



AI through the Eyes of Gen Z: Setting a Research Agenda for Emerging Technologies that Empower Our Future Generations

Nora McDonald
nmcdona4@gmu.edu
George Mason University
Fairfax, Virginia, U.S.A

Afsaneh Razi
afsaneh.razi@drexel.edu
Drexel University
Philadelphia, Pennsylvania, U.S.A

Karla Badillo-Urquiola
kbadill3@nd.edu
University of Notre Dame
Notre Dame, Indiana, U.S.A

John S. Seberger
jss436@drexel.edu
Drexel University
Philadelphia, Pennsylvania, U.S.A

Denise Agosto
dea22@drexel.edu
Drexel University
Philadelphia, Pennsylvania, U.S.A

Pamela J. Wisniewski
pamela.wisniewski@vanderbilt.edu
Vanderbilt University
Nashville, TN, U.S.A

ABSTRACT

Artificial intelligence (AI) underpins virtually every experience that we have—from search and social media to generative AI and immersive social virtual reality (SVR). For Generation Z, there is no *before* AI. As adults, we must humble ourselves to the notion that AI is shaping youths' world in ways that we don't understand and we need to listen to them about their lived experiences. We invite researchers from academia and industry to participate in a workshop *with youth activists* to set the agenda for research into how AI-driven emerging technologies affect youth and how to address these challenges. This reflective workshop will amplify youth voices and empower youth and researchers to set an agenda. As part of the workshop, youth activists will participate in a panel and steer the conversation around the agenda for future research. All will participate in group research agenda setting activities to reflect on their experiences with AI technologies and consider ways to tackle these challenges.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**; User studies; • **Social and professional topics** → **Computing / technology policy**.

KEYWORDS

Youth, teens, technology, Artificial Intelligence, AI, "For You" algorithms

ACM Reference Format:

Nora McDonald, Afsaneh Razi, Karla Badillo-Urquiola, John S. Seberger, Denise Agosto, and Pamela J. Wisniewski. 2023. AI through the Eyes of Gen Z: Setting a Research Agenda for Emerging Technologies that Empower Our Future Generations. In *Computer Supported Cooperative Work and Social Computing (CSCW '23 Companion)*, October 14–18, 2023, Minneapolis, MN, USA. ACM, New York, NY, USA, 4 pages. <https://doi.org/10.1145/3584931.3611281>

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

CSCW '23 Companion, October 14–18, 2023, Minneapolis, MN, USA

© 2023 Copyright held by the owner/author(s).

ACM ISBN 979-8-4007-0129-0/23/10.

<https://doi.org/10.1145/3584931.3611281>

1 INTRODUCTION

HCI scholars and practitioners [11] have raised concerns about the increasingly complex issues surrounding the digital well-being and online safety of younger generations [8, 13–15], their information practices [12], as well as the importance of co-designing solutions around privacy [3] and digital autonomy [18] with youth to empower them in shaping the future of the technologies that will shape their lives. Generation Z (born 1996 - 2010) is coming of age amidst rapid technological developments at the intersection of social media and Artificial Intelligence (AI). Founded on the powerful economics of surveillance capitalism [19], carefully cultivated digital resignation [7], and techno-solutionism [16], the tacit expectation is that Generation Z will mature into adulthood *through* their constant engagement with technology—using AI-based apps and generative AI for virtually all social and learning activities. The intent of this workshop is to create a forward-thinking research agenda for amplifying the voices of and empowering current youth and future generations—given they will be the ones who inherit the digital artifacts we create today.

Among the most outspoken (and certainly the most powerful) voices addressing the underlying effects of emerging technology and its potentially harmful effects are those belonging to youth themselves. In reaction to a growing sense of the harms caused by an all-consuming digital world on a generation that has never been without social media, several youth-run movements have emerged to push back, educate, and empower themselves [9, 10]. Such empowerment has taken the form of asserting agency to divest from the algorithmic infrastructures that characterize the received historical conditions of the present day—or simply abandoning smartphones or social media altogether. Rather than passively receiving and adopting the patterns of daily life instantiated by vast digital infrastructures, members of these groups seek empowerment to direct their engagement with digital infrastructures—to come of age *alongside*, rather than *through*, novel technologies.

In short, these youth-led movements seek to determine the boundaries of their digital engagement and algorithmic interpellation [6]. This workshop will present a unique opportunity for HCI scholars and practitioners to engage directly with members from youth-led organizations dedicated to initiating dialogue around technology use and well-being. Our youth-centered workshop will celebrate the grassroots empowerment efforts that young people take upon themselves to achieve. By engaging youth and inviting

them into the HCI community, we valorize the genuine aspiration toward empowerment that these groups represent: an empowerment derived from the bottom-up agency to self-determine [1, 2], rather than the top-down conditional empowerment commonly associated with technological design, development, and deployment [16]. We invite scholars and practitioners with interest in the humanistic flourishing of Generation Z [17].¹ Such interests may include, but are not limited to, agency, identity, well-being, safety, autonomy, privacy, or other related areas.

2 WORKSHOP GOALS

With this workshop, we will take an exciting participatory approach with youth and adults as partners to co-create an agenda for future research and public discourse. Specifically, we address the following goals: (1) Bring **scholars, industry practitioners, and Generation Z activists/thought leaders** into shared dialogue about what should be the HCI research agenda for emerging technologies, particularly across the new frontiers and intersections of AI, social media, and social virtual reality (VR). (2) Identify major challenges to youth well-being raised by AI-driven technologies. (3) Work together to propose initial research and public education to begin to tackle the challenges identified during the workshop. (4) Spawn cross-generational research partnerships that integrate youths' lived experiences with human-centered design. (5) Promote awareness of youth-led missions and activities within the CSCW community.

3 WORKSHOP THEMES AND OPEN QUESTIONS

While the workshop themes will be co-created and refined given the attendees, broad themes centered around emerging technologies and open questions may include, but are not limited to, the following:

- **Artificial Intelligence:** *How do AI systems (e.g., "for you" algorithms) shape who youth think they are, how others perceive them, and their online risk experiences? Is youth behavior shaped by awareness of algorithmic arrangement of their feeds and those of others? Does this awareness shift their expectations about what is private? Do they resist?*
- **Generative AI:** *How do youth leverage generative AI for learning and information seeking? To what extent do youth trust and rely on information provided by generative AI? Do youth use generative AI to replace rather than augment or build skills?*
- **Social Media:** *Does tracking everything youth do and see on social media change their views about what privacy they have and are entitled to? How does increased exposure to misinformation and disinformation impact youths' information sharing? How might social media be re-imagined to meet the unique needs of the next generation?*
- **Social Virtual Reality (VR):** *What are the challenges, opportunities, privacy risks, and safety considerations for youth*

¹We join Vallor in taking issue with the term "well-being" as it suggests a universal ideal and one that could be measured and evaluated by those designing technology, particularly problematic in this space when we are looking to gain insight from youth about technologies' harms.

in immersive social spaces? With platform proliferation, what avenues or rights do youth have to refuse interpolation?

- **Recommender Systems:** *How do AI search recommender systems change the way that youth search for information and/or what they believe to be true? How might such persuasive technologies threaten to shape the worldviews of generations to come?*

4 CALL FOR PARTICIPATION

We will host a one-day online workshop with 40 to 60 researchers from academia and industry together with an invited panel of youth activists/thought leaders. To ensure a diverse mix of participants from various fields, such as HCI, design, information science, social sciences, and others, we will recruit participants via social media, social media groups (e.g., CHIMeta, CSCWMeta, CRA-WP), email list-servs, and appropriate community boards. We will actively recruit youth participants from organizations concerned about youth online well-being and safety issues. This broad range of stakeholders will allow us to coalesce a range of voices to set an agenda around key challenges and to guide collaborative work during the workshop and beyond.

Workshop participants are required to make submissions to ensure their participation aligns with the workshop goals. Submissions can take various forms, such as (1) short bios with a statement of motivation/interest, (2) an academic position paper in the SIGCHI extended abstract format discussing one or more of the workshop themes, or (3) a case study demonstrating relevant work that contributes to one of our themes. We encourage honest and subversive submissions from all participants, regardless of their prior experience with this type of work. Each submission will undergo peer review by two program committee members, with acceptance based on the quality of the submission, relevance to the workshop themes, and the potential of the individual(s) to make a meaningful contribution to the workshop discussions and goals. Workshop papers should be emailed to aiyouthcscw2023@gmail.com. Papers will be shared on our workshop website aiyouthcscw2023.wordpress.com with the author's permission. At least one author of each accepted position paper must attend the workshop.

5 PROPOSED SCHEDULE AND ACTIVITIES

- **Introductions and Overview (10:00am-10:30am EST / 30 minutes):** We will open the workshop with introductions from the organizers and brief break-out lightning talks by the workshop attendees.
- **Keynote followed by Q&A (10:30am-11:30am EST / 60 minutes):**

Amanda Lenhart. Amanda is the Head of Research at Common Sense Media where she studies how technology impacts families and youth. Amanda has served as the Program Director for Health & Data at Data & Society and as Deputy Director of Better Life Lab at New America. She was an Associate Director, Research focusing on Teens and Technology at the Pew Research Center for over 16 years, studying how teens and families use social and mobile technologies. She

has led research on myths about healthy technologies embraced by big tech, as well as how social media platforms think about and design for youth digital well-being.

Patrick Gage Kelley. Patrick is a security, privacy, and anti-abuse researcher at Google where he focuses on educational and design resources to help people navigate AI. Patrick holds a PhD from Carnegie Mellon University and is the founder of a startup Wombat Security Technologies which develops privacy and security tools and education materials.

- **Gen Z Panel (11:30pm-12:15pm EST / 45 minutes):** We will invite 5-7 youth panelists (ages 14-21, with approval from parents/guardians for those under 18) to share their experiences and thoughts regarding how AI and emerging social technologies have/will shape their lives. We will reserve time for Q&A by workshop participants.
- **Breakfast/Lunch & Networking Break (12:15pm-1:00pm EST / 45 minutes)**
- **Small Group Research Agenda Setting (1:00pm-1:30pm EST / 30 minutes):** Participants will break into small groups, which will include one youth panel participant each to identify related HCI and CSCW agenda items for the next 1-2 years. While items may be framed in terms of research or theoretical development, they might also include projects with industry leaders, policy recommendations, or other grassroots initiatives.
- **Large Group Discussion for Setting Research Agenda (1:30pm-2:15pm EST / 45 minutes):** Each of the groups will share their agenda items and we will (as a large group) nominate 5-7 items for follow-up work (e.g. actions, papers, research or design projects, etc.)
- **Wrap-up (2:15pm-2:30pm EST / 15 minutes):** We will review our nominated agenda items and facilitate brainstorming and networking ideas for follow-up work.

5.1 Equity and Accessibility

This workshop will bring together a broad group of ages, backgrounds, positionalities, and abilities. It will value diverse lived experiences and ways of being and communicating, and seek to bring lesser-heard voices to the foreground of the conversation. We will encourage our panel committee to reach out to and advertise broad participation of people with diverse backgrounds (gender, sexual orientation, race/ethnicity, experiences, age, etc.).

To ensure the success of our **youth participants**, we will meet with them in a pre-workshop session to learn about their views, review any key concepts and address any questions or goals they might have about the workshop.

We will reach out to all attendees to understand their accessibility needs during the conference workshop and make any arrangements in collaboration with the CSCW Equity and Accessibility Co-Chairs. We will, of course, follow the Conference Session Accessible Conference Guidelines provided by SIGACCESS².

5.2 Timeline

- **July 6:** Website and call for participation
- **August 25:** Attendee submissions due
- **September 1:** Review deadline
- **September 6:** Notice of acceptance
- **October 14:** Workshop

6 EXPECTED WORKSHOP CONTRIBUTIONS AND BEYOND

This workshop contributes to emergent issues around AI-driven technologies and their effects on youth and their sense of identity, privacy, and safety. It will facilitate researchers and youth to work collaboratively to map ideas and set research agendas for living with and designing technology for future generations, while providing opportunities for researchers and youth to work together on future projects. We will write a series of papers and short articles about the resulting research agenda co-created with youth to be submitted to ACM publications as well as broadly distributed blog posts. We will also create a platform for continuing engagement with youth activists and more broadly youth who lack platforms for contribution, building on the Design Justice [5] and restorative justice [4] movements in HCI.

7 WORKSHOP CO-ORGANIZERS

Nora McDonald is an Assistant Professor in Information Sciences and Technology at George Mason University. Her work focuses on privacy technology use and strategies among marginalized and vulnerable individuals. She also theorizes about the impact of new types of data relations on our identities and shifting norms around surveillance and privacy.

Afsaneh Razi is an Assistant Professor at the College of Computing & Informatics at Drexel University. She investigates the critical and timely matter of youth online safety and privacy by leveraging human-centered ML and multi-disciplinary approaches.

Karla Badillo-Urquiola is a Clare Boothe Luce Assistant Professor of Computer Science and Engineering at the University of Notre Dame. She leverages her interdisciplinary expertise to investigate technology-driven solutions that empower people and protect the well-being of youth in marginalized communities, drawing on participatory and critical design methods.

John S. Seberger is an Assistant Professor in Information Science at Drexel University's College of Computing & Informatics. His work blends multi-disciplinary expertise to understand how people experience themselves and their worlds through the condition of "being users." He conducts research about dignity, privacy, and agency in the context of the (increasingly digital) infrastructures of daily life.

Denise E. Agosto is a Professor in the College of Computing & Informatics at Drexel University, where she serves as Director of the Master's of Science in Information program. Her research investigates how young people use information and information technologies, and the role of social context in shaping youths' multifaceted information practices.

Pamela Wisniewski is an Associate Professor and Flowers Family Chancellor's Faculty Fellow in Engineering at Vanderbilt

²<https://www.sigaccess.org/welcome-to-sigaccess/resources/accessible-conference-guide/>

University. As the Director of the Socio-Technical Interaction Research (STIR) Lab, she is an HCI expert in the interplay between social media, privacy, and online safety for youth (ages 13-17).

8 PROGRAM COMMITTEE MEMBERS

Those listed below have committed to serving on the Program Committee. Among their responsibilities will be reviewing 2-5 submissions, promoting the workshop, and attending the workshop if possible.

- Oshrat Ayalon, Max Planck
- Leanne Bowler, Pratt Institute
- Diana Freed, Cornell Tech
- Heidi Hartikainen, University of Oulu
- Priya Kumar, Penn State University
- Rachel Magee, University of Illinois Urbana-Champaign
- Xinru Page, Brigham Young University
- Jinkyung Katie Park, Vanderbilt University
- Rebecca Reynolds, Rutgers University
- Shadi Rezapour, Drexel University
- Eugenia Rho, Virginia Tech
- Ellen Simpson, University of Colorado
- Vivek Singh, Rutgers University
- Emily Tseng, Cornell Tech
- Yaxing Yao, Virginia Tech

ACKNOWLEDGMENTS

Thanks to our graduate students for support with workshop development and organizing.

Dr. Wisniewski's research is supported in part by the William T. Grant Foundation (187941) and the U.S. National Science Foundation under grants IIP-1827700 and IIS-1844881. Any opinion, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of Dr. Wisniewski's sponsors.

REFERENCES

- [1] Denise E Agosto. 2018. Thoughts about the past, present and future of research in youth information behaviors and practices. *Information and Learning Sciences* 120, 1/2 (2018), 108–118.
- [2] Philip E Agre. 1994. From high tech to human tech: Empowerment, measurement, and social studies of computing. *Computer Supported Cooperative Work (CSCW)* 3, 2 (1994), 167–195.
- [3] Mamtaj Akter, Leena Alghamdi, Jess Kropczynski, Heather Richter Lipford, and Pamela J. Wisniewski. 2023. It Takes a Village: A Case for Including Extended Family Members in the Joint Oversight of Family-based Privacy and Security for Mobile Smartphones. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA) (CHI EA '23). Association for Computing Machinery, 1–7. <https://doi.org/10.1145/3544549.3585904>
- [4] Neeraj Chatlani, Arianna Davis, Karla Badillo-Urquiola, Elizabeth Bonsignore, and Pamela Wisniewski. 2023. Teen as research-apprentice: A restorative justice approach for centering adolescents as the authority of their own online safety. *International Journal of Child-Computer Interaction* 35 (2023), 100549.
- [5] Sasha Costanza-Chock. 2020. *Design Justice: Community-Led Practices to Build the Worlds We Need*. The MIT Press.
- [6] Ronald E Day. 2014. *Indexing it All: The Subject in the Age of Documentation, Information, and Data*. MIT Press, Cambridge, MA.
- [7] Nora A Draper and Joseph Turow. 2019. The corporate cultivation of digital resignation. *New media & society* 21, 8 (2019), 1824–1839.
- [8] Diana Freed, Natalie N. Bazarova, Sunny Consolvo, Eunice J Han, Patrick Gage Kelley, Kurt Thomas, and Dan Cosley. 2023. Understanding Digital-Safety Experiences of Youth in the U.S.. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (Hamburg, Germany) (CHI '23). Association for Computing Machinery, New York, NY, USA, Article 191, 15 pages. <https://doi.org/10.1145/3544548.3581128>
- [9] Lulu Garcia-Navarro, Rhiannon Corby, Anabel Bacon, Kaari Pitkin, Stephanie Joyce, Carole Sabouraud, Isaac Jones, Sonia Herrero, and Pat McCusker. 2023. *Opinion | The Teenager Leading the Smartphone Liberation Movement*. <https://www.nytimes.com/2023/02/02/opinion/teen-luddite-smartphones.html>
- [10] Julie Halpert. 2022. A New Student Movement Wants You to Log Off. <https://www.nytimes.com/2022/06/14/style/log-off-movement-emma-lemcke.html>
- [11] Karen Hao. 2021. The Facebook whistleblower says its algorithms are dangerous. Here's why. <https://www.technologyreview.com/2021/10/05/1036519/facebook-whistleblower-frances-haugen-algorithms/>
- [12] Amelia Hassoun, Ian Beacock, Sunny Consolvo, Beth Goldberg, Patrick Gage Kelley, and Daniel M. Russell. 2023. Practicing Information Sensibility: How Gen Z Engages with Online Information. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA) (CHI '23). Association for Computing Machinery, 1–17. <https://doi.org/10.1145/3544548.3581328>
- [13] Afsaneh Razi, Ashwaq AlSoubai, Seunghyun Kim, Shiza Ali, Gianluca Stringhini, Munmun Choudhury, and Pamela J. Wisniewski. 2023. Sliding into My DMs: Detecting Uncomfortable or Unsafe Sexual Risk Experiences within Instagram Direct Messages Grounded in the Perspective of Youth, Vol. 7. Association for Computing Machinery, New York, NY, USA, Article 89, 28 pages. <https://doi.org/10.1145/3579522>
- [14] Afsaneh Razi, Karla Badillo-Urquiola, and Pamela J. Wisniewski. 2020. Let's Talk about Sex: How Adolescents Seek Support and Advice about Their Online Sexual Experiences. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (Honolulu, HI, USA) (CHI '20). Association for Computing Machinery, New York, NY, USA, 1–13. <https://doi.org/10.1145/3313831.3376400>
- [15] Afsaneh Razi, Seunghyun Kim, Ashwaq AlSoubai, Gianluca Stringhini, Thamar Solorio, Munmun De Choudhury, and Pamela J Wisniewski. 2021. A Human-Centered Systematic Literature Review of the Computational Approaches for Online Sexual Risk Detection. *Proceedings of the ACM on Human-Computer Interaction* 5, CSCW2 (2021), 1–38.
- [16] John S Seberger, Marissel Llavore, Nicholas Nye Wyant, Irina Shklovski, and Sameer Patil. 2021. Empowering resignation: There's an App for That. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 1–18.
- [17] Shannon Vallor. 2016. *Technology and the virtues: A philosophical guide to a future worth wanting*. Oxford University Press, Oxford, UK.
- [18] Ge Wang, Jun Zhao, Max Van Kleek, and Nigel Shadbolt. 2023. 12 Ways to Empower: Designing for Children's Digital Autonomy. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA) (CHI '23). Association for Computing Machinery, 1–27. <https://doi.org/10.1145/3544548.3580935>
- [19] Shoshanna Zuboff. 2019. *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. PublicAffairs, New York. <https://books.google.com/books?id=IRqRDQAAQBAJ>