From:	Anita Aaron
To:	ai_standards
Cc:	Mary Brooner; Susan P. Mazrui; Kevin Foster; Eli Gelardin; RWolkowitz@wbklaw.com; Malcom Glenn; Kamilah O. Martin-Proctor; Heather Duncan
Subject:	RE: RFI - Developing a Federal AI Standards Engagement Plan
Date:	Friday, May 17, 2019 3:47:30 PM
Attachments:	image003.png

TO: ai_standards@nist.gov

FROM: Anita Aaron, Executive Director

World Institute on Disability

DATE: May 17, 2019

RE: RFI - Developing a Federal AI Standards Engagement Plan

This letter is in response to the National Institute of Standards and Technology (NIST) Request for Information on AI Standards related to the anticipated plan for Federal engagement on standards for artificial intelligence (AI).

The World Institute on Disability (WID) is a leading disability justice organization focused on policy, research and consulting on critical issues facing people with disabilities worldwide. AI (ANI, AGI, ASI) is a critical issue for people with disabilities and it will only grow in its impact as it relates to those with disabilities.

WID believes that NIST's standards on AI have the potential to be very influential. They can be applied to the Federal Government, the States, and US engagement on similar projects worldwide. WID applauds NIST for releasing the RFI to provide support to the Executive Order. We believe leadership on this critical issue from the Federal Government is long in coming and we understand there is a short timeframe and there will be many responses to the RFI and in attendance at the in-person workshop.

WID is aware that AI has already brought many remarkable tools to disability access and inclusion; what has already been achieved illuminates the promise that AI can facilitate more accessible content for people with disabilities. For example, software is now learning how to recognize and respond to images, sounds, and linguistic expressions, which have opened up new opportunities for people with many disabilities.

The concerns of WID focus on the critical need for AI standards for privacy, ethics and bias so that full inclusion of persons with disabilities in the evolution of AI occurs. WID foresees many risks of AI use unless there is commitment to and prioritization of privacy,

ethics and bias. For example:

- Models learning from biased data may reproduce and continue historical biases;

- Training data may underrepresent outlier populations, which often include people with disabilities, and therefore inhibit or even deny full inclusion;

- Gathering inclusive datasets will prove essential for building effective solutions, but also holds significant ethical challenges. Building these systems requires people to waive privacy rights, and people with disabilities may have heightened privacy concerns.

- Data collection, machine learning training protocols and programming may not include representation from individuals with disabilities or professionals in the field with the appropriate knowledge to plan for full inclusion.

- Safety, security, bias and accessibility may be a lower priority than speed.

So, while AI is a great opportunity, it is also a great threat to full inclusion for people with disabilities. Most researchers, accessibility experts, and disability rights organizations agree that building inclusive datasets is one of the largest fairness challenges for researchers and AI accessibility should be a base level requirement for AI standards.

WID also recommends that persons with expertise in disability culture and accessibility be engaged early in the NIST AI standards development, as well as those with expertise in recognizing and addressing implicit bias and those who can set guidance for developing inclusive data sets. Inclusion of those with appropriate expertise will go far to achieve full inclusion of persons with disabilities in future datasets.

When the datasets used are designed for full inclusion, tools like those outlined below will dramatically and positively change the landscape for people with disabilities:

- Auto captioning with AI

- Autonomous cars—when built with Universal Design principles—can provide expanded transportation options for people who are unable to drive

- Facial recognition and image recognition to support navigation and interaction with the environment for people who are blind or have low vision

- Text summaries to facilitate comprehension for people with cognitive disabilities.

Today, the unemployment rate of people with disabilities is double the rate for those without disabilities. This must change and it can change with the development of accessible and intelligent AI solutions which will support job seekers and employees in developing their professional skills, improve workplace culture and expand inclusive hiring.

Yours truly,

Anita Aaron