ASONAM 2022 Keynotes

ASONAM 2022 Keynote I

Can crowdsourcing rescue the social marketplace of ideas?

Taha Yasseri
University College Dublin, Ireland

Abstract

Facebook and Twitter recently announced community-based review platforms to address misinformation. In this talk, I provide an overview of the potential affordances of such community-based approaches to content moderation based on past research and preliminary analysis of Twitter's Birdwatch data. While our analysis generally supports a community-based approach to content moderation, it also warns against potential pitfalls, particularly when the implementation of the new infrastructure focuses on crowd-based "validation" rather than "collaboration." We call for multidisciplinary research utilizing methods from complex systems studies, behavioural sociology, and computational social science to advance the research on crowd-based content moderation.

Biography

Taha Yasseri is an Associate Professor at the School of Sociology and a Geary Fellow at the Geary Institute for Public Policy at University College Dublin, Ireland. Formerly, he was a Senior Research Fellow in Computational Social Science at the University of Oxford, a Turing Fellow at the Alan Turing Institute for Data Science and Artificial Intelligence, and a Research Fellow in Humanities and Social Sciences at Wolfson College. Taha Yasseri has a PhD in Complex Systems Physics from the University of Göttingen, Germany. He has interests in the analysis of large-scale transactional data and conducting behavioural experiments to understand human dynamics, machines' social behaviour, government-society interactions, online political behaviour, mass collaboration and collective intelligence, information and opinion dynamics, hate speech and content moderation, collective behaviour, and online dating.

ASONAM 2022 Keynote II

Social Media Data for Studying Human Behavior: Where do we go from here?

Juergen Pfeffer
Technical University of Munich, Germany

Abstract

Social media has come a long way - and it hasn't been a good one, unfortunately. Platforms that were celebrated for their mobilizing power during the Arab Spring are now the focus of criticism because this same mobilizing power drives negative dynamics such as polarization, hate speech, and the spread of fake news and conspiracy theories. From a research perspective, we have embraced these destructive tendencies as worthy scientific challenges – always under the assumption that the data that we are analyzing is a good representation of human behavior. However, access to platform data has been limited over the years and, where available, was complicated by flaws and a lack of transparency. With Musk's take-over of Twitter, we have most likely reached a tipping point for social media research. At the same time platforms and their billionaire owners have reached a new low in reputation among the general public. In this presentation, I will talk about challenges for individual researchers and for society at large in the current state of social media platforms. But I will also talk about ideas for solutions and possible paths forward. Researchers will need to adapt and spend more time thinking about data quality, bias, and new methodological approaches. And policymakers will need to become more creative when it comes to regulating and auditing social media platforms so that tools that are used by the entire society can actually serve society and the public interest.

Biography

Prof. Pfeffer’s research focuses on the analysis of large and dynamic socio-technical systems as well as the methodological, algorithmic and theoretical challenges that arise from these analyses. Pfeffer's research falls at the intersection of social and computer sciences. Current projects deal with the modeling and detection of negative dynamics in social media, such as online firestorms and hate against politically active women. After ten years of professional experience in NGOs, consulting firms and non-university research institutions, Jürgen Pfeffer acquired a doctorate in business informatics at the University of Technology in 2010. He subsequently worked as a postdoctoral fellow at Carnegie Mellon University (USA) until he was appointed there as Assistant Research Professor in 2012. Since March 1, 2016, Prof. Jürgen Pfeffer has been serving as Professor of Computational Social Science & Big Data at the Bavarian School of Public Policy at TUM.

ASONAM 2022 Keynote III

Networks and Narratives: Characterizing Multiplatform Influence Campaigns to Strengthen Socio-cognitive Security

Nitin Agarwal
University of Arkansas at Little Rock, USA

Abstract

Digital communication tools, especially social media, are integral part of lives. A large population gets their information and news from these platforms. Openness and lack of standards have made these media platforms a hotbed for malicious activities such as, spreading propaganda, misinformation, conspiracy theories, extremism, and terrorism to propagate hysteria, sow discord, create chaos, cause instability, and erode public trust in democratic and scientific institutions.
I will discuss our research efforts studying the mechanics of misinformation campaigns, critical link between blogs and various social media platforms, and media orchestration strategies. Tactics, techniques, and procedures used by malicious groups to propagate misinformation will be highlighted. I will present insights from our various studies pertaining to misinformation campaigns in the Baltic region, NATO's military exercises, Canadian elections, Indo-Pacific, and COVID-19.
The research has been transitioned into publicly available software programs, viz., Blogtracker and YouTubeTracker that will be showcased during the talk. Furthermore, the research has been operationalized for policy makers such as Arkansas Attorney General's office to combat COVID-19 scams, NATO public affairs and strategic communications officers to manage anti-NATO campaigns, among others.

Biography

Nitin Agarwal is the Jerry L. Maulden-Entergy Chair and Distinguished Professor of Information Science at University of Arkansas - Little Rock and a faculty fellow of the International Computer Science Institute (ICSI) at University of California, Berkeley. Dr. Agarwal is the founding director of the Collaboratorium of Social Media and Online Behavioral Studies (COSMOS) research center. His research interests include social computing, (deviant) behavior modeling, group dynamics, influence, trust, collective action, social-cyber forensics, mis/disinformation, influence operations, coordinated and cross-platform cyber campaigns, adversarial information operations, health informatics, data mining, and privacy. Cyber is vital for any multi-domain operation but the challenges we face today transcend the traditional cybersecurity in the form of (mis/dis)information and influence operations targeting individual (at micro level) and groups or societies (at macro level).
Dr. Agarwal is leading the development of research-based solutions for characterizing multimedia and multiplatform influence campaigns, measure their influence, assess human and adversarial AI coordination, and strengthen socio-cognitive security apparatus by designing inoculation strategies. Dr. Agarwal's socio-computational models and social cyber forensics methodologies, rooted in social science theories, help advance the understanding of campaigns, mobilization through online networks, collective action, deindividuation, influence campaigns, misinformation, disinformation, and propaganda campaigns that are conducted in the cyber world with real-world implications. Dr. Agarwal has received 32 grants totaling over $40 million from the U.S. Army, Navy, Air Force, DARPA, and NSF to support these multi-year and multi-domain efforts and multi-national

partnerships with various academic, government, and industry entities. Over 300 publications have resulted so far from this effort including 15 best paper awards in highly prestigious scientific and policy forums. Dr. Agarwal has led transition of the research into usable tools winning top innovation recognitions from NATO, WHO, and others demonstrating the need for technology and innovation to bridge science, society, and policy. Visit https://profiles.ualr.edu/na10/ for more details.