

Eshwar Chandrasekharan

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Siebel School of Computing and Data Science
University of Illinois Urbana-Champaign

Research Interests

My research aims to *make the internet a safer and more welcoming place* by developing new scientific methods and computational tools. My current focus is on facilitating healthy online interactions, combating online antisocial behavior, and human-AI collaborations to promote trust and safety on the Internet.

Topics: Social Computing, HCI, Human-centered AI, Data Science, Statistical ML, Content Moderation.

Education

- **Georgia Institute of Technology** Atlanta, GA
Ph.D. in Computer Science Aug 2015 - May 2020
 - Thesis: *Combatting Abusive Behavior in Online Communities Using Cross-Community Learning*
 - Committee: Eric Gilbert (advisor), Amy Bruckman, Munmun De Choudhury, Jacob Eisenstein, Cliff Lampe
- **Indian Institute of Technology (IIT) Madras** Chennai, India
B.Tech & M.Tech in Computer Science and Engineering 2010 - 2015
 - Thesis: *Footprints on Silicon: Explorations in Gathering Autobiographical Content*
 - Advisor: Sutanu Chakraborti

Publications

Heavily Peer-Reviewed Conference Proceedings:

- C.19 **Understanding Community Resilience: Quantifying the Effects of Sudden Popularity via Algorithmic Curation**
ICWSM 2024
 - Jackie Chan, Charlotte Lambert, Frederick Choi, Stevie Chancellor, **Eshwar Chandrasekharan**
- C.18 **“Positive reinforcement helps breed positive behavior”: Moderator Perspectives on Encouraging Desirable Behavior**
CSCW 2024
 - Charlotte Lambert, Frederick Choi, **Eshwar Chandrasekharan**
- C.17 **Measuring epistemic trust: Towards a new lens for democratic legitimacy, misinformation, and echo chambers**
CSCW 2024
 - Dominic Zaun Eu Jones, **Eshwar Chandrasekharan**
- C.16 **Opportunities, Tensions, and Challenges in Computational Approaches to Addressing Online Harassment**
DIS 2024 [Honorable Mention]
 - Evey Jiaxin Huang, Abhraneel Sarma, Sohyeon Hwang, **Eshwar Chandrasekharan**, Stevie Chancellor

- C.15 **ConvEx: A Visual Conversation Exploration tool for Discord Moderators**
CSCW 2023
 – Frederick Choi, Tanvi Bajpai, Sowmya Pratipati, **Eshwar Chandrasekharan**
- C.14 **Measuring User-Moderator Alignment on r/ChangeMyView**
CSCW 2023 [Best Paper]
 – Vinay Koshy, Tanvi Bajpai, **Eshwar Chandrasekharan**, Hari Sundaram, Karrie Karahalios
- C.13 **Conversational Resilience: Quantifying and Predicting Conversational Outcomes Following Adverse Events**
ICWSM 2022
 – Charlotte Lambert, Ananya Rajagopal, **Eshwar Chandrasekharan**
- C.12 **Harmonizing the Cacophony: An Affordance-aware Framework of Platform Moderation**
CSCW 2022
 – Tanvi Bajpai, Drshika Asher, Anwesa Goswami, **Eshwar Chandrasekharan**
- C.11 **Quarantined! Examining the Effects of a Community-Wide Moderation Intervention on Reddit**
TOCHI 2021
 – **Eshwar Chandrasekharan**, Shagun Jhaver, Amy Bruckman, Eric Gilbert
- C.10 **Conversations Gone Alright: Predicting Prosocial Outcomes in Online Conversations**
WWW 2021
 – Jiajun Bao, Junjie Wu, Yiming Zhang, **Eshwar Chandrasekharan** and David Jurgens
- C.9 **Synthesized Social Signals: Computationally-Derived Social Signals from Account Histories**
CHI 2020
 – Jane Im, Sonali Tandon, **Eshwar Chandrasekharan**, Taylor Denby, Eric Gilbert
- C.8 **Still out there: Modeling and Identifying Russian Troll Accounts on Twitter**
WebSci 2020 [Acceptance rate: 27%] - Best Paper Award Runner Up
 – Jane Im, **Eshwar Chandrasekharan**, Jackson Sargent, Paige Lighthammer, Taylor Denby, Ankit Bhargava, Libby Hemphill, David Jurgens, Eric Gilbert
- C.7 **Crossmod: A Cross-Community Learning-based System to Assist Reddit Moderators**
CSCW 2019
 – **Eshwar Chandrasekharan**, Chaitrali Gandhi, Matthew Wortley Mustelier, Eric Gilbert
- C.6 **A Just and Comprehensive Strategy for Using NLP to Address Online Abuse**
ACL 2019 [Acceptance rate: 24%]
 – David Jurgens, **Eshwar Chandrasekharan**, Libby Hemphill
- C.5 **Prevalence and Psychological Effects of Hateful Speech in Online College Communities**
WebSci 2019
 – Koustuv Saha, **Eshwar Chandrasekharan**, Munmun De Choudhury
- C.4 **The Internet's Hidden Rules: An Empirical Study of Reddit Norm Violations at Micro, Meso, and Macro Scales**
CSCW 2018 [Acceptance rate: 27%]
 – **Eshwar Chandrasekharan**, Mattia Samory, Shagun Jhaver, Hunter Charvat, Amy Bruckman, Cliff Lampe, Jacob Eisenstein, Eric Gilbert
- C.3 **You Can't Stay Here: The Efficacy of Reddit's 2015 Ban Examined Through Hate Speech**
CSCW 2017 [Acceptance rate: 27%]
 – **Eshwar Chandrasekharan**, Umashanthi Pavalanathan, Anirudh Srinivasan, Adam Glynn, Jacob Eisenstein, Eric Gilbert

- C.2 **Situated Anonymity: Impacts of Anonymity, Ephemerality, and Hyper-Locality on Social Media Platforms**
CHI 2017 [Acceptance rate: 25%]
 – Ari Schlesinger, **Eshwar Chandrasekharan**, Christina Masden, Amy Bruckman, W Keith Edwards, Rebecca Grinter
- C.1 **The Bag of Communities: Identifying Abusive Behavior Online with Preexisting Internet Data**
CHI 2017 [Acceptance rate: 25%]
 – **Eshwar Chandrasekharan**, Mattia Samory, Anirudh Srinivasan, Eric Gilbert

Lightly Peer-Reviewed, Non-archival papers:

- L.5 **LLM-Mod: Can Large Language Models Assist Content Moderation?**
CHI Late Breaking Work 2024.
 – Mahi Kolla, Siddharth Salunkhe, **Eshwar Chandrasekharan**, Koustuv Saha
- L.4 **Evolution of Rules in Reddit Communities**
Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing.
 – Harita Reddy, **Eshwar Chandrasekharan**
- L.3 **Community Resilience: Quantifying the Disruptive Effects of Sudden Spikes in Activity within Online Communities**
CHI Late Breaking Work 2022.
 – Jackie Chan, Aditi Atreyasa, Stevie Chancellor, **Eshwar Chandrasekharan**
- L.2 **Hybrid Approaches to Detect Comments Violating Macro Norms on Reddit**
arXiv. Dataset paper 2019.
 – **Eshwar Chandrasekharan**, Eric Gilbert
- L.1 **Footprints on Silicon: Explorations in Gathering Autobiographical Content**
CICLing 2015 (IJCLA). [Acceptance rate: 34%]
 – **Eshwar Chandrasekharan**, Sutanu Chakraborti

Workshops Organized:

- W.1 **Volunteer Work: Mapping the Future of Moderation Research**
CSCW 2019. [Accepted as a full-day workshop]. ACM Extended Abstract.
 – Charles Kiene, Shagun Jhaver, **Eshwar Chandrasekharan**, Bryan Dosono, Brianna Dym, Sarah Gilbert, Jialun “Aaron” Jiang, Kat Lo, Joseph Seering, Kenny Shores, Donghee “Yvette” Wohn
- W.2 **Managing and Designing for Norms in Online Communities**
ICWSM 2019. [Accepted as a full-day workshop]
 – Joseph Seering, Sanjay Kairam, **Eshwar Chandrasekharan**, Stevie Chancellor

Awards & Achievements

- Paper Awards: Best Paper at CSCW 2023, Honorable Mention at DIS 2024, Best Paper Award Runner Up at WebSci 2020.
- “List of Teachers Ranked as Excellent By Their Students” at the University of Illinois, Urbana-Champaign in Fall 2020, Spring 2021, Fall 2021, and Spring 2022.
- Won a research award of \$100,000 from Facebook Research for my proposal on “Measuring healthy online behavior” in 2020.

- 2019 Foley Scholars Finalist at GVV Student Awards.
- Invited to attend the 2019 CSST Summer Institute at Rutgers University.
- 2015 Georgia Tech Graduate Research Assistantship (Full tuition for 5 years + stipend).
- Winner, South East Asia Regional Computer Confederation (SEARCC) International Schools' Software Competition 2009 conducted by Computer Society of Sri Lanka, representing India at University of Colombo School of Computing, Colombo, Sri Lanka, 2009.

Selected Press

- *Why deplatforming 8chan can be effective.* The Verge (2019)
- *CloudFlare dropping 8chan helps fight hate even if 8chan comes back.* MIT Technology Review (2019)
- *Reddit Limits Noxious Content by Giving Trolls Fewer Places to Gather.* The New York Times (2017)
- *Study finds Reddit's controversial ban of its most toxic subreddits actually worked.* TechCrunch (2017)
- *New Georgia Tech Research May Help Combat Abusive Online Comments.* Georgia Tech News Center (2017)

Professional Experience

- **Assistant Professor**
Department of Computer Science, University of Illinois at Urbana-Champaign. 2020 - present
- **Graduate Research Assistant**
School of Interactive Computing, Georgia Institute of Technology. 2015 - 2020
 - Advisor: Eric Gilbert
 - Researching online abusive behavior and improving content moderation on Internet platforms using human-guided AI.
 - Area of work: Quantitative Research, Social Computing, AI, Causal Inference, Machine Learning
- **Health ML Intern - Engineering**
Twitter Inc. May - Aug. 2018
 - Examined the landscape of incoming abuse reports on Twitter in a large-scale, empirical manner, in order to quantify the notion of *report quality*.
 - Identified the different types of abuse that are reported by users using a mixed-methods approach (computational and qualitative)
 - Presented approaches to build new ML tools to detect and discourage different types of abuse on the platform, and training the existing internal tools in a more nuanced manner.
 - Area of work: Machine Learning, Quantitative Research, Data Science
- **Data Science Intern**
BuzzFeed Inc. May - Aug. 2017
 - Developed a human-machine collaboration service which informs BuzzFeed's content distribution strategy on Facebook

- Built machine learning models to predict which BuzzFeed links would perform best on certain Facebook pages, and identify which pages to post on for the most content shares
- Area of work: Data Science, Machine Learning

Software Development Engineer (SDE) Intern

• *Amazon Development Center (India) Pvt. Ltd., Bangalore*

May - July. 2013

- Automated product Opinion summarization of Amazon Customer Reviews
- Creating original content for product web pages to improve Search Engine Optimization
- Area of work: Opinion Mining, Sentiment Analysis, Text Summarization

Teaching Experience

- **Computational Social Science (CS498 SCU) - newly designed** University of Illinois Urbana-Champaign
Course instructor *Jan. - May 2024*
- **Research Methods in HCI (CS598 SPH) - newly designed** University of Illinois Urbana-Champaign
Course instructor *Aug. - Dec. 2023*
- **Antisocial Computing (CS498 ASU)** University of Illinois Urbana-Champaign
Course instructor *Aug. - Dec. 2022*
- **Social Computing (CS598 SC)** University of Illinois Urbana-Champaign
Course instructor *Jan. - May 2022*
- **Antisocial Computing (CS598 ECH)** University of Illinois Urbana-Champaign
Course instructor *Aug. - Dec. 2021*
- **Social Computing (CS598 EWS) - newly designed** University of Illinois Urbana-Champaign
Course instructor *Jan. - May 2021*
- **Antisocial Computing (CS598 RBO) - newly designed** University of Illinois Urbana-Champaign
Course instructor *Aug. - Dec. 2020*
- **Artificial Intelligence (OMSCS 6601)** Georgia Institute of Technology
Teaching Assistant *Jan. - Apr. 2019*
 - Designed assignments, midterms, and examinations; office hours; tutorials; evaluations
 - Class of approx. 400 graduate students
- **Center for Teaching and Learning (CETL)** Georgia Institute of Technology
Minor in Higher Education *Jan. - Dec. 2017*
 - Exposure to learner-centered teaching techniques honed my ability to design future curriculum.
 - Designed my own course on “Introduction to Data Science and Applications to Online Social Media”. My course portfolio includes a syllabus, assessment plan, sample lessons and assignments.
 - Led a micro-teaching session: Taught 20 PhD students in non-CS STEM fields fundamental data science concepts like collaborative filtering in Recommender systems.
- **Computing, Society and Professionalism (CS 4001)** Georgia Institute of Technology
Teaching Assistant *Aug. - Dec. 2017*
 - Group discussions on ethical practices; evaluated assignments and examinations
 - Class of approx. 40 undergraduate students

Invited Talks, Panels & Guest Lectures

- **“Proactive Approaches to Online Governance”** HCIC
Invited Talk: Annual Meeting on Supporting Online Trust and Safety, Privacy, and Security June 2023
- **Panelist on “New Work on Community Driven Governance”** Yale Law School
Panel: Social Media Governance Initiative Spring 2023 Convening March 2023
- **“Quantifying Outcomes in Online Conversations”** Google
Guest Speaker: Jigsaw February 2022
- **Panelist on “Transparent Automated Content Moderation”** University of Illinois
Panel: TU Vienna Digital Humanism and Illinois EU Center Faculty Workshop September 2021
- **“Understanding, building and evaluating social computing systems”** University of Minnesota
Guest lecture: HCI Methods February 2021
- **Panelist on “Stories of refusal from within the corporate firm”** UC Berkeley
Panel: The Refusal Conference, AFOG October 2020
- **“Combating trolling and online harassment”** University of Illinois
Guest lecture: Social spaces on the internet (CS598kgk) September 2020
- **“Using Human-Centered AI to Combat Abusive Behavior on the Internet”** UMass Amherst
Talk: College of Information and Computer Sciences, Amherst, MA April 2020
- **“Using Human-Centered AI to Combat Abusive Behavior on the Internet”** University of Illinois
Talk: Department of Computer Science, Urbana, IL March 2020
- **“Using Human-Centered AI to Combat Abusive Behavior on the Internet”** University of Minnesota
Talk: Department of Computer Science, Minneapolis, MN February 2020
- **“Using Human-Centered AI to Combat Abusive Behavior on the Internet”** UC Berkeley
Talk: Department of EECS, Berkeley, CA February 2020
- **“Combating Online Abusive Behavior Using Cross-Community Learning”** University of Michigan
Talk: School of Information, Ann Arbor, MI February 2019
- **“Effectiveness of Banning as a Moderation Strategy”** Twitter
Talk: Twitter HQ, San Francisco, USA June 2018
- **“Twitter Data Mining and Analysis”** Georgia Institute of Technology
Guest Lecture: Social Computing (CS6474) April 2015
- **“Mining the Web to predict Future Events”** IIT Madras
Guest Lecture: Artificial Intelligence & Database Laboratory, IIT Madras July 2014

Service & Mentoring

Service.

- Organizing Committee - Local Arrangements Co-Chair @ CSCW 2019, Data Challenge Chair @ ICWSM 2022
- Program Committee - Associate Chair (AC) CHI 2024, Associate Chair (AC) CSCW 2020-21, PC member for: EMNLP 2020, WWW 2020, ALW 2018 (ACL'19), TRAC-1 (COLING'18)
- Reviewer - CHI 2017-'22, CSCW 2017-'20 & 2021-'22, ICWSM 2018-'20, ACL 2019-'20, TOCHI 2018, TSC 2019-'20

Students Mentored. [* = Graduated; † = Awarded CS STARS at Illinois]

- **University of Illinois.** *PhD-CS*: Charlotte Lambert, Fred Choi, Jackie Chan, Tanvi Bajpai;
MS-CS: Dominic Jones*, Harita Reddy*, Omkar Gurjar; *BS-CS*: Yoshee Jain†, Drshika Asher†, Sowmya Pratipati†, Ayaan Shah, Aarohi Gupta, Tue Do, Ishq Gupta, Ananya Rajagopal, Aarthi Balaji*, Anwesa Goswami*, Clark Lu*, Niharika Chintalapati*, Jacqueline Chen*.
- **Georgia Tech.** *MS-CS*: Anirudh Srinivasan*; *BS-CS*: Nancy Tao*, Christine Shih*, Iris Birman*.
- **University of Michigan.** *MS-SI*: Chaitrali Gandhi*, Sonali Tandon*, Aljoharah Alfayez*; *BS-SI*: Hunter Charvat*, Taha Ziad*, Katherine Mustelie*, Yiming Zhang*, Jiajun Bao*, Junjie Wu*, Michelle Lee*, Shradha Reddy*, Weiji Li*, Aditya Manjusha Shylesh*, Robert Kang*.