Mohit Singhal

 $\frac{682\text{-}552\text{-}4545 \mid \underline{\text{m.singhal@northeastern.edu}} \mid \underline{\text{https://msinghal10.github.io/}}}{\text{https://scholar.google.com/citations?user} = \underline{8MNR5Y8AAAAJ\&hl} = en}$

Research Interests

Security & Privacy, Content Moderation, Data Mining, Fairness and Bias of AI systems, Computational Social Sciences

EDUCATION

The University of Texas at Arlington

Arlington, TX

Ph.D. in Computer Science

Aug. 2019 - May 2024

Advisor: Dr. Shirin Nilizadeh

The University of Texas at Arlington

Arlington, TX

M.S. in Computer Science

Aug. 2017 - May 2019

Advisor: David Levine

Jaypee University of Information Technology

Solan, India

B. Tech in Computer Science & Engineering

Aug. 2013 - May 2017

APPOINTMENTS

Research Active Assistant Teaching Professor

Spring 2025 – present

Northeastern University

Boston, MA

Affiliate Faculty at Northeastern Ethics Institute

Fall 2024 – present

 $Northeastern\ University$

Boston, MA Spring 2025 – present

Expert at The Center of Excellence in Cyber-Physical Systems

Solan, India

Jaypee University of Information Technology

Down, India

Assistant Teaching Professor

Fall 2024 – present

Northeastern University

Boston, MA

Instructor

Fall 2021 & 2023, Spring 2023 & 2024

 $The\ University\ of\ Texas\ at\ Arlington$

Arlington, TX

STEM Graduate Research Assistant

Spring 2022, & Summer 2023

The University of Texas at Arlington

Arlington, TX

STEM Graduate Teaching Assistant

Fall 2018 – Spring 2024

The University of Texas at Arlington

Arlington, TX

Summer Research Intern
Indian Institute of Technology

Summer 2016
Roorkee, India

Summer Research Intern

Summer 2015

The University of Nebraska at Omaha

Omaha, NE

THESIS

- Ph.D. Thesis: Content Moderation on Social Media: Social and Computational Standards and Implications
- Masters Thesis: Analysis and Categorization of Drive-By Download Malware Using Sandboxing and Yara Ruleset

Publications

- Khorzooghi, S. M. S. M., Thota, P., **Singhal, M.**, Asudeh, A., Das, G., & Nilizadeh, S. 2025. [Poster] FairDeFace: Evaluating the Fairness and Adversarial Robustness of Face Obfuscation Methods. In USENIX Security 2025.
- Kumarswamy, N.*, **Singhal, M.***, and Nilizadeh, S. 2025. Causal Insights into Parler's Content Moderation Shift: Effects on Toxicity and Factuality. In Proceedings of the ACM Web Conference 2025 (WWW '25), April 28-May 2, 2025, Sydney, NSW, Australia. ACM, New York, NY, USA, 10 pages. (* Joint Co-First Authors)

- Singhal, M., Pacheco, J., Moosavi Khorzooghi, S. M. S., Debi, T., Asudeh, A., Das, G., & Nilizadeh, S. (2025). Auditing Yelp's Business Ranking and Review Recommendation Through the Lens of Fairness. Proceedings of the International AAAI Conference on Web and Social Media, 19(1), 1798-1816.
- Vafa, E. P.*, **Singhal, M.***, Thota, P., & Roy, S. S. (2024, November). Learning from Censored Experiences: Social Media Discussions around Censorship Circumvention Technologies. In 2025 IEEE Symposium on Security and Privacy (SP) (pp. 62-62). IEEE Computer Society. (* Joint Co-First Authors)
- Singhal, M., Ling, C., Paudel, P., Thota, P., Kumarswamy, N., Stringhini, G., & Nilizadeh, S. (2023, July). SoK: Content moderation in social media, from guidelines to enforcement, and research to practice. In 2023 IEEE 8th European Symposium on Security and Privacy (EuroS&P) (pp. 868-895). IEEE.
- Singhal, M., Kumarswamy, N., Kinhekar, S., & Nilizadeh, S. (2023, June). Cybersecurity Misinformation Detection on Social Media: Case Studies on Phishing Reports and Zoom's Threat. In Proceedings of the International AAAI Conference on Web and Social Media (Vol. 17, pp. 796-807).
- Singhal, M., Kumarswamy, N., Kinhekar, S., & Nilizadeh, S. (2021). Poster: Detecting Misinformation about Zoom's Security and Privacy Threats. In (NDSS 2022). Received Best Technical Poster Award
- Singhal, M., & Levine, D. (2019, October). Analysis and categorization of drive-by download malware. In 2019 4th International Conference on Computing, Communications and Security (ICCCS) (pp. 1-4). IEEE.

Broader Impact

- Our paper SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice was cited in amicus curiae brief submitted in **The Supreme Court** case Moody v. NetChoice, LLC.
- Our paper SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice was cited in *amicus curiae brief* submitted in **The Supreme Court** case *NetChoice*, *LLC v. Paxton*.
- Our paper SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice was cited in the official report submitted to *The Committee on Civil Liberties*, *Justice and Home Affairs* in **The European Union**.
- Our paper SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice was cited in *amicus curiae brief* submitted in **The Supreme Court** case *Gonzalez v. Google LLC*.

Working Papers

- Khorzooghi, S. M. S. M., Thota, P., **Singhal, M.**, Asudeh, A., Das, G., & Nilizadeh, S. (2024, November). Hidden Faces or Hidden Biases?: Exploring Fairness and Robustness in Visual Privacy Protection Systems.
- Aleksandric, A., **Singhal, M.**, Groggel, A., & Nilizadeh, S. (2022). Understanding the Bystander Effect on Toxic Twitter Conversations. arXiv preprint arXiv:2211.10764.
- Salehabadi, N., Groggel, A., **Singhal, M.**, Roy, S. S., & Nilizadeh, S. (2022). User Engagement and the Toxicity of Tweets. arXiv preprint arXiv:2211.03856.

AWARDS

- Awarded the People's Choice Award for my Ph.D. lightning talk on SoK: Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice at the 50th Anniversary function of The Computer Science and Engineering Department held at The University of Texas at Arlington, 2023.
- Recipient of the Student Travel grant for Euro S&P 2023.
- Awarded the best Ph.D. lightning talk runner-up award for the research lightning talk on *Detecting Misinformation* about Zoom's Security and Privacy Threats at SCRF conference held at The University of Texas at Arlington, 2023.
- Awarded the best project presentation & demo runner-up award for poster Content Moderation in Social Media, from Guidelines to Enforcement, and Research to Practice at SCRFconference held at The University of Texas at Arlington, 2023.
- Awarded *The Outstanding TA award* by The Department of Computer Science & Engineering at The University of Texas at Arlington, 2022.

- Awarded the best technical poster for *Detecting Misinformation about Zoom's Security and Privacy Threats* at NDSS conference, 2022.
- Awarded the best technical poster for *Detecting Misinformation about Zoom's Security and Privacy Threats* at SCRF conference held at The University of Texas at Arlington, 2022.
- Recipient of the Student Travel grant for USENIX Security 2021.
- Awarded the best poster at IEEE MetroCon Conference, 2019.
- Awarded *The Computer Science Scholarship* by The Department of Computer Science & Engineering at The University of Texas at Arlington, 2019.

PROFESSIONAL SERVICE

- Advisor for MedCS Lab at Northeastern University.
- Serving as a mentor for the IJCNLP-AACL 2025 Student Research Workshop (SRW).
- PC member for AsiaCCS 2026, ACL 2025, EMNLP 2025, WWW 2025, ICWSM 2025, ICWSM 2026, CSCW 2025, CHI 2025, CSET 2023, and CSET 2024.
- Reviewer for Transactions on the Web, Transactions on Dependable and Secure Computing, Transactions on Technology and Society, Online Social Networks and Media, Computers in Human Behavior: Artificial Humans, Social Network Analysis and Mining, Humanities & Social Sciences Communications, Journal of Telecommunication Policy, Technology in Society, and Journal of Cybersecurity.
- Serving as the Program Co-Chair for The 18th Workshop on Cybersecurity Experimentation and Test Workshop (CSET 2025).
- Serving as a Khoury FIRST Mentor for First Generation Students at Khoury College of Computer Science, Northeastern University.
- Judge for Ethics Bowl 2024 held at Northeastern University.
- Serving on the team for Reddit for Researchers Beta Program.
- Lifelong member of the UTA Texas Gamma Chapter of Upsilon Pi Epsilon.
- Session Chair for The 17th Workshop on Cybersecurity Experimentation and Test Workshop (CSET 2024).
- Served as the Event Facilitator for OurCS@DFW & SCRF 2023 at The University of Texas at Arlington
- External reviewer for ACM CCS 2024. DIMVA 2024, ICWSM 2024, Web4Good 2024, Transactions on Information Forensics & Security, PoPETs/PETS 2023, Euro S&P 2022, USENIX Security 2020 & 2021, RAID 2020, E-Crimes 2020

TEACHING EXPERIENCE

• Assistant Teaching Professor (Northeastern University):

DS 3000: Foundations of Data Science - Fall 2025 - 266 Students

DS 3000: Foundations of Data Science - Spring 2025 - 89 Students

CY 2550: Foundations of Cybersecurity - Spring 2025 - 134 Students

DS 3000: Foundations of Data Science - Fall 2024 - 130 Students

• Instructor (The University of Texas at Arlington):

Information Security I (CSE 4380) - Spring 2024 - 35 Students

Information Security I (CSE 4380) - Fall 2023 - 20 Students

Information Security I (CSE 4380) - Spring 2023 - 36 Students

Information Security I (CSE 4380) - Fall 2021 - 27 Students

• Graduate Teaching Assistant (The University of Texas at Arlington):

Information Security I (CSE 4380) - Spring 2024 - 35 Students

Information Security I (CSE 4380) - Fall 2023 - 20 Students

Information Security I (CSE 4380) - Spring 2023 - 36 Students

Information Security I (CSE 4380/5380) - Fall 2022 - 36 Students

Programming Language Concepts (CSE 3302/5307) - Summer 2022 - 70 Students

Database Systems (CSE 5330) - Spring 2021 - 44 Students

Information Security I (CSE 4380) - Fall 2020 - 36 Students Discrete Structures (CSE 2315) - Summer 2020 - 27 Students Secure Programming (CSE 4382/5382) - Spring 2020 - 45 Students Information Security I (CSE 4380) - Fall 2019 - 25 Students Information Security I (CSE 4380/5380) - Spring 2019 - 38 Students Information Security I (CSE 4380) - Fall 2018 - 39 Students

MENTORSHIP

Northeastern University

- Mentoring Anusha Gollarahalli Patel (Summer 2025 Present) [Masters Student]
- Mentoring Huy Gia Han Vu (Summer 2025 Present) [Bachelor Student]
- Mentoring Siddharth Karani (Summer 2025 Present) [Bachelor Student]
- Mentoring Yipeng Wang (Spring 2025 Present) [Bachelor Student]
- Mentoring Niraj Nadarasa (Fall 2024 Present) [Bachelor Student]
- Mentored Aadarsh Gaikwad (Fall 2024 Spring 2025) [Masters Student]
- Mentored Prerna Chander, Sadasivam Natanakumar, & Nidhi Mankala (Fall 2024) [Masters Students]

The University of Texas at Arlington

- Mentored Javier Pacheco (Fall 2022 Fall 2023) [Bachelor Student]
- Mentored Keren Valdez (Fall 2022 Fall 2023) [Bachelor Student]
- Mentored Katia Lopez (Spring 2022) [Bachelor Student]
- Mentored Micheal Brady (Fall 2021) [Bachelor Student]
- Mentored Nihal Kumarswamy (Fall 2020 Spring 2022) [Bachelor to Master Student]
- Mentored Shreyasi Kinhekar (Fall 2020 Spring 2022) [Bachelor Student]