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December 12, 2017

The Honorable John Thune, Chairman
The Honorable Bill Nelson, Ranking Member
U.S. Senate Committee on Commerce, Science, and Transportation
Dirksen Senate Building, Room 512
Washington, DC 20510

Dear Chairman Thune and Ranking Member Nelson:

We write to you regarding the "Digital Decision-Making: The Building Blocks of Machine Learning and Artificial Intelligence" hearing.[1] EPIC is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.[2] EPIC has promoted "Algorithmic Transparency" for many years.[3]

Democratic governance is built on principles of procedural fairness and transparency. And accountability is key to decision making. We must know the basis of decisions, whether right or wrong. But as decisions are automated, and organizations increasingly delegate decisionmaking to techniques they do not fully understand, processes become more opaque and less accountable. It is therefore imperative that algorithmic process be open, provable, and accountable. Arguments that algorithmic transparency is impossible or "too complex" are not reassuring.

It is becoming increasingly clear that Congress must regulate AI to ensure accountability and transparency:

- Algorithms are often used to make adverse decisions about people. Algorithms deny people educational opportunities, employment, housing, insurance, and credit.[4] Many of these decisions are entirely opaque, leaving individuals to wonder whether the decisions were accurate, fair, or even about them.

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[1] *Digital Decision-Making: The Building Blocks of Machine Learning and Artificial Intelligence*, 115th Cong. (2017), S. Comm. on Commerce, Science, & Transportation, https://www.commerce.senate.gov/public/index.cfm/hearings?ID=7097E2B0-4A6B-4D92-85C3-D48E1008C8FD (Dec. 12, 2017).

[2] EPIC, *About EPIC*, https://epic.org/epic/about.html.

[3] EPIC, *Algorithmic Transparency*, https://epic.org/algorithmic-transparency/.

[4] Danielle Keats Citron & Frank Pasquale, *The Scored Society: Due Process for Automated Predictions*, 89 Wash. L. Rev. 1 (2014).

- Secret algorithms are deployed in the criminal justice system to assess forensic evidence, determine sentences, to even decide guilt or innocence.[5] Several states use proprietary commercial systems, not subject to open government laws, to determine guilt or innocence. The Model Penal Code recommends the implementation of recidivism-based actuarial instruments in sentencing guidelines.[6] But these systems, which defendants have no way to challenge are racially biased, unaccountable, and unreliable for forecasting violent crime.[7]

- Algorithms are used for social control. China's Communist Party is deploying a "social credit" system that assigns to each person government-determined favorability rating. "Infractions such as fare cheating, jaywalking, and violating family-planning rules" would affect a person's rating.[8] Low ratings are also assigned to those who frequent disfavored web sites or socialize with others who have low ratings. Citizens with low ratings will have trouble getting loans or government services. Citizens with high rating, assigned by the government, receive preferential treatment across a wide range of programs and activities.

- In the United States, U.S. Customs and Border Protection has used secret analytic tools to assign "risk assessments" to U.S. travelers.[9] These risk assessments, assigned by the U.S. government to U.S. citizens, raise fundamental questions about government accountability, due process, and fairness. They may also be taking us closer to the Chinese system of social control through AI.

In a recent consumer complaint to the Federal Trade Commission, EPIC challenged the secret scoring of young athletes.[10] As EPIC's complaint regarding the Universal Tennis Rating system makes clear, the "UTR score defines the status of young athletes in all tennis related activity; impacts opportunities for scholarship, education and employment; and may in the future provide the basis for 'social scoring' and government rating of citizens."[11] As we explained to the FTC, "EPIC seeks to ensure that all rating systems concerning individuals are open, transparent and accountable."[12]

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[5] *EPIC v. DOJ (Criminal Justice Algorithms)*, EPIC, https://epic.org/foia/doj/criminal-justice-algorithms/; *Algorithms in the Criminal Justice System*, EPIC, https://epic.org/algorithmic- transparency/crim-justice/.
[6] Model Penal Code: Sentencing §6B.09 (Am. Law. Inst., Tentative Draft No. 2, 2011).
[7] Julia Angwin et al., *Machine Bias*, ProPublica (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.
[8] Josh Chin & Gillian Wong, *China's New Tool for Social Control: A Credit Rating for Everything*, Wall Street J., Nov. 28, 2016, http://www.wsj.com/articles/chinas-new-tool-for- social-control-a-credit-rating-for-everything-1480351590
[9] *EPIC v. CBP* (Analytical Framework for Intelligence), EPIC, https://epic.org/foia/dhs/cbp/afi/.
[10] EPIC, *EPIC Asks FTC to Stop System for Secret Scoring of Young Athletes* (May 17, 2017), https://epic.org/2017/05/epic-asks-ftc-to-stop-system-f.html; *See also* Shanya Possess, *Privacy Group Challenges Secret Tennis Scoring System,* Law360, May 17, 2017, https://www.law360.com/articles/925379; Lexology, *EPIC Takes a Swing at Youth Tennis Ratings*, June 1, 2017, https://www.lexology.com/library/detail.aspx?g=604e3321-dfc8-4f46-9afc-abd47c5a5179
[11] EPIC Complaint to Federal Trade Commission, In re Universal Tennis at 1 (May 17, 2017).
[12] *Id.*

In *re Universal Tennis*, EPIC urged the FTC to (1) Initiate an investigation of the collection, use, and disclosure of children's personal information by Universal Tennis; (2) Halt Universal Tennis's scoring of children without parental consent; (3) Require that Universal Tennis make public the algorithm and other techniques that produce the UTR; (4) Require that Universal Tennis establish formal procedures for rectification of inaccurate, incomplete, and outdated scoring procedures; and (5) Provide such other relief as the Commission finds necessary and appropriate.[13]

"Algorithmic Transparency" must be a fundamental principle for consumer protection The phrase has both literal and figurative dimensions. In the literal sense, it is often necessary to determine the precise factors that contribute to a decision. If, for example, a government agency or private company considers a factor such as race, gender, or religion to produce an adverse decision, then the decision-making process should be subject to scrutiny and the relevant factors identified.

On October 12, 2016, The White House announced two reports on the impact of Artificial Intelligence on the US economy and related policy concerns. *Preparing for the Future of Artificial Intelligence* concluded that "practitioners must ensure that AI-enabled systems are governable; that they are open, transparent, and understandable; that they can work effectively with people; and that their operation will remain consistent with human values and aspirations."[14]

Some have argued that algorithmic transparency is simply impossible, given the complexity and fluidity of modern processes. But if that is true, there must be some way to recapture the purpose of transparency without simply relying on testing inputs and outputs. We have seen recently that it is almost trivial to design programs that evade testing.[15] And central to the science and innovation is the provability of results.

Europeans have long had a right to access "the logic of the processing" concerning their personal information.[16] That principle is reflected in the U.S. in the publication of the FICO score, which for many years remained a black box for consumers, establishing credit worthiness without providing any information about the basis of score.[17]

The continued deployment of AI-based systems raises profound issues for democratic countries. As Professor Frank Pasquale has said:

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[13] *Id.* at 13.

[14] *Preparing for the Future of Artificial Intelligence*, (Oct 2016), Executive Office of the President, National Science and Technology Council, Comm. on Technology, https://obamawhitehouse.archives.gov/sites/default/files/whitehouse_files/microsites/ostp/NSTC/preparing_for_the_future_of_ai.pdf.

[15] Jack Ewing, *In '06 Slide Show, a Lesson in How VW Could Cheat*, N.Y. Times, Apr. 27, 2016, at A1.

[16] Directive 95/46/EC—The Data Protection Directive, art 15 (1), 1995, http://www.dataprotection.ie/docs/EU-Directive-95-46-EC--Chapter-2/93.htm.

[17] Hadley Malcom, *Banks Compete on Free Credit Score Offers*, USA Today, Jan. 25, 2015, http://www.usatoday.com/story/money/2015/01/25/banks-free-credit-scores/22011803/.

Black box services are often wondrous to behold, but our black box society has become dangerously unstable, unfair, and unproductive. Neither New York quants nor California engineers can deliver a sound economy or a secure society. Those are the tasks of a citizenry, which can perform its job only as well as it understands the stakes.[18]

We ask that this Statement from EPIC be entered in the hearing record. We look forward to working with you on these issues of vital importance to the American public.

Sincerely,

/s/ *Marc Rotenberg*
Marc Rotenberg
EPIC President

/s/ *Caitriona Fitzgerald*
Caitriona Fitzgerald
EPIC Policy Director

/s/ *Christine Bannan*
Christine Bannan
EPIC Policy Fellow

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[18] Frank Pasquale, *The Black Box Society: The Secret Algorithms that Control Money and Information* 218 (Harvard University Press 2015).