January 23, 2022

I am writing in support of Maryland Senate Bill SB11, the Maryland Online Consumer Protection and Child Safety Act. I also plan to offer oral testimony to the Maryland Senate Finance Committee on January 26, 2022.

I am a Professor of Computer Science at Clarkson University in Potsdam, New York with a Ph.D. in Computer Science from University of California Berkeley. I am also co-chair of the IEEE-USA AI Policy Committee and a member of the ACM US Technology Policy Committee (ACM US-TPC) and a co-chair of their AI and Algorithms Subcommittee.

I am providing copies of 4 documents relevant to this bill.

- An article I wrote that appears in The Conversation on January 12, 2022, "**Radicalization pipelines: How targeted advertising on social media drives people to extremes** "
- The IEEE-USA Policy Statement "**Privacy, Equity, and Justice in Artificial Intelligence",** adopted by the IEEE-USA Board of Directors in November 2021.
- The IEEE-USA Policy Statement "**Democratic Use of Artificial Intelligence",** adopted by the IEEE-USA Board of Directors in November 2021.
- A policy statement issued by the ACM US-TPC in January 2017, "**Statement on Algorithmic Transparency and Accountability**"

I congratulate the Maryland Senate for working to protect the rights of Marylanders with SB 11. This is an important and difficult policy area and I commend you for rising to the challenge. Through this bill Maryland has an opportunity to take a leadership role in the national debate over data privacy protections. As is stated in the IEEE USA Policy Statement "**Privacy, Equity, and Justice in Artificial Intelligence"**, "Equitable AI practices require a clear legislative framework for data ownership, confidentiality of data, and rights of access to data used in and by AI systems--essential to protecting privacy and autonomy. Moreover, *the absence of a comprehensive data protection law at the federal level in the U.S. is a missed opportunity for the U.S. to globally shape and address data rights, practices, and privacy*."

IEEE-USA recommends policies that enact clear and comprehensive data protection laws, establish data collection and data use limitations, contain data quality standards and security safeguards, require clearer notice of data collection practices with truly effective opportunities to consent (or not) to such data collection, and mandate transparency and user control in use of individual data.

I would like to comment especially on the aspects of de-identification, re-identification, and pseudonymization mentioned in SB 11. Many people are surprised to realize the degree to which seemingly anonymous data can be linked to them personally. For example, if an application or web service is capable of tracking someone's location over time, then it is usually possible to uniquely

Jeanna Matthews, Professor, Department of Computer Science
Clarkson University • PO Box 5815 • Potsdam, NY 13699-5815
315-268-6288 • Fax 315-268-2371 • e-mail jnm@clarkson.edu

identify that person even without direct personal information like name or phone number. Simple algorithms systems can conclude that a person's most frequent location at night is likely their home and their most frequent location during the day is likely their work. The combination of where you live together with where you work can be enough to uniquely identify you from publicly available data sources. More sophisticated algorithms can use additional seemingly anonymous location data, including whether you frequent a gym, have regular medical appointments, the location of your children's school and more to draw a frighteningly accurate picture of you and your family. In addition, the mobility patterns for people are highly predictable so with past location data is possible to predict where you will be an hour from now with a high degree of accuracy.

I recommend that you use SB 11 as opportunity to provide increased protections for the citizens of Maryland from intrusive data collection and an opportunity to influence the strengthening of protections at the federal level.

I am honored to have the opportunity to provide input to the Maryland Senate in their deliberations of this important bill

Dr. Jeanna Matthews
Professor of Computer Science, Clarkson University
IEEE USA AI Policy Committee, Co-Chair
ACM Technology Policy Council, ACM US Technology Policy Committee, AI and Algorithms Subcommittee Co-Chair