Questions from Senator Tillis for Dr. Robert Epstein (re@aibrt.org) Witness for the Senate Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights Hearing on "The New Invisible Hand? The Impact of Algorithms on Competition and Consumer Rights", Hearing of December 13, 2023

1. The AMERICA Act would prohibit large digital advertising companies from owning more than one part of the digital ad ecosystem. In your opinion, should this take effect today do you see any unintended consequences?

Although I believe this Act should take effect today, and although I don't immediately see any unintended consequences, I state for the record that this Act falsely creates the impression that Congress is bringing Big Tech companies under control. In fact, this Act addresses none of the three big threats that Google and, to a lesser extent, other tech companies, pose to our democracy, our minds, and our children: (1) The massive and unrestricted surveillance that underlies the unethical business model these companies use. (2) The ability to determine

what content Americans and, indeed, billions of people worldwide, can or cannot see online – in other words, the censorship problem. (3) The unrestricted ability that Google and, to a lesser extent, other tech companies, have to shift millions of votes in our elections without people knowing and without leaving a paper trail for authorities to trace. Leaks from the company and a massive amount of online data my research team has been collecting since 2016 show without doubt that Google has been using these techniques to manipulate our elections, effectively determining the outcome of any election in which the win margin is 4 percent or less, which includes the 2020 Presidential election and many of the 2022 midterm elections. My research on new forms of influence that the internet has made possible is published in peer reviewed scientific journals and adheres to the highest standards of academic integrity. For further information, please see the written version of my

Congressional testimony of December 13, 2023 (480 pages), accessible at <u>https://is.gd/ouJAFD</u>.

2. Development of AI will only continue to grow and as a result more and more sophisticated AI tools will become available and the use of AI tool more prevalent. What can Congress do now to better to plan for the impact on competition, without stifling AI innovation?

Having studied AI since its origins in the 1960s (see Epstein et al., 2008, *Parsing the Turing Test: Methodological and philosophical issues in the quest for the thinking computer*. Dordrecht, The Netherlands: Springer), it troubles me to inform you that I believe that Congress lacks the ability to protect the American public from a wide variety of problems that rapidly evolving AI technology will create in coming years.

3. Can algorithms be manipulated by bad actors to censor free speech, specifically during an election cycle? And if so, how?

Yes, algorithms can be manipulated and *are* being manipulated by bad actors to censor free speech, often with the intent of determining the outcome of elections in the U.S. and elsewhere around the world. My research team has, since 2013, been discovering, naming, studying and quantifying how algorithms can be used to alter opinions and votes on a massive scale without people knowing and without leaving paper trails for authorities to trace. In the 2024 Presidential election, Google alone can use such techniques to shift between 6.4 and 25.5 million votes. Specific techniques include, among others, the Search Engine Manipulation Effect (SEME,

<u>https://SearchEngineManipulationEffect.com</u>), the Search Suggestion Effect (SSE,

<u>https://SearchSuggestionEffect.com</u>), the Digital Personalization Effect (DPE,

<u>https://DigitalPersonalizationEffect.com</u>), the Targeted Messaging Effect (TME,

<u>https://TargetedMessagingEffect.com</u>), the

YouTube Manipulation Effect (YME,

<u>http://YouTubeManipulationEffect.com</u>), the

Opinion Matching Effect (OME, <u>https://OpinionMatchingEffect.com</u>), the Multiple Exposure Effect (MEE, <u>https://MultipleExposureEffect.com</u>), and the Answer Bot Effect (ABE, <u>https://AnswerBotEffect.com</u>). In the days leading up to an election, Google can rapidly and effectively shift the voting preferences of

undecided voters by demoting or removing content from search results; by removing content from search suggestions; by altering content in answer boxes; by displaying partisan up-next recommendations on YouTube (owned by Google); and by displaying on its home page partisan register-to-vote reminders, partisan mail-in-your-ballot reminders, and partisan govote reminders. Data my team has captured with increasingly more sophisticated monitoring systems since 2016 confirm that Google is in fact using all of these techniques to alter opinions and votes in regional, state, and nationwide elections in the U.S. For further information, please see the written version of my Congressional testimony of December 13,

2023 (480 pages), accessible at <u>https://is.gd/ouJAFD</u>.

4. Groups with different viewpoints have weighed in on algorithms. Some suggest that more transparency is needed, while others want more privacy. Can you provide your perspective on whether more or less transparency is needed when it comes to algorithms?

When it comes to algorithms, "transparency" is a misleading term. Algorithms – especially advanced machine-learning algorithms used by Big Tech companies – are inherently opaque. By that I mean that no one understands how they work – not even the programmers who wrote them. (Note: I have been writing algorithms since I was a teenager.) Australia's 2019 effort to "regulate algorithms" was a complete failure (see Reuters story here: <u>https://is.gd/ptz5Ql</u>). The only meaningful way to make algorithms transparent is not to try to examine (or "regulate") the algorithm, but to monitor, preserve, and analyze the *content* the algorithm is producing. That is what my team

and I have done by building increasingly more sophisticated automated monitoring systems. For further information, see <u>https://AmericasDigitalShield.com</u>, or see my oral testimony of December 13, 2023, at <u>https://2023EpsteinTestimony.com</u>.

5. Do you believe that large companies and platforms can use algorithms to stifle innovation or small businesses?

Large companies use their monopolistic power to stifle innovation and competition. Please don't let the current fascination with the word "algorithm" lead you astray on this issue. For at least a few more years, algorithms will continue to be composed and controlled by people. People are the problem, not the algorithms they write.

6. What do you believe is the role of government in regulating algorithms? What, if any, unintended consequences would there be if Congress gets involved?

As I stated during the hearing of December 13, 2023, it would be meaningless for Congress to "regulate algorithms." Because algorithms are inherently opaque, authorities would have no way of confirming compliance – the problem the EU has had with its data protection laws. Moreover, laws and regulations move slowly, whereas algorithmic technology moves with lightning speed. Programmers can easily program around any law or regulation without you having the slightest idea they've done so. By manipulating elections and making prudent campaign donations, tech companies can also constrain the kinds of laws and regulations that are enacted. With respect, Senator Tillis, your questions exemplify the power that Big Tech companies currently wield. Instead of asking questions about how we can (a) end the surveillance, (b) stop the censorship, and (c) stop the manipulation of our elections and the indoctrination of our children by Big Tech companies, you are asking about "regulating algorithms," which suggests you know little or nothing about what algorithms actually are.

Based on my work with various AG offices around the country since 2015, I have come to believe that the tech companies are responsible

believe that the tech companies are responsible for shifting our governing authorities away from consumer protection issues – again, the three big threats: surveillance, censorship, and manipulation – toward antitrust issues that address none of these threats. You are doing exactly what the tech companies want you to do. I note, for the record, that, according to OpenSecrets.org, you accepted \$19,000 in campaign donations from Google during the most recent election cycle. Google is among your top 50 donors.