Research Roundup: UMSI scholars at the 2023 ACM Conference on Computer Supported Cooperative Work (CSCW)

Check out UMSI papers, workshops and awards for the 2023 CSCW conference.

University of Michigan School of Information (UMSI) faculty and students will present more than two dozen papers at the <u>2023 ACM Conference on Computer-Supported Cooperative Work (CSCW)</u> October 14-18.

These papers help illustrate the breadth and depth of topics information scientists are currently studying, including: The role of artificial intelligence in the workplace, the impact of social media on first generation college students and the relationships between robots and humans.

### **Awards**

Lasting Impact Award:

The Lasting Impact Award goes to a paper that is at least 10 years old and has had an impact on CSCW as a field. Nominations are taken from the community, and the decision is made by a committee of senior CSCW scholars. This year that committee consisted of Susan R. Fussell (Cornell University), Xiaojuan Ma (Hong Kong University of Science and Technology), Joseph Konstan (University of Minnesota), Myriam Lewkowicz (Université de Technologie de Troyes), and Melissa A. Mazmanian (University of California, Irvine).

We're pleased to announce that the 2023 Lasting Impact Award goes to the CSCW 2006 paper "<u>A Face(book) in the crowd: Social searching vs. social browsing</u>" by <u>Cliff Lampe</u>, <u>Nicole Ellison</u>, and Charles Steinfield.

### Best Paper:

• Data Subjects' Perspectives on Emotion Artificial Intelligence Use in the Workplace: A Relational Ethics Lens

<u>Shanley Corvite</u> (University of Michigan), <u>Kat Roemmich</u> (University of Michigan), Tillie Ilana Rosenberg (University Of Michigan), <u>Nazanin Andalibi</u> (University of Michigan)

### Honorable Mentions:

• Community Tech Workers: Scaffolding Digital Engagement Among Underserved Minority Businesses

<u>Julie Hui</u> (University of Michigan), Kristin Seefeldt (University of Michigan), Christie Baer (University of Michigan), Lutalo Sanifu (Jefferson East, Inc.), Aaron Jackson (University of Michigan), <u>Tawanna R. Dillahunt</u> (University of Michigan)

### Impact Recognition:

• Community Tech Workers: Scaffolding Digital Engagement Among Underserved Minority Businesses

<u>Julie Hui</u> (University of Michigan), Kristin Seefeldt (University of Michigan), Christie Baer (University of Michigan), Lutalo Sanifu (Jefferson East, Inc.), Aaron Jackson (University of Michigan), <u>Tawanna R. Dillahunt</u> (University of Michigan)

• Data Work of Frontline Care Workers: Practices Problems and Opportunities in the Context of Data-Driven Long-Term Care

Yuling Sun (East China Normal University), Xiaojuan Ma (Hong Kong University of Science and Technology), <u>Silvia Lindtner</u> (University of Michigan), Liang He (East China Normal University)

### Recognition for Contribution to Diversity and Inclusion

• Care Workers' Wellbeing in Data-Driven Healthcare Workplace: Identity, Agency, and Social Justice

Yuling Sun (East China Normal University), Xiaojuan Ma (Hong Kong University of Science and Technology), Silvia Lindtner (University of Michigan), Liang He (East China Normal University)

- How Recent Migrants Develop Trust Through Community Commerce: The Emergence of Sociotechnical Adaptation
  - <u>Joey Chiao-Yin Hsiao</u> (University of Michigan), <u>Sylvia Darling</u> (University of Michigan), <u>Tawanna R. Dillahunt</u> (University of Michigan)
- Racial Capitalism Online: Pressures to Perform Race Among Creative Professionals Jaleesa Rosario Turner (University of Michigan), <u>Julie Hui</u> (University of Michigan)
- Social Media and College-Related Social Support Exchange for First-Generation
   Low-Income Students: The Role of Identity Disclosures
   Cassidy Pyle (University of Michigan), Nicole B. Ellison (University of Michigan), Nazanin Andalibi (University of Michigan)

### Workshops

#### **Many Worlds of Ethics: Ethical Pluralism in CSCW**

**Organizers:** Mohammad Rashidujjaman Rifat, University of Toronto; Ayesha Bhimdiwala, University of Texas at Austin; Ananya Bhattacharjee, University of Toronto; <u>Amna Batool</u>, University of Michigan; Dipto Das, University of Colorado Boulder; Nusrat Jahan Mim, Harvard University; Abdullah Hasan Safir, University of Warwick; Sharifa Sultana, Cornell University; Taslima Akter, University of California

Irvine; C. Estelle Smith, Colorado School of Mines; Bryan Semaan, University of Colorado Boulder; Shaimaa Lazem, New Borg El-Arab; Robert Soden, University of Toronto; Michael Muller, IBM Research; Syed Ishtiaque Ahmed, University of Toronto

Format: Hybrid

**Description:** Although CSCW has shown a strong interest in diversity and inclusion, the literature predominantly reflects ethics rooted in Western universalism, modernism, scientism, and Euro-centrism. Consequently, CSCW theories and practices tend to marginalize millions of people worldwide whose ethical perspectives do not align with the narrow focus of ethics and values within CSCW. In an effort to embrace ethical pluralism within CSCW, we propose a day-long hybrid workshop in CSCW and invite researchers and practitioners to initiate conversations centered around three themes: (a) foregrounding ethical diversities, (b) adapting diverse ethics, and (c) addressing challenges, barriers, and limitations associated with incorporating plural ethics into CSCW. Through this workshop, we aim to bring together CSCW scholars and practitioners, fostering a community that advocates for and advances the cause of pluralism in socio-technical systems.

#### Trauma-Informed Design: A Collaborative Approach to Building Safer Online Spaces

**Organizers:** Casey Randazzo, Rutgers University; Carol F. Scott, University of Michigan; Rosanna Bellini, Cornell Tech; Tawfiq Ammari, Rutgers University; Michael Ann DeVito, University of Colorado Boulder; Bryan Semaan, University of Colorado Boulder; Nazanin Andalibi, University of Michigan School of Information

Format: Hybrid

Description: Trauma-informed design, which is gaining greater attention in the Computer-Supported Cooperative Work (CSCW) and Human-Computer Interaction (CHI) communities, focuses on designing and managing online platforms with consideration for the prevalence and impact of trauma on individuals, communities, and wider societies. This approach aims to build safer and more supportive digital spaces for users who have a history or trauma. This workshop enables participants to critically examine the application and measurement of trauma-informed approaches to social media. We bring together researchers and practitioners to explore the challenges and opportunities of trauma-informed design, with the goal of creating more compassionate and ethical online spaces that prioritizes user safety, well-being, and healing. Participants will engage in activities that encourage collaboration, discussion, and reflection on the principles of trauma-informed design and their application in different online contexts. By the end of the workshop, participants will have a better understanding of the principles of trauma-informed design and be equipped with tools and strategies to apply these principles in their work.

Supporting Workers in Developing Effective Collaboration Skills for Complex Work

**Organizers:** Evey Huang, Northwestern University; Kapil Garg, Northwestern University; Diego Gómez-Zará, University of Notre Dame; <u>Julie Hui</u>, University of Michigan; Chinmay Kulkarni, Emory University; Michael Massimi, Slack; Elizabeth F Churchill, Google LLC; Elizabeth Gerber, Northwestern University

Format: In-person

**Description:** This one—day, in-person workshop aims to support participants in reflecting, ideating, and prototyping new socio-technical approaches to help workers develop effective collaboration skills for complex work. While CSCW researchers have created tools to provide workers access to collaboration opportunities, workers require more support in learning to collaborate effectively to benefit from these opportunities. This workshop invites academic and industry researchers who study these topics and develop socio-technical systems for workplaces to participate. Participants will share insights from their work and work with each other to envision an agenda for future research and design of workplaces that support learning how to collaborate. Discussion and ideas generated from this workshop will be synthesized and archived online for the larger research community and the general public. We hope these discussions will foster new collaborations and further develop a community of researchers interested in supporting learning in the future of work.

### **Papers**

#### Calibrated Uncertainty: How In-Vitro Fertilization Patients Use Information to Regulate Emotion

Melody Sheau yun Ku, Mark Ackerman

The acquisition of information and its use in decision making and coping by people with health concerns have garnered much attention in CSCW. This study investigated patients' information behavior during a critical treatment, in vitro fertilization (IVF). Based on in-depth interviews with 29 IVF patients, this study uncovered several underlying drivers and mechanisms accounting for patients' information behavior. Their behavior is shown to be driven by coping concerns – specifically, dealing with the unpredictability of the treatment outcome, overcoming feelings of powerlessness and the sense of being out of control, and managing difficult emotionality. These factors shape patients' information needs and drive their behaviors in seemingly irrational but ultimately logical and adaptive ways. In contrast to the conventional wisdom that patients typically seek information that can help them fill knowledge gaps to resolve treatment uncertainty and foster their positive emotions, we discovered that in response to the desire to control their perceptions of irresolvable uncertainty and the difficult emotional needs of the moment, IVF patients frequently used "calibrated uncertainty" – a psychological mechanism or state driven by the simultaneous seeking of varying levels and contradictory valences of certainty – to actively conduct targeted searches and actively use the information sought. This behavior has not always been understood by the IVF clinicians, who have assumed that information was primarily for knowledge transfer. This study shows that coping, emotion regulation, and information-seeking are inextricably bound together in the patient experience, and that this intertwining must be considered in the clinical

setting for physician-patient communication and for patient-facing information. The findings have several valuable design implications for improved health informatics technology and service delivery systems.

### Toward a Feminist Social Media Vulnerability Taxonomy

Kristen Barta, Cassidy Pyle, Nazanin Andalibi

Vulnerability intimately shapes the lived human experience and continues to gain attention in computer-supported cooperative work and human-computer interaction scholarship broadly, and in social media studies specifically. Social media comprise sociotechnical affordances that may uniquely shape lived experiences with vulnerability, rendering existing frameworks inadequate for comprehensive examinations of vulnerability as mediated on social media. Through interviews with social media users in the United States (N = 20) and drawing on feminist conceptualizations of vulnerability and social media disclosure and privacy scholarship, we propose a feminist taxonomy of social media vulnerability (FSMV). The FSMV taxonomy reflects vulnerability sources, states, and valences, within which we introduce the state of networked vulnerability and ambivalent, desired, and undesired valences. We describe how social media enable forms of vulnerability different from in-person settings, challenge framings that synonymize vulnerability with risk/harm, and facilitate interdisciplinary theory-building. Additionally, we discuss how networked, ambivalent, and un/desired vulnerability extend and diverge from prior work to create a theoretically rich taxonomy that is useful for future work on social media and vulnerability. Finally, we discuss implications for design related to granular control over profile, content, and privacy settings, as well as implications for platform accountability, as they pertain to social media vulnerability.

# Automated Emotion Recognition in the Workplace: How Proposed Technologies Reveal Potential Futures of Work

#### Karen L Boyd, Nazanin Andalibi

Emotion recognition technologies, while critiqued for bias, validity, and privacy invasion, continue to be developed and applied in a range of domains including in high-stakes settings like the workplace. We set out to examine emotion recognition technologies proposed for use in the workplace, describing the input data and training, outputs, and actions that these systems take or prompt. We use these design features to reflect on these technologies' implications using the ethical speculation lens. We analyzed patent applications that developed emotion recognition technologies to be used in the workplace (N=86). We found that these technologies scope data collection broadly; claim to reveal not only targets' emotional expressions, but also their internal states; and take or prompt a wide range of actions, many of which impact workers' employment and livelihoods. Technologies described in patent applications frequently violated existing guidelines for ethical automated emotion recognition technology. We demonstrate the utility of using patent applications for ethical speculation. In doing so, we suggest that 1) increasing the visibility of claimed emotional states has the potential to create additional emotional labor for workers (a burden that is disproportionately distributed to low-power and marginalized workers) and contribute to a larger pattern of blurring boundaries between expectations of the workplace and a worker's autonomy, and more broadly to the data colonialism regime; 2) Emotion recognition technology's failures can be

invisible, may inappropriately influence high-stakes workplace decisions and can exacerbate inequity. We discuss the implications of making emotions and emotional data visible in the workplace and submit for consideration implications for designers of emotion recognition, employers who use them, and policymakers.

## Values in Emotion Artificial Intelligence Hiring Services: Technosolutions to Organizational Problems

Kat Roemmich, Tillie Ilana Rosenberg, Serena Fan, Nazanin Andalibi

Despite debates about emotion artificial intelligence's (EAI) validity, legality, and social consequences, EAI is increasingly present in the high stakes context of hiring, with potential to shape the future of work and the workforce. The values laden in technology play a significant role in its societal impact. We conducted qualitative content analysis on the public-facing websites (N = 229) of EAI hiring services. We identify the organizational problems that EAI hiring services claim to solve and reveal the values emerging in desired EAI uses as promoted by EAI hiring services to solve organizational problems. Our findings show that EAI hiring services market their technologies as technosolutions to three purported organizational hiring problems: 1) hiring (in)accuracy, 2) hiring (mis)fit, and 3) hiring (in)authenticity. We unpack these problems to expose how these desired uses of EAI are legitimized by the corporate ideals of data-driven decision making, continuous improvement, precision, loyalty, and stability. We identify the unfair and deceptive mechanisms by which EAI hiring services claim to solve the purported organizational hiring problems, suggesting that they unfairly exclude and exploit job candidates through EAI's creation, extraction, and affective commodification of a candidate's affective value through pseudoscientific approaches. Lastly, we interrogate EAI hiring service claims to reveal the core values that underpin their stated desired use: techno-omnipresence, techno-omnipotence, and techno-omniscience. We show how EAI hiring services position desired use of their technology as a moral imperative for hiring organizations with supreme capabilities to solve organizational hiring problems, then discuss implications for fairness, ethics, and policy in EAI-enabled hiring within the US policy landscape.

# "I like to See the Ups and Downs of My Own Journey": Motivations for and Impacts of Returning to Past Content About Weight Related Journeys on Social Media

#### Nadia Karizat, Nadanin Andalibi

Documenting weight-related journeys (e.g., weight loss, weight gain) is prevalent on social media, as is weight stigma, resulting in easily accessible personal archives filled with emotional, and potentially stigmatizing content. Through semi-structured interviews with 17 U.S.-based social media users sharing weight-related journeys, we investigate the motivations for and impacts of returning to previously posted weight-related social media content. We show how these personal archives foster a contested relationship between one's past and current self, where returning to past content facilitates dynamic interpretations of the self. We argue these interpretations' impacts cannot be understood without acknowledging and addressing the socio-technical context in which they exist: one filled with weight stigma, fatphobia, and narrow body ideals. We introduce the novel concepts of Transtemporal Support and Transtemporal Harm

to describe the support and harms that one experiences in the present from returning to their past social media content. We posit that designs accounting for transtemporal support 1) can facilitate reflective sense-making for users who create repositories of digital artifacts about sensitive, potentially stigmatizing experiences on social media, and 2) should not perpetuate transtemporal harm.

# Data Subjects' Perspectives on Emotion Artificial Intelligence Use in the Workplace: A Relational Ethics Lens

#### Shanley Corvite, Kat Roemmich, Tillie Ilana Rosenberg, Nazanin Andalibi

The workplace has experienced extensive digital transformation, in part due to artificial intelligence's commercial availability. Though still an emerging technology, emotional artificial intelligence (EAI) is increasingly incorporated into enterprise systems to augment and automate organizational decisions and to monitor and manage workers. EAI use is often celebrated for its potential to improve workers' wellbeing and performance as well as address organizational problems such as bias and safety. Workers subject to EAI in the workplace are data subjects whose data make EAI possible and who are most impacted by it. However, we lack empirical knowledge about data subjects' perspectives on EAI, including in the workplace. To this end, using a relational ethics lens, we qualitatively analyzed 395 U.S. adults' open-ended survey (partly representative) responses regarding the perceived benefits and risks they associate with being subjected to EAI in the workplace. While participants acknowledged potential benefits of being subject to EAI (e.g., employers using EAI to aid their wellbeing, enhance their work environment, reduce bias), a myriad of potential risks overshadowed perceptions of potential benefits. Participants expressed concerns regarding the potential for EAI use to harm their wellbeing, work environment and employment status, and create and amplify bias and stigma against them, especially the most marginalized (e.g., along dimensions of race, gender, mental health status, disability). Distrustful of EAI and its potential risks, participants anticipated conforming to (e.g., partaking in emotional labor) or refusing (e.g., quitting a job) EAI implementation in practice. We argue that EAI may magnify, rather than alleviate, existing challenges data subjects face in the workplace and suggest that some EAI-inflicted harms would persist even if concerns of EAI's accuracy and bias are addressed.

# Social Media and College-Related Social Support Exchange for First-Generation, Low-Income Students: The Role of Identity Disclosures

#### Cassidy Pyle, Nicole B. Ellison, Nazanin Andalibi

First-generation, low-income (FGLI) students face barriers to college access and retention that reproduce socioeconomic inequities. These students turn to social media for college-related social support. However, while students can reap benefits from social media, it is crucial to investigate under what conditions social media interactions facilitate or hinder students' access to college-related social support. We conducted in-depth, semi-structured interviews with 20 FGLI students in the United States who applied for college in the 2020-2021 application cycle. Our findings illustrate how FGLI identity disclosures on social media can facilitate access to college-related social support when met with supportive or neutral responses while stigmatizing reactions can disrupt access to these benefits. We draw from the lenses of the "doubly disadvantaged" and "privileged poor" used to describe FGLI students in post-secondary education to

argue that engaging in FGLI identity disclosures on social media can help students become academically and psychosocially prepared for collegiate environments. Finally, we discuss the implications of this work for theoretical frameworks centering social media and social support, consider when stigma might lead to support space abandonment and describe the potential implications for social media design.

#### Similar Others, Social Comparison, and Social Support in Online Support Groups

Kristen Barta, Katelyn Wolberg, Nazanin Andalibi

Social comparison and social support have implications for individuals' wellbeing, offline and on social media. Perceptions of similarity underlie both social comparison and social support processes, though how comparison and support function in tandem in online spaces, and which aspects of identity and experiential similarity are salient to which comparison and support outcomes, merits investigation. Through interviews with people who have joined or considered joining social media-based support groups following pregnancy loss (N=18), we provide an intracommunity view into social comparison within online support groups. We identify a set of identity and experience attributes that inform perceptions of similarity and difference in these support spaces. We characterize tensions arising from these attributes and propose the preliminary Social Comparison and Social Support in Online Support Groups model to describe interactions between social support and comparison processes within online support groups. We further discuss findings' implications for design, including via introducing the tolerance principle of online health support groups. CAUTION: This paper includes quotes about pregnancy loss.

# Remove, Reduce, Inform: What Actions do People Want Social Media Platforms to Take on Potentially Misleading Content?

#### Shubham Atreja, Libby Hemphil, Paul Resnick

To reduce the spread of misinformation, social media platforms may take enforcement actions against offending content, such as adding informational warning labels, reducing distribution, or removing content entirely. However, both their actions and their inactions have been controversial and plagued by allegations of partisan bias. When it comes to specific content items, surprisingly little is known about what ordinary people want the platforms to do. We provide empirical evidence about a politically balanced panel of lay raters' preferences for three potential platform actions on 368 news articles. Our results confirm that on many articles there is a lack of consensus on which actions to take. We find a clear hierarchy of perceived severity of actions with a majority of raters wanting informational labels on the most articles and removal on the fewest. There was no partisan difference in terms of how many articles deserve platform actions but conservatives did prefer somewhat more action on content from liberal sources, and vice versa. We also find that judgments about two holistic properties, misleadingness, and harm, could serve as an effective proxy to determine what actions would be approved by a majority of raters.

Wisdom of Two Crowds: Misinformation Moderation on Reddit and How to Improve this Process---A Case Study of COVID-19

#### Lia Bozarth, Jane Im, Christopher Quarles, Ceren Budak

Past work has explored various ways for online platforms to leverage crowd wisdom for misinformation detection and moderation. Yet, platforms often relegate governance to their communities, and limited research has been done from the perspective of these communities and their moderators. How is misinformation currently moderated in online communities that are heavily self-governed? What role does the crowd play in this process, and how can this process be improved? In this study, we answer these questions through semi-structured interviews with Reddit moderators. We focus on a case study of COVID-19 misinformation. First, our analysis identifies a general moderation workflow model which encompasses various processes adopted by participants for handling COVID-19 misinformation. Further, we show that the moderation workflow revolves around three elements: content facticity, user intent, and perceived harm. Next, our interviews also reveal that Reddit moderators rely on two types of crowd wisdom for misinformation detection. Almost all participants are heavily reliant on reports from crowds of ordinary users to identify potential misinformation. A second crowd--participants' own moderation teams and expert moderators of other communities--provide support when participants encounter difficult, ambiguous cases. Finally, we use design probes to better understand how different types of crowd signals---from ordinary users and moderators---readily available on Reddit can assist moderators with identifying misinformation. We observe that nearly half of all participants preferred these cues over labels from expert fact-checkers because these cues can help them discern user intent. Additionally, a quarter of the participants distrust professional fact-checkers, raising important concerns about misinformation moderation.

#### GuesSync!: An Online Casual Game To Reduce Affective Polarization

Ashwin Rajadesingan, Daniel Choo, Jessica Zhang, Mia Inakage, Ceren Budak, Paul Resnick

The past decade in the US has been one of the most politically polarizing in recent memory. Ordinary Democrats and Republicans fundamentally dislike and distrust each other, even when they agree on policy issues. This increase in hostility towards opposing party supporters, commonly called affective polarization, has important ramifications that threaten democracy. Political science research suggests that at least part of the polarization stems from Democrats' misperceptions about Republicans' political views and vice-versa. Therefore, in this work, drawing on insights from political science and game studies research, we designed an online casual game that combines the relaxed, playful nonpartisan norms of casual games with corrective information about party supporters' political views that are often misperceived. Through an experiment, we found that playing the game significantly reduces negative feelings toward outparty supporters among Democrats, but not Republicans. It was also effective in improving willingness to talk politics with outparty supporters. Further, we identified psychological reactance as a potential mechanism that affects the effectiveness of depolarization interventions. Finally, our analyses suggest that the game versions with political content were rated to be just as fun to play as a game version without any political content suggesting that, contrary to popular belief, people do like to mix politics and play.

How Recent Migrants Develop Trust Through Community Commerce: The Emergence of Sociotechnical Adaptation

#### Joey Chiao-Yin Hsiao, Sylvia Darling, Tawanna R Dillahunt

Trust is key to community commerce, or peer-to-peer e-commerce where transactions happen within local communities. Trust is especially vital among migrants who move to new countries and need time to develop trust after arrival. To understand migrants' trust development in community commerce and its potential and challenges for supporting their transition to the U.S., we conducted 24 semi-structured interviews with migrants who had lived there for three years or less. We highlight practices embedded in difficulties engaging with technologies in a new place. We identify four forms of migrants' trust and show how their offline experiences with local communities reflect their online trust development in community commerce and vice versa, thereby creating unique challenges in their adaptation to new technologies. We coin the term sociotechnical adaptation to frame migrants' distinctive adjustments to social media technologies in a new country. We conclude with implications for creating community commerce platforms that foster migrants' trust and a reflection on how sociotechnical adaptation may vary among diverse migrant populations.

# Community Tech Workers: Scaffolding Digital Engagement Among Underserved Minority Businesses

Julie Hui, Kristin Seefeldt, Christian Baer, Lutalo Sanifu, Aaron Jackson, Tawanna R Dillahunt

Small businesses are being encouraged to use digital technologies more than ever before. However, the greater emphasis on technology adoption is putting underserved minority business owners at greater risk of being left behind. We take an assets-based approach to understand the strengths and challenges business owners face in adopting and using digital technologies. We then implement a community-based intervention---Community Tech Workers (CTWs)---to bridge the growing socio-technical gap in the context of small businesses on Detroit's Eastside. We take a mixed-methods approach, using a combination of a survey, interviews, and observations, to outline how the CTW program 1) helps businesses determine where to start with technology use, 2) offers support grounded in the day-to-day realities of running a business, and 3) builds caring relationships with business owners to foster trust in technology support services. We suggest opportunities for a more collective perspective to assets-based community development and outline considerations for building culturally-conscious ecosystems of support for digital engagement among underserved minority business owners.

### Opportunities for Social Media to Support Aspiring Entrepreneurs with Financial Constraints

#### Aarti Israni, Julie Hui, Tawanna R Dillahunt

Social media offers an alternative source for entrepreneurs to expand their social networks and obtain relevant resources to support their ambitions. Aspiring entrepreneurs with limited access to resources and social networks might rely more on the opportunities that social media tools offer. However, aspiring entrepreneurs facing financial constraints who must navigate social media to realize their economic dreams often face challenges. Because aspiring entrepreneurs are transitioning to entrepreneurship, they must construct and even adapt to new work-role identities and new requisite skills, behaviors, attitudes,

and patterns of interactions. In a re-analysis of a sub-sample of data from two empirical studies, this work examines how aspiring entrepreneurs living in a financially-constrained environment seek informational, social, and emotional support online and navigate their transition to entrepreneurship. These entrepreneurs obtained informational and emotional resources from observing other members' posts in online communities, including the next steps needed to adapt to their desired small business work roles. However, few publicly disclosed their informational or emotional needs online. We extend existing research on financially-constrained entrepreneurs' use of social media, contributing insights into how these resource-seeking practices limit their exploration of alternative entrepreneurial identities and feedback. We also contribute design implications to facilitate their online disclosure practices, including offering suggestions about ways to respond to questions and other disclosures in ways that restore trust and mitigate identity threats.

#### Racial Capitalism Online: Pressures to Perform Race Among Creative Professionals

Jaleesa Rosario Turner, Julie Hui

Racial capitalism, which describes how people in power extract value from the racial identity of others, has been a constant driver in the creative industries. As social media becomes the widespread avenue for sharing creative works and building professional reputation, the effects of racial capitalism become further amplified online. In fact, many creative professionals of color find that the biases they face offline are only replicated, and sometimes even magnified, online. We seek to understand how creative professionals of color navigate these expectations and perceptions of race on digital platforms. In this study, we interview creative professionals of color who heavily rely on digital platforms to promote their work in order to understand how racial capitalism shapes the experience and performance of race online. Creative professionals describe seeing their work appropriated and shared for little to no recognition, while at the same time, feeling pressured to present themselves in a palatable way in order to meet the expectations of a dominant consumer audience. Creatives also worked within these capitalistic expectations by building communities with similar others in order to exchange advice, serve as role models, and share resources. Our data uncover how expectations on social media, fueled by racial biases, burden creative professionals of color, thus informing alternative futures that could compensate their work more equitably and build more inclusive spaces for creative professional growth.

# Advocacy as Access Work: How People with Visual Impairments Gain Access to Digital Banking in India

Vaishnav Kameswaran, Vidhya Y, Megh Marathe

Research in accessibility and assistive technology often assumes that technology is within easy reach, that is, people with disabilities are able to obtain technologies so long as they are accessible. As a result, less is understood about the challenges that people with disabilities face in obtaining technology in the first place and how they work around these challenges. We reduce this gap by examining the technology access challenges of people with visual impairments in India in the context of digital banking. Through a qualitative study consisting of 30 interviews, we find that participants routinely encountered social and technical challenges that made it difficult to access and use digital banking. To address these challenges, people with visual impairments engaged in advocacy work which consisted of five dimensions: 1)

creating awareness, 2) demonstrating competence, 3) escalation, 4) gathering support, and 5) seeking sighted help. We expand on the idea of advocacy as a form of access work performed by people with visual impairments to secure and maintain access to digital banking.

# Data Work of Frontline Care Workers: Practices, Problems, and Opportunities in the Context of Data-Driven Long-Term Care

Yuling Sun, Xiaojuan Ma, Silvia Lindtner, Liang He

Using data and data technologies to support healthcare has drawn significant attention recently. While CSCW and HCI have largely celebrated the tremendous promise of 'data-driven healthcare' in reforming the healthcare sector, this paper reveals 'labor-driven reality' of this promised data-driven future. Drawing from a qualitative study in a real-world data-driven long-term care (LTC) facility in China, we demonstrate how data-driven technologies work in practice, and especially how frontline workers, as the crux of this data-driven configuration, conduct a tremendous amount of "data work" to make data-drivenness work. This data work, we argue, goes beyond the "clerical work" and functions as a labor of maintenance, articulation, and repair, that both guarantees data technologies' functionalities and acts as an interface between stakeholders. We discuss the properties and impacts of this data work in a boarder socio-cultural context, and highlight how socio-cultural context, perceptions, and existing technologies influence data work practices. Based on these findings, we propose ways to enable more just and ethical data-driven futures.

# "Would I Feel More Secure With a Robot?": Understanding Perceptions of Security Robots in Public Spaces

Gabriel Marcu, Iris Lin, Brandon Williams, Lionel Peter Robert, Florian Schaub

Robots are increasingly being deployed as security agents helping law enforcement in spaces such as streets, parks, or shopping malls. Unfortunately, the deployment of security robots is not without problems and controversies. For example, the New York Police Department canceled its contract with Boston Dynamics in response to backlash from their use of Digidog, an autonomous robotic dog, which sparked fears in the public. However, it is unclear to what extent affected communities have been involved in the design and deployment process of robots. This is problematic because, without input from community members in the processes of design and deployment, security robots are likely to not satisfy the concerns or safety needs of real communities. To gain deeper insight into people's perceptions of security robots—including both potential benefits and concerns—we conducted 17 semi-structured interviews addressing the following research questions: RQ1. What characteristics do people ascribe to security robots? RQ2. What expectations do people have about the function and role of security robots? RQ3. What are people's attitudes toward the use of security robots? Our study offers several contributions to the existing literature on security robots.

The Shapes of the Fourth Estate During the Pandemic: Profiling COVID-19 News Consumption in Eight Countries

#### Cai Yang, Lexing Xie, Siqi Wu

News media is often referred to as the Fourth Estate, a recognition of its political power. New understandings of how media shape political beliefs and influence collective behaviors are urgently needed in an era when public opinion polls do not necessarily reflect election results and users influence each other in real-time under algorithm-mediated content personalization. In this work, we measure not only the average but also the distribution of audience political leanings for different media across different countries. The methodological components of these new measurements include a high-fidelity COVID-19 tweet dataset; high-precision user geolocation extraction; and user political leaning estimated from the within-country retweet networks involving local politicians. We focus on geolocated users from eight countries, profile user leaning distribution for each country, and analyze bridging users who have interactions across multiple countries. Except for France and Turkey, we observe consistent bi-modal user leaning distributions in the other six countries, and find that cross-country retweeting behaviors do not oscillate across the partisan divide. More importantly, this study contributes a new set of media bias estimates by averaging the leaning scores of users who share the URLs from media domains. Through two validations, we find that the new average audience leaning scores strongly correlate with existing media bias scores. Lastly, we profile the COVID-19 news consumption by examining the audience leaning distribution for top media in each country, and for selected media across all countries. Those analyses help answer questions such as: Does center media Reuters have a more balanced audience base than partisan media CNN and Fox News in the US? Does far-right media Breitbart attract any left-leaning readers in any countries? Does CNN reach a more balanced audience base in the US than in UK and Spain? In sum, our data-driven methods allow us to study media that are not often collected in editor-curated media bias reporting, especially in non-English-speaking countries. We hope that such cross-country research would inform media outlets of their effectiveness and audience bases in different countries, inform non-government and research organizations about the country-specific media audience profiles, and inform individuals to reflect on our day-to-day media diet.

### **Posters**

#### **Toward Value Scenario Generation Through Large Language Models**

Hyunggu Jung, Woosuk Seo, Seokwoo Song, Sungmin Na

We propose a method of generating value scenarios for design research by leveraging ChatGPT, an AI-powered chatbot based on large language models. Identifying the needs of a vulnerable population, such as North Korean defectors, is challenging for researchers. To address this, we introduce ChatGPT-generated value scenarios, an extension of scenario-based design that supports critical, systemic, long-term thinking in current design practice, technology development, and deployment. Using our proposed method, we created a prompt to generate value scenarios on ChatGPT. %Two examples of ChatGPT-generated value scenarios drawn from prior work on North Korean defectors with depression. Based on our analysis of the generated scenarios, we identified that ChatGPT could generate plausible information about Value Implications. However, it lacks details on Pervasiveness and Systemic Effects.

After discussing the limitations and opportunities of ChatGPT in generating value scenarios, we conclude with suggestions for how ChatGPT might be better used to generate value scenarios.