." In *Proceedings of the 35th Annual ACM Conference on Human Factors in Computing Systems (CHI 2018)*.
- [5] **Shagun Jhaver**, Sucheta Ghoshal, Amy Bruckman and Eric Gilbert. (2018). "Online Harassment and Content Moderation: The Case of Blocklists." *ACM Transactions on Computer-Human Interaction (TOCHI)*.

# Featured in Editor's Spotlight

- [4] Eshwar Chandrasekharan, Mattia Samory, **Shagun Jhaver**, Hunter Charvat, Amy Bruckman, Cliff Lampe, Jacob Eisenstein and Eric Gilbert. (2018). "The Internet's Hidden Rules: An Empirical Study of Reddit Norm Violations at Micro, Meso, and Macro Scales." In *Proceedings of the ACM Human-Computer Interaction Article* 32 (CSCW 2018).
- [3] **Shagun Jhaver**, Larry Chan, and Amy Bruckman. (2018). "The View from the Other Side: The Border Between Controversial Speech and Harassment on Kotaku in Action." *First Monday*.
- [2] Munmun De Choudhury, **Shagun Jhaver**, Benjamin Sugar, and Ingmar Webar. (2016). "Social Media Participation in an Activist Movement for Racial Equality." In *Proceedings of the 10th International AAAI Conference on Web and Social Media (ICWSM 2016)*.

  Best Paper Award
- [1] **Shagun Jhaver**, Latifur Khan, and Bhavani Thuraisingham. (2014). "Calculating Edit Distance for Large Sets of String Pairs using MapReduce." In *Proceedings of the ASE International Conference on Big Data 2014*.

# Workshops Organized (Peer Reviewed)

[1] Charles Kiene, **Shagun Jhaver**, Eshwar Chandrasekharan, Bryan Dosono, Brianna Dym, Sarah Gilbert, Aaron Jiang, Kat Lo, Joseph Seering, Kenny Shores, and D. Yvette Wohn. "Volunteer Work: Mapping the Future of Moderation Research." *In ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2019).* 

# Posters (Peer Reviewed)

[1] **Shagun Jhaver**, Larry Chan, and Sandeep Soni. "PostScholar: Surfacing Social Signals in Google Scholar Search." *In Proceedings of the 19th ACM Conference on Computer Supported Cooperative Work and Social Computing Companion (CSCW 2016).* 

## Workshop Proceedings (Lightly Peer Reviewed)

- [2] **Shagun Jhaver**. "Leveraging Focus Theory of Normative Conduct to Shape User Behavior." *Managing and Designing for Norms in Online Communities* Workshop. *In Proceedings of the 13th International AAAI Conference on Web and Social Media (ICWSM 2019)*.
- [1] **Shagun Jhaver**. "Designing 'Understanding Mechanisms' to Fight Online Harassment." *Understanding Bad Actors Online* Workshop. *In Proceedings of the 35th Annual ACM Conference on Human Factors in Computing Systems* (CHI 2018).

#### TECHNICAL REPORTS

[1] **Shagun Jhaver**, Pranil Vora, and Amy Bruckman. (2017). "Designing for Civil Conversations: Lessons Learned from ChangeMyView." *GVU Technical Report*.

#### **GRANTS**

"Pathways to Online Radicalization: Designing Sociotechnical Solutions to Address Online Masculine Toxicity & Radicalization"

Rutgers School of Communication and Information, Scholarly Futures Award (2022)

Shagun Jhaver, Kiran Garimella, and Tawfiq Ammari

Amount: \$4,000

• "Examining User Trajectory in the Aftermath of Community Bans" Rutgers SC&I Grants for Individual Faculty Research (GIFR) (2022)

**Shagun Jhaver** Amount: \$4,800

• "Evaluating the Effectiveness of Deplatforming as a Moderation Strategy"

Facebook Oversight Board Research Award (2020)

Shagun Jhaver, Christian Boylston, Amy Bruckman, Diyi Yang

Amount: \$99,708 Duration: 9 months

• "A Restorative Justice Approach to Online Moderation"

UC Berkeley Center for Technology, Society & Policy Fellowship (2020)

Sijia Xiao, Shagun Jhaver, Niloufar Salehi

Amount: \$4,000 Duration: 9 months

### RESEARCH EXPERIENCE

# RESEARCH ASSISTANT

- School of Interactive Computing, Georgia Institute of Technology
   I used computational techniques, surveys, interviews and participant observations to understand key aspects of sociotechnical systems, such as how content moderation occurs on social media websites and how users perceive and react to different moderation mechanisms.
- Department of Computer Science, University of Texas at Dallas

  I developed a framework to perform setwise classification on streaming data by designing an ensemble of models that addressed the challenges of concept drift, concept evolution, and storage limitations. I used this framework to conduct real-time sentiment analyses of Twitter posts.

# RESEARCH INTERNSHIPS

- Max Planck Institute for Software Systems, Saarbrücken, Germany
   With Krishna Gummadi Networked Systems Research Group
   Examined the moderation mechanisms of Facebook ads and evaluated moderator communications on Reddit.
- Microsoft Research, Seattle, WA USA
   With Scott Counts and Justin Cranshaw Social Computing Group

   Studied the role of self-directed skill development on economic growth across all US cities using large-scale search query data.
- Airbnb, Inc., San Francisco, CA USA
   With Judd Antin Homes 2.0 Team

   Investigated the impact of algorithmic evaluation on users and their work practices in the context of sharing economy platforms.

• Brown University, Providence, RI USA Data Management Research Group

May 2013 - June 2013

Helped build a new system for big data analytics and performed in-memory computations on large clusters in a fault-tolerant manner.

• INRIA Research Centre, Paris-Rocquencourt, France

May 2009 - July 2009

Contraintes Research team

Developed mathematical models to analyze biomolecular networks using MATLAB.

#### PROFESSIONAL EXPERIENCE

#### SOFTWARE DEVELOPER

• Amazon.com, Inc., Seattle, WA USA Vendor Express Team

Mar 2015 - July 2015

Developed support for mobile users on the Vendor Express platform, created internal tools for faster support case management, and implemented Vendor Express for Germany and Japan.

• Future Group, Mumbai, India

Jan 2011 – Jun 2012

Head of the Analytics and Business Intelligence Team. Conceptualized and implemented Order Lifecycle Management, a system to process and manage orders. Developed a website for sellers to track orders, sales summaries, and product reviews.

# **TEACHING EXPERIENCE**

# Instructor, Rutgers University

• ITI 221: Fundamentals of Data Curation and Management Fall 2021, Spring 2022 (2 sections)

## Instructor, University of Washington

• CSE 492: Designing a More Critical CS Education

Winter 2021

## HEAD TEACHING ASSISTANT, GEORGIA INSTITUTE OF TECHNOLOGY

• CS 4863: Computers, Society, and Professionalism

Fall 2019

- Assisted Prof. Amy Bruckman with developing this new course.
- Taught a section of the course.
- CS 3600: Intro. to Artificial Intelligence

Spring 2018

- Managed and mentored other Teaching Assistants.
- Facilitated proctoring and grading of exams.

# TEACHING ASSISTANT, GEORGIA INSTITUTE OF TECHNOLOGY

CS 3600: Intro. to Artificial Intelligence	Summer 2019
CS 4001: Computing & Society	Fall 2018
CS 4001: Computing & Society	Fall 2017
CS 3600: Intro. to Artificial Intelligence	Spring 2017
CS 4001: Computing & Society	Fall 2016
CS 3600: Intro. to Artificial Intelligence	Spring 2016

#### GUEST LECTURER

- 16:194:610 Seminar in Information Studies, "Computational Social Science and Data Science," Rutgers University [Fall 2021]
- SI 529 Online Communities, "Toward Fairness & Transparency in Content Moderation," Univ. of Michigan [Winter 2021]

- CS 6470 Design of Online Communities, "Deviant Behavior," Georgia Tech [Spring 2019]
- CS 6470 Design of Online Communities, "Content Moderation," Georgia Tech [Spring 2019]
- CS 4001 Computing, Society and Professionalism, "Online Harassment & Content Moderation," Georgia Tech [Fall 2018]
- CS 4001 Computing, Society and Professionalism, "Academic Urban Legends," Georgia Tech [Fall 2017]

### MATH AND PHYSICS TUTOR

#### Student Success Center, University of Texas at Dallas

Jan - Oct 2013

- Assisted students of all levels on various Math and Physics university courses.
- Conducted exam reviews.

## **SERVICE & MENTORING**

## PROGRAM COMMITTEE

- Associate Chair, CSCW 2022
- Associate Chair, Understanding People: Theory, Concepts, Methods, CHI 2021

# Conference & Journal Reviewing

- New Media & Soceity 2021
- TOCHI 2020
- CHI 2017-2022
- CSCW 2018-21
- GROUP 2020
- · First Monday
- Big Data & Society
- ACL Workshop on Abusive Language Online (ALW<sub>3</sub>)

## STUDENT MENTORING

#### Rutgers University

- Nikhila Natarajan Ph.D. Comm and Info: Personal Content Moderation Configurations
- Aditya Jain M.S. Computer Science: User Trajectories in Response to Community Bans
- Abhinay Reddy Vongur M.S. Computer Science: Dynamics of Inter-community Conflicts

## Remote co-mentoring

- Sijia Xiao Ph.D. Information, UC Berkeley: Online Restorative Justice
- Manoel Horta Ribeiro Ph.D. Computer Science, EPFL: Platform Migrations

# Georgia Tech

- Maya Holikatti B.S. Computer Science: Learning Mechanisms of Airbnb Hosts
- Christian J Boylston B.S. Computer Science: Effects of Deplatforming on Twitter
- Josiah Mangiameli M.S. Human Computer Interaction: User Reactions to Content Removals on Reddit
- Kevin Tang B.S. Game and Interactive Media Design: Removal Explanations on Reddit
- Iris Birman B.S. Computer Science: Moderation of Reddit Communities
- Francisco A Zampieri B.S. Computer Science: Effects of Community Response on User Behavior
- Pranil Vora B.S. Computer Science: Design Mechanisms of the ChangeMyView Subreddit
- Benjamin Sugar M.S. Digital Media: Social Media Participation in the Black Lives Matter Movement

#### **INVITED TALKS**

• "Analyzing the Effectiveness of Content Moderation Interventions" in New Faculty Colloquium at Rutgers School of Communication and Information (Oct 2021)

• Served as a panelist for the *Special Session—Online communities: Engineering Self-Governing Online Commons* at IASC 2021 Knowledge Commons Virtual Conference (June 2021)

- "Designing Transparent & Effective Content Moderation" at the University of Washington DUB seminar (May 2021)
- "Designing for Multiple Centers of Power: Multi-level Governance in Online Social Platforms" at the Metagovernance seminar (May 2021)
- "Designing Transparent & Effective Content Moderation" at the School of Communication and Information, Rutgers University (April 2021)
- "Designing Transparent & Effective Content Moderation" at the Department of Computer Science, George Mason University (Feb 2021)
- Served as an expert panelist for "The Great Deplatforming: Implications of Big Tech Censorship" at the University of Chicago (Jan 2021)
- "Toward Fairness and Transparency in Content Moderation" at the Max Planck Institute for Software Systems (April 2020)
- "Toward Fairness and Transparency in Content Moderation" at Microsoft Research New England (Feb 2020)
- "Toward Fairness and Transparency in Content Moderation" at the School of Information, University of Michigan (Jan 2020)
- "Toward Fairness and Transparency in Content Moderation" at Facebook (Jan 2020)

# **SELECTED PRESS COVERAGE**

- The New Yorker, The Age of Algorithmic Anxiety (2022)
- Vice, Ebook Services Are Bringing Unhinged Conspiracy Books into Public Libraries (2022)
- Science Vs Podcast, Misinformation: What Should Our Tech Overlords Do? (2022)
- ABC News, Joe Rogan's fans would likely follow him away from Spotify, so what would deplatforming him achieve? (2022)
- Vox, Does banning extremists online work? It depends. (2022)
- Salon, Twitter is actually doing a (relatively) good job limiting right-wing misinformation, study finds. (2021)
- Time, Big Tech's Crackdown on Donald Trump and Parler Won't Fix the Real Problem With Social Media. (2021)
- The Washington Post, TheDonald's owner speaks out on why he finally pulled plug on hate-filled site. (2021)
- Wired, Deplatforming works, but it's not enough to fix Facebook and Twitter. (2021)
- NBC News, Does 'deplatforming' work? Trump's most extreme fans will find him, research says. (2021)
- NBC News, Trump's blog isn't lighting up the internet. (2021)
- Newsweek, Twitter Under Pressure Over 'Double Standards' After Donald Trump, MAGA Crackdown.
- The Atlantic, The Secret Internet of TERFs. (2020)
- Digital Privacy News, Facebook Content Moderators Want Better Working Conditions. (2020)
- MIT Technology Review, Reddit's automoderator is the future of the internet, and deeply imperfect. (2019)
- New Scientist, Explaining why Reddit posts are removed helps people comply with rules. (2019)
- Forbes, Why Republicans Weren't The Only Ones Shadow Banned On Twitter. (2018)
- The Washington Post, Here's proof that not everything was terrible on the Internet in 2017. (2017)
- Al Jazeera, Black Lives Matter: The social media behind a movement. (2016)
- Futurity, Tweets shift tone before Black Lives Matter protests. (2016)