115TH CONGRESS
1ST SESSION
H. R. 4625

To require the Secretary of Commerce to establish the Federal Advisory Committee on the Development and Implementation of Artificial Intelligence, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 12, 2017

Mr. DELANEY (for himself, Mr. OLSON, Mr. TED LIEU of California, Mr. KHANNA, Mr. CLEAVER, Mr. DESAULNIER, and Mr. MICHAEL F. DOYLE of Pennsylvania) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Space, and Technology, Education and the Workforce, Foreign Affairs, the Judiciary, and Oversight and Government Reform, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To require the Secretary of Commerce to establish the Federal Advisory Committee on the Development and Implementation 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 2017'' or the ''FUTURE of Artifi-

2 cial Intelligence Act of 2017''.

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's 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 4(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 results from the develop-

5   ment of artificial intelligence;

6   (C) to promote and support the unbiased

7   development and application of artificial intel-

8   ligence; and

9   (D) to protect the privacy rights of individ-

10   uals.

11 **SEC. 3. DEFINITIONS.**

12   (a) IN GENERAL.—Except as provided in subsection

13 (b), in this Act:

14   (1) ARTIFICIAL INTELLIGENCE.—The term "ar-

15   tificial intelligence" includes the following:

16   (A) Any artificial systems that perform

17   tasks under varying and unpredictable cir-

18   cumstances, without significant human over-

19   sight, or that can learn from their experience

20   and improve their performance. Such systems

21   may be developed in computer software, phys-

22   ical hardware, or other contexts not yet con-

23   templated. They may solve tasks requiring

24   human-like perception, cognition, planning,

25   learning, communication, or physical action. In

1 general, the more human-like the system within

2 the context of its tasks, the more it can be said

3 to use artificial intelligence.

4 (B) Systems that think like humans, such

5 as cognitive architectures and neural networks.

6 (C) Systems that act like humans, such as

7 systems that can pass the Turing test or other

8 comparable test via natural language proc-

9 essing, knowledge representation, automated

10 reasoning, and learning.

11 (D) A set of techniques, including machine

12 learning, that seek to approximate some cog-

13 nitive task.

14 (E) Systems that act rationally, such as in-

15 telligent software agents and embodied robots

16 that achieve goals via perception, planning, rea-

17 soning, learning, communicating, decision mak-

18 ing, and acting.

19 (2) ARTIFICIAL GENERAL INTELLIGENCE.—The

20 term "artificial general intelligence" means a no-

21 tional future artificial intelligence system that exhib-

22 its apparently intelligent behavior at least as ad-

23 vanced as a person across the range of cognitive,

24 emotional, and social behaviors.

1   (3) NARROW ARTIFICIAL INTELLIGENCE.—The
2   term "narrow artificial intelligence" means an artifi-
3   cial intelligence system that addresses specific appli-
4   cation areas such as playing strategic games, lan-
5   guage translation, self-driving vehicles, and image
6   recognition.

7   (b) MODIFICATIONS.—The Federal Advisory Com-
8   mittee on the Development and Implementation of Artifi-
9   cial Intelligence established under section 4(a) may revise
10   such definitions under subsection (a) of this section as the
11   advisory committee considers appropriate.

12   **SEC. 4. ESTABLISHMENT OF FEDERAL ADVISORY COM-**
13   **MITTEE ON THE DEVELOPMENT AND IMPLE-**
14   **MENTATION OF ARTIFICIAL INTELLIGENCE.**

15   (a) ESTABLISHMENT.—

16   (1) IN GENERAL.—The Secretary of Commerce
17   shall establish a Federal advisory committee to ad-
18   vise the Secretary on matters relating to the devel-
19   opment of artificial intelligence.

20   (2) DESIGNATION.—The Federal advisory com-
21   mittee established under paragraph (1) shall be
22   known as the "Federal Advisory Committee on the
23   Development and Implementation of Artificial Intel-
24   ligence" (in this section the "Advisory Committee").

25   (b) PURPOSES OF THE ADVISORY COMMITTEE.—

1 (1) ADVICE.—The Advisory Committee shall
2 provide advice to the Secretary on matters relating
3 to the development of artificial general intelligence
4 and narrow artificial intelligence, including on the
5 following as they relate to artificial intelligence:

6 (A) The competitiveness of the United
7 States, including matters relating to the pro-
8 motion of public and private sector investment
9 and innovation into the development of artificial
10 intelligence.

11 (B) Workforce, including matters relating
12 to the potential for using artificial intelligence
13 for rapid retraining of workers, due to the pos-
14 sible effect of technological displacement.

15 (C) Education, including matters relating
16 to science, technology, engineering, and mathe-
17 matics education to prepare the United States
18 workforce as the needs of employers change.

19 (D) Ethics training and development for
20 technologists working on artificial intelligence.

21 (E) Matters relating to open sharing of
22 data and the open sharing of research on artifi-
23 cial intelligence.

24 (F) International cooperation and competi-
25 tiveness, including matters relating to the com-

1   petitive international landscape for artificial in-

2   telligence-related industries.

3   (G) Accountability and legal rights, includ-

4   ing matters relating to the responsibility for

5   any violations of laws by an artificial intel-

6   ligence system and the compatibility of inter-

7   national regulations.

8   (H) Matters relating to machine learning

9   bias through core cultural and societal norms.

10   (I) Matters relating to how artificial intel-

11   ligence can serve or enhance opportunities in

12   rural communities.

13   (J) Government efficiency, including mat-

14   ters relating to how to promote cost saving and

15   streamline operations.

16   (2) STUDY.—The Advisory Committee shall

17   study and assess the following:

18   (A) How to create a climate for public and

19   private sector investment and innovation in ar-

20   tificial intelligence.

21   (B) The possible benefits and effects that

22   the development of artificial intelligence may

23   have on the economy, workforce, and competi-

24   tiveness of the United States.

1   (C) Whether and how networked, auto-

2 mated, artificial intelligence applications and

3 robotic devices will displace or create jobs and

4 how any job related gains relating to artificial

5 intelligence can be maximized.

6   (D) How bias can be identified and elimi-

7 nated in the development of artificial intel-

8 ligence and in the algorithms that support

9 them, including with respect to the following:

10   (i) The selection and processing of

11 data used to train artificial intelligence.

12   (ii) Diversity in the development of

13 artificial intelligence.

14   (iii) The ways and places the systems

15 are deployed and the potential harmful

16 outcomes.

17   (E) Whether and how to incorporate eth-

18 ical standards in the development and imple-

19 mentation of artificial intelligence.

20   (F) How the Federal Government can en-

21 courage technological progress in implementa-

22 tion of artificial intelligence that benefits the

23 full spectrum of social and economic classes.

1 　　　　(G) How the privacy rights of individuals

2 　　　　are or will be affected by technological innova-

3 　　　　tion relating to artificial intelligence.

4 　　　　(H) Whether technological advancements

5 　　　　in artificial intelligence have or will outpace the

6 　　　　legal and regulatory regimes implemented to

7 　　　　protect consumers.

8 　　　　(I) How existing laws, including those con-

9 　　　　cerning data access and privacy, should be mod-

10 　　　ernized to enable the potential of artificial intel-

11 　　　ligence.

12 　　　(J) How the Federal Government utilizes

13 　　　artificial intelligence to handle large or complex

14 　　　data sets.

15 　　　(K) How ongoing dialogues and consulta-

16 　　　tions with multi-stakeholder groups can maxi-

17 　　　mize the potential of artificial intelligence and

18 　　　further development of artificial intelligence

19 　　　technologies that can benefit everyone inclu-

20 　　　sively.

21 　　　(L) How the development of artificial intel-

22 　　　ligence can affect cost savings and streamline

23 　　　operations in various areas of government oper-

24 　　　ations, including health care, cybersecurity, in-

25 　　　frastructure, and disaster recovery.

1   (M) Such other matters as the Advisory

2   Committee considers appropriate.

3   (3) REPORTS AND RECOMMENDATIONS.—

4   (A) REPORT BY ADVISORY COMMITTEE.—

5   Not later than 540 days after the date of the

6   enactment of this Act, the Advisory Committee

7   shall submit to the Secretary and to Congress

8   a report on the findings of the Advisory Com-

9   mittee and such recommendations as the Advi-

10   sory Committee may have for administrative or

11   legislative action relating to artificial intel-

12   ligence.

13   (B) RECOMMENDATIONS OF SECRETARY.—

14   Not later than 90 days after receiving the re-

15   port submitted under subparagraph (A), the

16   Secretary shall review the report and submit to

17   Congress such recommendations as the Sec-

18   retary may have with respect to the matters

19   contained in the report submitted under sub-

20   paragraph (A).

21   (c) MEMBERSHIP.—

22   (1) VOTING MEMBERS.—

23   (A) IN GENERAL.—The Advisory Com-

24   mittee shall be composed of 19 voting members

25   who shall be appointed by the Secretary of

1 Commerce, with advisement from the Chair and

2 Ranking Member of the Committee on Com-

3 merce, Science, and Transportation of the Sen-

4 ate and the Chair and Ranking Member of the

5 Committee on Energy and Commerce of the

6 House of Representatives, for purposes of the

7 Advisory Committee from among individuals

8 with expertise in matters relating to workforce

9 development, ethics, privacy, artificial intel-

10 ligence, or computer science.

11 (B) REPRESENTATION.—In carrying out

12 subparagraph (A), the Secretary shall ensure

13 that voting members are appointed as follows:

14 (i) Five members from academic or

15 research community.

16 (ii) Six members from private indus-

17 try, at least one of whom shall be from a

18 small business concern.

19 (iii) Six from civil society, at least two

20 of whom shall be from groups that advo-

21 cate for civil liberties or civil rights.

22 (iv) Two from labor organizations or

23 groups.

24 (C) GEOGRAPHICAL DIVERSITY.—In car-

25 rying out subparagraph (A), the Secretary shall

1   ensure that the voting members of the Advisory

2   Committee come from diverse geographical loca-

3   tions within the United States.

4   (2) NONVOTING MEMBERS.—The Advisory

5   Committee shall also be composed of such nonvoting

6   members as the Secretary considers appropriate, ex-

7   cept that the Secretary shall appoint at least one

8   such member from each 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 Federal Trade Commission.

14   (F) The National Institute of Standards

15   and Technology.

16   (G) The National Science Foundation.

17   (H) The National Science and Technology

18   Council.

19   (I) Such other nonvoting members as the

20   voting members of the Advisory Committee con-

21   sider appropriate.

22   (3) CHAIRPERSON.—The Secretary shall ap-

23   point a chairperson for the Advisory Committee

24   from among the members appointed under para-

25   graph (1).

1 (d) MEETINGS.—The Advisory Committee shall

2 meet—

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

4 year; and

5   (2) via telepresence no less frequently than once

6 every two months.

7 (e) POWERS.—In order to carry out its duties under

8 subsection (b), the Advisory Committee may—

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

10 times and places, take such testimony, and receive

11 such evidence as the Advisory Committee considers

12 appropriate;

13   (2) submit to Congress such recommendations

14 as the Advisory Committee considers appropriate;

15   (3) submit to Federal agencies such rec-

16 ommendations as the Advisory Committee considers

17 appropriate;

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

19   (5) hold or host conferences and symposia;

20   (6) enter into cooperative agreements with

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

22 pertise, and oversee staff;

23   (7) establish subcommittees; and

24   (8) establish rules of procedure.

1 (f) TRAVEL EXPENSES.—The members of the Advi-
2 sory Committee shall be allowed travel expenses, including
3 per diem in lieu of subsistence, at rates authorized for em-
4 ployees of agencies under subchapter I of chapter 57 of
5 title 5, United States Code, while away from their homes
6 or regular places of business in the performance of services
7 for the Advisory Committee.

8 (g) FUNDING.—

9   (1) IN GENERAL.—Except as provided in para-
10   graph (2), amounts to carry out this section shall be
11   derived from amounts appropriated or otherwise
12   made available to the Secretary of Commerce.

13   (2) DONATIONS.—

14   (A) AUTHORIZATION.—The Advisory Com-
15   mittee may solicit and accept donations from
16   private persons and non-Federal entities to
17   carry out this section.

18   (B) LIMITATION.—Of the amounts ex-
19   pended by the Advisory Committee in a fiscal
20   year to carry out this section, not more than
21   half may be derived from amounts received
22   under subparagraph (A).

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