

Hussam Habib

Post Doc Researcher,
CS², IDea_Lab @ Uni-Graz
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Research Interests

Computational Social Science; Online User Behavior; Algorithm Audits; Online Personalization.

Work Experience

University of Graz Post Doc Researcher @IDea_Lab , with Prof. Jana Lasser	2025-present
New York University Research Associate, with Prof. Rachel Greenstadt	2024-2025
University of Iowa Research Associate, with Prof. Rishab Nithyanand	2019-2024
Lahore University of Management Sciences Research Assistant, with Prof. Fareed Zaffar	2018-2019

Higher Education

Ph.D. Computer Science , University of Iowa Advisor: Rishab Nithyanand Thesis: How do social media platforms influence user behavior?	2019-2025
B.S. Computer Science , National University of Computer & Emerging Sciences	2014-2018

Honors & Awards

APART-USA Fellowship , Austrian Academy of Sciences (ÖAW)	2025
Graduate College Post-Comprehensive Research Fellowship , University of Iowa	2022
Dare to Discover Feature , University of Iowa	2022
Dean's Honor List , National University of Computer & Emerging Sciences	18' 17'
Travel Grants , PETS'23	2023

Pre-Print

- [1] H. Habib, R. Stoldt, R. Maragh-Lloyd, B. Ekdale, and R. Nithyanand, Uncovering the Interaction Equation: Quantifying the Effect of User Interactions on Social Media Homepage Recommendations. Submitted: **AAAI Conference on Web and Social Media (ICWSM 2026)**. <https://arxiv.org/pdf/2407.07227>
- [2] H. Habib and R. Nithyanand, YouTube Recommendations Reinforce Negative Emotions: Auditing Algorithmic Bias with Emotionally Agentic Sock Puppets. **Pre-Print**. <https://arxiv.org/pdf/2501.15048>
- [3] S. Aldrich, H. Habib and U. Iqbal. A Framework for Benchmarking Personalization in AI Agents. Submitted.
- [4] H. Habib and R. Greenstadt, For You (and Everyone Else): Privacy Implications of Discovered Unauthorized Access to TikTok's FYP and External Shares. Submitted.

Published Articles

- [5] H. Habib, R. Stoldt, R. Maragh-Lloyd, B. Ekdale, A. High, A. Peterson, K. Biddle, J. Ssozi, and R. Nithyanand, Algorithmic amplification of biases on Google Search: How Partisan Audiences on Google Search Induce an Abortion-Related Filter Bubble Effect. Submitted: **ACM SIGCHI Conference on Computer Supported Cooperative Work (CSCW 2025)**. <https://arxiv.org/pdf/2401.09044>
- [6] H. Habib, P. Srinivasan, and R. Nithyanand, Making a Radical Misogynist: How Online Social Engagement with the Manosphere Influences Traits of Radicalization. In: **ACM SIGCHI Conference on Computer Supported Cooperative Work (CSCW 2022)**. <https://doi.org/10.1145/3555551>
- [7] H. Habib, M. B. Musa, M. F. Zaffar, and R. Nithyanand, Are Proactive Interventions for Reddit Communities Feasible? In: **AAAI Conference on Web and Social Media (ICWSM 2022)**. <https://ojs.aaai.org/index.php/ICWSM/article/view/19290>
- [8] H. Habib and R. Nithyanand, Exploring the Magnitude and Effects of Media Influence on Reddit Moderation. In: **AAAI Conference on Web and Social Media (ICWSM 2022)**. <https://ojs.aaai.org/index.php/ICWSM/article/view/19291>
- [9] H. Habib and R. Nithyanand, The Morbid Realities of Social Media: An Investigation into the Narratives Shared by the Deceased Victims of COVID-19. In: **AAAI Conference on Web and Social Media (ICWSM 2023)**. <https://doi.org/10.1609/icwsm.v17i1.22147>
- [10] R. Roongta, J. Jose, H. Habib, R. Greenstadt, Sheep's clothing, wolfish impact: Automated detection and evaluation of problematic 'allowed' advertisements. In: **Privacy Enhancing Technologies (PETS 2026)**. <https://doi.org/10.1609/icwsm.v17i1.22147><https://petsymposium.org/popets/2025/popets-2025-0142.pdf>
- [11] R. Stoldt, A. High, A. Peterson, K. Biddle, R. Maragh-Lloyd, R. Nithyanand, B. Ekdale, T. Havens, H. Habib, J. Thiede, Extended abstract: Relationships Among Vaccination Attitudes, Social Media Use, and Activist vs. Radical Behavior. In: **72nd Annual International Communication Association Conference (ICA 2022)**.

Open-Source Contributions

Warning Behavior Analysis Toolkit • github.com/hussamh10/warning-behavior-analysis-toolkit

A computational framework using social science theories to measure warning behaviors indicative of radicalization in online platforms.

Online Community Health Monitor • github.com/hussamh10/online-community-monitor

Active monitoring of subreddits to flag online communities—using interpretable machine learning—as they adopt and exhibit problematic behavior.

Emotionally-Agentic YouTube Sock Puppets • github.com/hussamh10/youtube-sockpuppets

YouTube Sock Puppets powered by LLMs consuming YouTube videos and selecting videos replicating psychological rule-based system.

Characterizing Platform Behavior • github.com/hussamh10/platform-behavior

A platform audit system designed to measure, replicate, and taxonomize platform behavior. Currently supporting Facebook, Twitter, Reddit, and YouTube.

Teaching

Machine Learning Workshop , Research Experiences for Undergraduates (REU)	Summer 2023
CS:2820 • Object-Oriented Software , University of Iowa, Teaching Assistant	Fall 2020
CS:2520 • Human-Computer Interaction , University of Iowa, Teaching Assistant	Spring 2020
CS:2230 • Data Structures , University of Iowa, Teaching Assistant	Fall 2019

Invited Talks

Social media platforms and their influence user behavior. Washington University in St. Louis	Fall 2024
Social media platforms and their influence user behavior. Denison University	Fall 2024
The radicalization pathways towards misogyny through the Manosphere. Nothing to hide (podcast)	Spring 2024
Does Google serve different results to users with opposing opinions? University of Wisconsin–Madison	Fall 2024
Social media platforms and their influence user behavior. University of Illinois Urbana-Champaign	Fall 2023
Social media platforms and their influence user behavior. University of Iowa	Fall 2023
Investigating Proactive Strategies for Online Community Moderation. Lahore University of Management Sciences	Fall 2020

Service

Reviewer

AEJMC'23, ICWSM'24, '25, '26, CSCW'24, IEEE'24

Research Mentoring

Stuart Aldrich , Graduate Student, WashU	2024
Amol Bhagavathi , Undergraduate, University of Iowa	
Luke Aschenbrenner , Visiting REU, Benedictine College	2023
Tiziana Hernandez , Visiting REU, Stonehill College	
Nick Cardenas , Visiting REU, Grinnell College	2022
Jordan Pollard , Visiting REU, St. Ambrose University	