

## Chairwoman Haley Stevens (D-MI) of the Subcommittee on Research and Technology

Research and Technology Subcommittee Hearing: Artificial Intelligence and the Future of Work Tuesday, September 24, 2019

Good afternoon, welcome and thank you to our witnesses for joining us here today, I'm looking forward to hearing your testimony. Thank you for your flexibility with the late start today. I'd like to take a moment to offer my deepest sympathies to Majority Whip Clyburn on the passing of his wife; my thoughts are with him and his family during this time of sorrow.

We are here today to examine the role of artificial intelligence in shaping the work of the future. Recent developments in machine learning algorithms, combined with increasing computing power and data generation, have enabled rapid advances in the accuracy, efficiency and applicability of artificial intelligence systems.

AI systems have already begun to change the nature of work and the workforce. They are being used in manufacturing processes, medical care, and customer service.

As we talk about the job loss that will occur as advanced technology increasingly affects all occupations and wage levels, companies in my district are telling me about how much trouble they are having trying to fill the jobs they have available. A 2017 study by the McKinsey Global Institute found that approximately half of all work activities could be automated by technologies that are already available today.

We need to start having the discussion at a broader level about how the types of jobs available will change rather than disappear, as specific tasks are taken over by AI systems and the workers take on new tasks.

The advances enabled by artificial intelligence also have the potential to create new kinds of jobs, and in doing so, elevate the standard of living and quality of life for many. 65% of children entering elementary school today will ultimately end up working in completely new job types that currently do not exist.

As the integration of these technologies changes jobs and creates new jobs, there will be a significant need to ensure we are training workers to succeed at all levels, from the factory floor

worker to the radiologist. The key is ensuring that the gains from AI systems are shared by all Americans, increasing the quality of life for everyone. As we discussed at a hearing in this Committee in June, if our Nation leads in the responsible development of AI, we can help set the standards and norms the rest of the world will follow. That applies equally to the use of AI in the workplace.

We are holding this hearing today to discuss what we do know, but the fact is there is a lot we still do not know. As AI-powered robots become more common, how do we ensure worker safety alongside these robots? Will artificial intelligence be routinely used to monitor workers, as some companies do today? How do we balance privacy rights with the potential productivity benefits and worker benefits these analyses could provide? How can we keep this data secure and prevent its malicious use? And finally, how do we get a better understanding of the macroeconomics and labor outlook so that the government, companies, colleges and universities, and workers can all plan for the transition? These are just some of the many questions researchers are pursuing.

I look forward to hearing from today's distinguished panel who will help us understand what we do know now, what knowledge and tools researchers, companies, and workers need going forward, and how Federal science agencies such as NSF are helping to lead the way.