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Opening Statement Ranking Member Robin Kelly

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Thank you Chairman Hurd, and welcome to all of our witnesses here today.

Artificial intelligence or AI has the capacity to improve how society handles some of its most difficult challenges. In medicine, the use of AI has the potential to save lives and detect illnesses earlier. One MIT study found that using machine learning algorithms reduced human errors by 85 percent when analyzing the cells of lung cancer patients. And earlier this month, Wired magazine reported hospitals have now begun testing software that can check the images of a person's eye for signs of diabetic eye disease, a condition that if diagnosed too late can result in vision loss.

In some communities around the country, self-driving cars are already operating on the roads and highways. Investments by major car companies in self-driving cars makes it increasingly likely that they will become the norm, not the exception on our nation's roads.

But there is a lot of uncertainty revolving around artificial intelligence. AI is no longer the fantasy of science fiction and is increasingly used in everyday life. As the use of AI expands, it is critical that this powerful technology is implemented in an inclusive, accessible, and transparent manner.

In its most recent report on the future of AI, the National Science and Technology Council (NSTC) issued a dire assessment of the state of diversity within the AI industry. The NSTC found that there was a "lack of gender and racial diversity in the AI workforce," and that this "mirrors the lack of diversity in the technology industry and the field of computer science generally." According to the NSTC, in the field of AI, improving diversity "is one of the most critical and high priority challenges."

The existing racial and gender gaps in the tech industry add to the challenges the AI field faces. Although women comprise approximately 18% of computer science graduates in the nation, only 11% of all computer science engineers are female. African-Americans and Hispanics account for just 11% of all employees in the technology sector, despite making up 27% of the total population in this country.

Lack of AI workforce diversity can have real costs on individuals' lives. The increasing use of AI to make consequential decisions about people's lives is spreading at a fast rate. Currently, AI systems are being used to make decisions by banks about who should receive loans, by governments about whether someone is eligible for public benefits, and by courts about whether a person should be set free.

However, research has found considerable flaws and biases can exist in the algorithms that support AI systems, calling into question the accuracy of such systems and its potential for unequal treatment of some Americans. For AI to be accurate it requires accurate data and learning sets to draw conclusions. If the data provided is biased, the conclusion will likely be biased. A diverse workforce will likely account for this and use more diverse data and learning sets.

Within the industry, the use of "black-box" algorithms are exasperating the problems of bias. Two years ago, ProPublica investigated the use of computerized "risk prediction" tools that were used by some judges in criminal sentencing and bail hearings. The investigation revealed that the algorithm the systems relied upon to predict recidivism was not only inaccurate, but biased against African-Americans who were "twice as likely as whites to be labeled a higher risk, but not actually re-offend." Judges were using this information derived from "black-box" software to make life-changing decisions on whether someone is let free or receives a harsher sentence than appropriate.

Increasing the transparency of these programs and ensuring a diverse workforce is engaged on developing AI will help decrease bias and make software more inclusive. Increasing diversity among the AI workforce helps avoid the negative outcomes that can occur when AI development is concentrated among certain groups of individuals, including the risk of biases in AI systems.

As we move forward in this great age of technological modernization, I'll be focused on how the private sector, Congress, and regulators can work together to ensure that AI technologies continue to innovate successfully and socially responsibly. I want to thank our witnesses for testifying today, and look forward to hearing your thoughts on how we can achieve this goal.

Thank you again, Mr. Chairman. I yield back.

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