116TH CONGRESS
2D SESSION **H. R. 7559**

To require the Director of the National Science Foundation, in consultation
with the Director of the Office of Science and Technology Policy, to
establish an advisory committee to advise the President on matters relat-
ing to the development of artificial intelligence, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 9, 2020

Mr. OLSON (for himself and Mr. MCNERNEY) introduced the following bill;
which was referred to the Committee on Science, Space, and Technology

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A BILL

To require the Director of the National Science Foundation,
in consultation with the Director of the Office of Science
and Technology Policy, to establish an advisory com-
mittee to advise the President on matters relating to
the development of artificial intelligence, and for other
purposes.

1 *Be it enacted by the Senate and House of Representa-*

2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Fundamentally Under-

5 standing The Usability and Realistic Evolution of Artifi-

1 cial Intelligence Act of 2020'' or the ''FUTURE of Artifi-
2 cial Intelligence Act of 2020''.

SEC. 2. SENSE OF CONGRESS.

4   It is the sense of Congress that—

5   (1) understanding and preparing for the ongo-
6   ing development of artificial intelligence is critical to
7   the economic prosperity and social stability of the
8   United States;

9   (2) as artificial intelligence evolves, it can great-
10   ly benefit society by powering the information econ-
11   omy, fostering better informed decisions and helping
12   unlock answers to questions that, as of the date of
13   the enactment of this Act, are unanswerable;

14   (3) for the reasons set forth in paragraph (2),
15   it is beneficial to better understand artificial intel-
16   ligence and foster the development of artificial intel-
17   ligence in a manner that maximizes its benefit to so-
18   ciety; and

19   (4) it is critical that the priorities of the advi-
20   sory committee established under section 3(a)(1) in-
21   clude developing guidance or recommendations—

22   (A) to promote a climate of investment and
23   innovation to ensure the global competitiveness
24   of the United States;

1   (B) to optimize the development of artifi-
2   cial intelligence to address the potential growth,
3   restructuring, or other changes in the United
4   States workforce that result from the develop-
5   ment of artificial intelligence, with particular
6   attention to traditionally underrepresented pop-
7   ulations that may be uniquely impacted;
8   (C) to promote and support the unbiased
9   development and application of artificial intel-
10   ligence; and
11   (D) to protect the privacy rights of individ-
12   uals.

13 **SEC. 3. ESTABLISHMENT OF FEDERAL ADVISORY COM-**
14 **MITTEE ON THE DEVELOPMENT AND IMPLE-**
15 **MENTATION OF ARTIFICIAL INTELLIGENCE.**

16 (a) ESTABLISHMENT.—
17   (1) IN GENERAL.—The Chief Technology Offi-
18 cer shall establish a Federal advisory committee to
19 advise the President on matters relating to the de-
20 velopment of artificial intelligence.
21   (2) DESIGNATION.—The Federal advisory com-
22 mittee established under paragraph (1) shall be
23 known as the "Federal Advisory Committee on the
24 Development and Implementation of Artificial Intel-

1 ligence'' (in this section referred to as the ''Advisory

2 Committee'').

3 (b) PURPOSES OF THE ADVISORY COMMITTEE.—

4 (1) ADVICE.—The Advisory Committee shall

5 provide advice to the Chief Technology Officer on

6 matters relating to the development and use of arti-

7 ficial general intelligence and narrow artificial intel-

8 ligence, including on the following as they relate to

9 artificial intelligence:

10 (A) The competitiveness of the United

11 States, including matters relating to the pro-

12 motion of public and private sector investment

13 and innovation into the development of artificial

14 intelligence.

15 (B) Workforce, including matters relating

16 to the potential for using artificial intelligence

17 for rapid retraining of workers, due to the pos-

18 sible effect of technological displacement and to

19 increase the labor force participation of tradi-

20 tionally underrepresented populations, including

21 minorities, low-income populations, and persons

22 with disabilities.

23 (C) Education, including matters relating

24 to science, technology, engineering, and mathe-

1　　matics education to prepare the United States

2　　workforce as the needs of employers change.

3　　　　(D) Ethics training and development for

4　　individuals, including both private and govern-

5　　ment technologists, working on and using artifi-

6　　cial intelligence.

7　　　　(E) Matters relating to open sharing of

8　　data and the open sharing of research on artifi-

9　　cial intelligence.

10　　　　(F) International cooperation and competi-

11　　tiveness, including matters relating to the com-

12　　petitive international landscape for artificial in-

13　　telligence-related industries.

14　　　　(G) Accountability and legal rights, includ-

15　　ing matters relating to the responsibility for

16　　any violations of laws by an artificial intel-

17　　ligence system and the compatibility of inter-

18　　national regulations.

19　　　　(H) Matters relating to machine learning

20　　bias through core cultural and societal norms.

21　　　　(I) Matters relating to how artificial intel-

22　　ligence can serve or enhance opportunities in

23　　rural communities.

1   (J) Government efficiency, including mat-

2 ters relating to how to promote cost saving and

3 streamline operations.

4   (K) Matters relating to individual civil

5 rights, including an assessment regarding how

6 rights are or will be affected by the use of arti-

7 ficial intelligence technology and whether such

8 uses should be subject to additional controls,

9 oversight, or limitations.

10   (L) Matters relating to urbanization and

11 the development of smart cities.

12 (2) STUDY.—The Advisory Committee shall

13 study and assess the following:

14   (A) How the term "artificial intelligence"

15 should be defined for purposes of this section

16 and how the relevant scope of the Advisory

17 Committee should be defined, including how

18 such definitions relate to artificial systems and

19 both narrow and general forms of artificial in-

20 telligence. In carrying out this subparagraph,

21 the Advisory Committee shall consider the fol-

22 lowing:

23 "(1) The term 'artificial intelligence' includes

24 the following:

7

"(A) Any artificial systems that perform tasks under varying and unpredictable circumstances, without significant human oversight, or that can learn from their experience and improve their performance. Such systems may be developed in computer software, physical hardware, or other contexts not yet contemplated. They may solve tasks requiring human-like perception, cognition, planning, learning, communication, or physical action. In general, the more human-like the system within the context of its tasks, the more it can be said to use artificial intelligence.

"(B) Systems that think like humans, such as cognitive architectures and neural networks.

"(C) Systems that act like humans, such as systems that can pass the Turing test or other comparable test via natural language processing, knowledge representation, automated reasoning, and learning.

"(D) A set of techniques, including machine learning, that seek to approximate some cognitive task.

"(E) Systems that act rationally, such as intelligent software agents and embodied robots

1 that achieve goals via perception, planning, rea-

2 soning, learning, communicating, decision mak-

3 ing, and acting.

4 "(2) The term 'artificial general intelligence'

5 means a notional future artificial intelligence system

6 that exhibits apparently intelligent behavior at least

7 as advanced as a person across the range of cog-

8 nitive, emotional, and social behaviors.

9 "(3) The term 'narrow artificial intelligence'

10 means an artificial intelligence system that address-

11 es specific application areas such as playing stra-

12 tegic games, language translation, self-driving vehi-

13 cles, and facial or other image recognition.".

14 (B) How to create a climate for public and

15 private sector investment and innovation in ar-

16 tificial intelligence.

17 (C) The possible benefits and effects that

18 the development of artificial intelligence may

19 have on the economy, workforce, and competi-

20 tiveness of the United States.

21 (D) Whether and how networked, auto-

22 mated, artificial intelligence applications and

23 robotic devices will displace or create jobs and

24 how any job-related gains relating to artificial

25 intelligence can be maximized.

1   (E) How bias can be identified and elimi-
2   nated in the development of artificial intel-
3   ligence and in the algorithms that support
4   them, including with respect to the following:

5   (i) The selection and processing of
6   data used to train artificial intelligence.

7   (ii) Diversity in the development of
8   artificial intelligence.

9   (iii) The ways and places the systems
10   are deployed and the potential harmful
11   outcomes.

12   (F) Whether and how to incorporate eth-
13   ical standards in the development and imple-
14   mentation of artificial intelligence.

15   (G) How the Federal Government can en-
16   courage technological progress in implementa-
17   tion of artificial intelligence that benefits the
18   full spectrum of social and economic classes.

19   (H) How the privacy rights of individuals
20   are or will be affected by technological innova-
21   tion relating to artificial intelligence.

22   (I) Whether technological advancements in
23   artificial intelligence have or will outpace the
24   legal and regulatory regimes implemented to
25   protect consumers.

1   (J) How existing laws, including those con-

2   cerning data access and privacy, should be mod-

3   ernized to enable the potential of artificial intel-

4   ligence.

5   (K) How the Federal Government utilizes

6   artificial intelligence to handle large or complex

7   data sets.

8   (L) How ongoing dialogues and consulta-

9   tions with multi-stakeholder groups can maxi-

10   mize the potential of artificial intelligence and

11   further development of artificial intelligence

12   technologies that can benefit everyone inclu-

13   sively.

14   (M) How the development of artificial in-

15   telligence can affect cost savings and streamline

16   operations in various areas of government oper-

17   ations, including health care, cybersecurity, in-

18   frastructure, and disaster recovery.

19   (N) Such other matters as the Advisory

20   Committee considers appropriate.

21   (3) REPORTS AND RECOMMENDATIONS.—

22   (A) REPORT BY ADVISORY COMMITTEE.—

23   Not later than 540 days after the date of the

24   enactment of this Act, the Advisory Committee

25   shall submit to the Chief Technology Officer

1 and to Congress a report on the findings of the

2 Advisory Committee and such recommendations

3 as the Advisory Committee may have for ad-

4 ministrative or legislative action relating to arti-

5 ficial intelligence.

6 (B) RECOMMENDATIONS OF CHIEF TECH-

7 NOLOGY OFFICER.—Not later than 90 days

8 after receiving the report submitted under sub-

9 paragraph (A), the Chief Technology Officer

10 shall review the report and submit to Congress

11 such recommendations as the Chief Technology

12 Officer may have with respect to the matters

13 contained in the report submitted under sub-

14 paragraph (A).

15 (c) MEMBERSHIP.—

16 (1) VOTING MEMBERS.—

17 (A) IN GENERAL.—The Advisory Com-

18 mittee shall be composed of 19 voting members

19 who shall be appointed by the Chief Technology

20 Officer, with advisement from the Chair and

21 Ranking Member of the Committee on Com-

22 merce, Science, and Transportation of the Sen-

23 ate and the Chair and Ranking Member of the

24 Committee on Science, Space, and Technology

25 of the House of Representatives, for purposes

1 of the Advisory Committee from among individ-

2 uals with expertise in matters relating to work-

3 force development, ethics, privacy, artificial in-

4 telligence, or computer science.

5 (B) REPRESENTATION.—In carrying out

6 subparagraph (A), the Chief Technology Officer

7 shall ensure that voting members are appointed

8 as follows:

9 (i) Five members from the academic

10 or research community.

11 (ii) Six members from private indus-

12 try, at least 1 of whom shall be from a

13 small business concern.

14 (iii) Six members from civil society, at

15 least 2 of whom shall be from groups that

16 advocate for civil liberties or civil rights.

17 (iv) Two members from labor organi-

18 zations or groups, including those that rep-

19 resent the unique interests of traditionally

20 underrepresented populations.

21 (C) GEOGRAPHICAL DIVERSITY.—In car-

22 rying out subparagraph (A), the Chief Tech-

23 nology Officer shall ensure that the voting

24 members of the Advisory Committee come from

1   diverse geographical locations within the United

2   States.

3   (2) NONVOTING MEMBERS.—The Advisory

4   Committee shall also be composed of such nonvoting

5   members as the Chief Technology Officer considers

6   appropriate, except that the Chief Technology Offi-

7   cer shall appoint at least 1 such member from each

8   of the following:

9   (A) The Department of Education.

10   (B) The Department of Justice.

11   (C) The Department of Labor.

12   (D) The Department of Transportation.

13   (E) The Department of Homeland Secu-

14   rity.

15   (F) The Federal Trade Commission.

16   (G) The National Institute of Standards

17   and Technology.

18   (H) The National Science Foundation.

19   (I) The National Science and Technology

20   Council.

21   (J) The National Science and Technology

22   Council Committee on Artificial Intelligence.

23   (K) The intelligence community (as de-

24   fined in section 3 of the National Security Act

25   of 1947 (50 U.S.C. 3003)).

1   (L) The Privacy and Civil Liberties Over-

2   sight Board.

3   (M) Such other nonvoting members as the

4   voting members of the Advisory Committee con-

5   sider appropriate.

6   (3) CHAIRPERSON.—The Chief Technology Of-

7   ficer shall appoint a chairperson for the Advisory

8   Committee from among the members appointed

9   under paragraph (1).

10   (d) MEETINGS.—The Advisory Committee shall

11 meet—

12   (1) in person no less frequently than twice each

13   year; and

14   (2) via telepresence no less frequently than once

15   every 2 months.

16   (e) SUBCOMMITTEE ON ARTIFICIAL INTELLIGENCE

17 AND LAW ENFORCEMENT AND SECURITY.—

18   (1) ESTABLISHMENT.—The chairperson of the

19   Advisory Committee shall establish a subcommittee

20   on matters relating to the development of artificial

21   intelligence relating to law enforcement and security

22   matters.

23   (2) ADVICE.—The subcommittee shall provide

24   advice to the Secretary on matters relating to the

25   development of artificial intelligence relating to law

1   enforcement and security matters, including advice

2   on the following:

3   (A) Bias, including whether the use of fa-

4   cial recognition by government authorities, in-

5   cluding law enforcement agencies, is taking into

6   account ethical considerations and addressing

7   whether such use should be subject to addi-

8   tional oversight, controls, and limitations.

9   (B) Security of data, including law en-

10   forcement's access to data and the security pa-

11   rameters for that data.

12   (C) Adoptability, including methods to

13   allow the United States Government and indus-

14   try to take advantage of artificial intelligence

15   technologies such as facial recognition tech-

16   nology while at the same time ensuring the po-

17   tential abuse of such technologies is sufficiently

18   mitigated.

19   (D) Legal standards, including whether

20   technological advancements in artificial intel-

21   ligence have or will outpace the legal and regu-

22   latory regimes implemented to protect con-

23   sumers, including the tools, training, and re-

24   sources that could be used by government, in-

25   cluding law enforcement agencies, to adapt to

1   the use of artificial intelligence technologies in-

2   cluding facial recognition consistent with the

3   privacy rights and civil liberties issues raised by

4   the use of these technologies.

5   (3) MEMBERSHIP.—The subcommittee shall be

6   composed of 9 members selected by the chairperson

7   as follows:

8   (A) Three members from the law enforce-

9   ment community.

10   (B) Two members from groups that advo-

11 cate for civil liberties or civil rights.

12   (C) Two members from private industry.

13   (D) Two members from the private secu-

14 rity community.

15 (f) POWERS.—In order to carry out its duties under

16 subsection (b), the Advisory Committee may—

17   (1) hold such hearings, sit and act at such

18 times and places, take such testimony, and receive

19 such evidence as the Advisory Committee considers

20 appropriate;

21   (2) submit to Congress such recommendations

22 as the Advisory Committee considers appropriate;

23   (3) submit to Federal agencies such rec-

24 ommendations as the Advisory Committee considers

25 appropriate;

1   (4) issue reports, guidelines, and memoranda;

2   (5) hold or host conferences and symposia;

3   (6) enter into cooperative agreements with

4 third-party experts to obtain relevant advice or ex-

5 pertise, and oversee staff;

6   (7) establish subcommittees; and

7   (8) establish rules of procedure.

8 (g) TRAVEL EXPENSES.—The members of the Advi-

9 sory Committee shall be allowed travel expenses, including

10 per diem in lieu of subsistence, at rates authorized for em-

11 ployees of agencies under subchapter I of chapter 57 of

12 title 5, United States Code, while away from their homes

13 or regular places of business in the performance of services

14 for the Advisory Committee.

15 (h) FUNDING.—

16   (1) IN GENERAL.—Except as provided in para-

17 graph (2), amounts to carry out this section shall be

18 derived from amounts appropriated or otherwise

19 made available to the National Science Foundation.

20   (2) DONATIONS.—

21   (A) AUTHORIZATION.—The Advisory Com-

22 mittee may solicit and accept donations from

23 private persons and non-Federal entities to

24 carry out this section.

1   (B) LIMITATION.—Of the amounts ex-
2   pended by the Advisory Committee in a fiscal
3   year to carry out this section, not more than
4   half may be derived from amounts received
5   under subparagraph (A).

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