

Eshwar Chandrasekharan

Assistant Professor of Computer Science
eshwarchandrasekharan AT gmail DOT com
www.eshwarchandrasekharan.com

University of Illinois at Urbana-Champaign
Department of Computer Science

Research Interests

Using a combination of *computational techniques* and *social computing theories*, my research aims to make advances on the problem of online abuse, with a long-term goal of **making the Internet safer**. My current focus is on *detecting* and *discouraging online misbehavior* using statistical ML and causal inference strategies.

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

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.10 **Synthesized Social Signals: Computationally-Derived Social Signals from Account Histories**
CHI 2020
 - Jane Im, Sonali Tandon, **Eshwar Chandrasekharan**, Taylor Denby, Eric Gilbert
- C.9 **Still out there: Modeling and Identifying Russian Troll Accounts on Twitter**
WebSci 2020 [Acceptance rate: 27%]
 - Jane Im, **Eshwar Chandrasekharan**, Jackson Sargent, Paige Lighthammer, Taylor Denby, Ankit Bhargava, Libby Hemphill, David Jurgens, Eric Gilbert
- C.8 **Crossmod: A Cross-Community Learning-based System to Assist Reddit Moderators**
CSCW 2019.
 - **Eshwar Chandrasekharan**, Chaitrali Gandhi, Matthew Wortley Mustelier, Eric Gilbert
- C.7 **A Just and Comprehensive Strategy for Using NLP to Address Online Abuse**
ACL 2019. [Acceptance rate: 24%]
 - David Jurgens, **Eshwar Chandrasekharan**, Libby Hemphill

- C.6 **Prevalence and Psychological Effects of Hateful Speech in Online College Communities**
WebSci 2019.
 – Koustuv Saha, **Eshwar Chandrasekharan**, Munmun De Choudhury
- C.5 **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.4 **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.3 **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
- 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 **Footprints on Silicon: Explorations in Gathering Autobiographical Content**
CICLing 2015 (IJCLA). [Acceptance rate: 34%]
 – **Eshwar Chandrasekharan**, Sutanu Chakraborti

Papers Under Submission for Peer-Review:

- S.1 **The Quarantine of r/TheRedPill: Efficacy of a Reddit Intervention in Limiting Misogyny and Radicalization**
(Under submission at ICWSM 2020)
 – **Eshwar Chandrasekharan**, Shagun Jhaver, Amy Bruckman, Eric Gilbert
- S.2 **Conversations Gone Alright: Predicting Prosocial Outcomes in Online Conversations**
(Under submission at IC2S2 2020)
 – Jiajun Bao, Junjie Wu, Yiming Zhang, **Eshwar Chandrasekharan** and David Jurgens
- S.3 **Hybrid Approaches to Detect Comments Violating Macro Norms on Reddit**
arXiv. (Dataset paper under submission at ICWSM 2020)
 – **Eshwar Chandrasekharan**, Eric Gilbert

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

- 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 GVVU Student Awards.
- Accepted to the 2019 CSST Summer Institute at Rutgers University.
- Semi-finalist for the Snap Inc. Research Fellowship 2019.
- 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.
- First Prize in the National Finals of Young Talent Search in Computer Programming Contest 2009 conducted by the Computer Society of India, 2009.
- Recipient of National Talent Search Examination (NTSE) Scholarship, The National Council of Educational Research and Training (NCERT) in 2008; awarded to the top 750 students in India.

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

• **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

• **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

• **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.

• **Social Computing (CS6474)**

Georgia Institute of Technology

Teaching Assistant

Aug. - Apr. 2015

- Graded assignments; guest lecture; led seminars and tutorials
- Class of approx. 25 graduate students

• **Natural Language Processing (CS6370)**

Indian Institute of Technology, Madras

Teaching Assistant

Jul. - Nov. 2014

- Office hours; project mentoring; guest lecture; evaluations
- Class of approx. 50 undergraduate students

Invited Talks & Guest Lectures

- **“Combating Online Abusive Behavior Using Cross-Community Learning”** University of Michigan
Venue: School of Information, Ann Arbor, MI February 2019
- **“Effectiveness of *Banning* as a Moderation Strategy”** Twitter
Venue: 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-Chairs @ CSCW 2019
- Program Committee - WWW 2020, ALW 2018 (ACL'19), TRAC-1 (COLING'18)
- Reviewer - CHI 2017-'20, CSCW 2017-'20, ICWSM 2018-'20, ACL 2019, TOCHI 2018, TSC 2019-'20

Students Mentored.

- **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 Mustelier, Yiming Zhang, Jiajun Bao, Junjie Wu, Michelle Lee, Shradha Reddy, Weiji Li, Aditya Manjusha Shylesh, Robert Kang.