....
(Original Signature of Member)

118TH CONGRESS
2D SESSION

H. R. _____

To facilitate the growth of multidisciplinary and diverse teams that can advance the development and training of safe and trustworthy artificial intelligence systems, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

Ms. LOFGREN introduced the following bill; which was referred to the Committee on _____

_____

A BILL

To facilitate the growth of multidisciplinary and diverse teams that can advance the development and training of safe and trustworthy artificial intelligence systems, 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 ''Workforce for AI Trust

5 Act''.

SEC. 2. NSF ARTIFICIAL INTELLIGENCE RESEARCH AND EDUCATION; NIST ARTIFICIAL INTELLIGENCE GOVERNANCE WORKFORCE.

(a) NSF ARTIFICIAL INTELLIGENCE RESEARCH AND EDUCATION.——

(1) FELLOWSHIPS.—Subsection (e) of section 5401 of the National Artificial Intelligence Initiative Act of 2020 (15 U.S.C. 9451; enacted as part of title LIV of division E of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283)) is amended—

(A) in paragraph (2)—

(i) in the heading, by striking "FACULTY"; and

(ii) by adding at the end the following new subparagraph:

"(D) INTERDISCIPLINARY ARTIFICIAL INTELLIGENCE FELLOWSHIPS.—

"(i) IN GENERAL.—The Director of the National Science Foundation may support graduate and postdoctoral research fellowships for students and postdoctoral researchers from across disciplines, including social science disciplines and the humanities, by making awards through quali-

1 fied institutions of higher education for re-

2 search and related activities related to the

3 integration of ethical and responsible prac-

4 tices and principles into the design, devel-

5 opment, training, deployment, evaluation,

6 and understanding of artificial intelligence

7 systems.

8 ''(ii) USE OF AWARDS.—An institu-

9 tion of higher education shall use awards

10 under clause (i) for the following purposes:

11 ''(I) For graduate fellowships,

12 tuition, education-related fees, and

13 stipends for up to three academic

14 years.

15 ''(II) For postdoctoral fellow-

16 ships, salaries, benefits, relocation

17 costs, related conference travels, and

18 research expenses for up to three

19 years.

20 ''(III) Additional such other ex-

21 penses the Director determines appro-

22 priate.

23 ''(iii) ELIGIBILITY.—To be eligible to

24 receive an award under this subparagraph,

1 an institution of higher education receiving

2 the award shall ensure recipients—

3 "(I) are citizens, nationals, or

4 lawful permanent residents of the

5 United States;

6 "(II) demonstrate a commitment

7 to a career in advancing the topic of

8 technology ethics, including trust-

9 worthy artificial intelligence;

10 "(III) for graduate fellowships,

11 are—

12 "(aa) full-time students in

13 an eligible program at the insti-

14 tution of higher education, as de-

15 termined by the Director; or

16 "(bb) students pursuing a

17 degree on a less than full-time

18 basis, but not less than half-time

19 basis, in an eligible program at

20 the institution of higher edu-

21 cation, as determined by the Di-

22 rector; and

23 "(IV) for postdoctoral fellow-

24 ships, have a doctoral degree in an eli-

25 gible program, have received such de-

gree not earlier than five years before the date that such fellowship begins, and have a postdoctoral appointment at a host institution.

"(iv) APPLICATION.—An applicant for a fellowship shall submit to the Director of the National Science Foundation an application, in such manner, and containing such information, as the Director may require. At a minimum, the Director shall require an applicants to include in such application a description of how—

"(I) the proposed research and activities are designed to advance the field of trustworthy artificial intelligence, including ways to design, develop, train, deploy, evaluate, and understand artificial intelligence systems or deploy such systems in a trustworthy manner;

"(II) the applicant will be integrated with artificial intelligence researchers at the host institution in a role consistent with being a member

1   of an interdisciplinary or
2   transdisciplinary team; and

3   "(III) the applicant plans to dis-
4   seminate any research findings,
5   learned best practices, or technical so-
6   lutions to the broader artificial intel-
7   ligence systems research community.

8   "(v) OUTREACH.—The Director of the
9   National Science Foundation shall conduct
10   outreach to recruit fellowship applicants—

11   "(I) from diverse research insti-
12   tutions;

13   "(II) from all regions of the
14   country; and

15   "(III) from groups historically
16   underrepresented in STEM fields.

17   "(vi) ADMINISTRATIVE AGREE-
18   MENTS.—Eligible fellowships may include
19   temporary artificial intelligence-related po-
20   sitions at Federal or State agencies, na-
21   tional laboratories, private sector entities,
22   institutions of higher education, the Insti-
23   tute, or other artificial intelligence relevant
24   entities, as determined appropriate by the

1 Director of the National Science Founda-

2 tion."; and

3 (B) by adding at the end the following new

4 paragraph:

5 "(4) ARTIFICIAL INTELLIGENCE SKILLS-BASED

6 TRAINING ACROSS THE NATIONAL SCIENCE FOUNDA-

7 TION.—The Director of the National Science Foun-

8 dation shall seek to encourage the application of ar-

9 tificial intelligence systems to accelerate scientific

10 discovery and technology development across all

11 fields of STEM supported by the Foundation, in-

12 cluding by supporting the following:

13 "(A) Training for undergraduate and grad-

14 uate students and postdoctoral researchers

15 through existing technical and skills-based

16 training or certification programs and by pro-

17 viding for additional experiential learning expe-

18 riences, as appropriate.

19 "(B) Development and hosting of intra- or

20 inter-institutional workshops on the application

21 of artificial intelligence systems to new uses in

22 research, development, demonstration, testing,

23 dissemination, and evaluation.

24 "(C) Administrative and award supple-

25 ments to existing research awards to support

1 professional development experiences for grad-

2 uate students and postdoctoral researchers who

3 receive a substantial portion of their support in

4 connection with such research awards to learn

5 how to apply artificial intelligence systems to

6 their research, as determined by the Director.''.

7 (2) ETHICS.—Subsection (d) of the section

8 5401 of the National Artificial Intelligence Initiative

9 Act of 2020 (15 U.S.C. 9451) is amended by adding

10 at the end the following new paragraph:

11 ''(3) WORKSHOPS.—The Director of the Na-

12 tional Science Foundation may make awards for the

13 development and hosting of intra- or inter-institu-

14 tional workshops focused on integrating perspectives

15 and skills from multiple and diverse disciplines, in-

16 cluding social science, behavioral science, technology

17 ethics, normative ethics, and linguistics, toward the

18 deployment, evaluation, and understanding of artifi-

19 cial intelligence systems.''.

20 (3) PEER REVIEW PANELS.—Section 5401 of

21 the National Artificial Intelligence Initiative Act of

22 2020 (15 U.S.C. 9451) is amended—

23 (A) by redesignating subsection (g) as sub-

24 section (h); and

1   (B) by inserting after subsection (f) the

2   following new subsection:

3   "(g) PEER REVIEW PANELS.—As practicable and ap-

4 propriate, the Director of the National Science Founda-

5 tion shall ensure that merit review panels convened to

6 evaluate proposals related to artificial intelligence systems

7 research and related activities integrate perspectives from

8 multiple and diverse research disciplines, including re-

9 searchers from social science, technology ethics, normative

10 ethics, legal, and linguistic disciplines.".

11   (b) NIST ACTIVITIES TO SUPPORT THE ARTIFICIAL

12 INTELLIGENCE GOVERNANCE WORKFORCE.—

13   (1) SUPPORTING ACTIVITIES.—Subsection (b)

14   of section 22A of the National Institute of Stand-

15   ards and Technology Act (15 U.S.C. 278h–1) is

16   amended—

17   (A) by redesignating paragraphs (3)

18   through (5) as paragraphs (4) through (6), re-

19   spectively; and

20   (B) by inserting after paragraph (2) the

21   following new paragraph:

22   "(3) support education and workforce develop-

23   ment activities to expand the artificial intelligence

24   workforce, including careers related to helping orga-

25   nizations govern, map, measure, and manage artifi-

1 cial intelligence related risk, including testing, eval-

2 uation, verification, and validation of artificial intel-

3 ligence systems;''.

4 (2) RISK MANAGEMENT FRAMEWORK.—Sub-

5 section (c) of section 22A of the National Institute

6 of Standards and Technology Act (15 U.S.C. 278h–

7 1) is amended—

8 (A) by redesignating paragraphs (4)

9 through (6) as paragraphs (5) through (7), re-

10 spectively; and

11 (B) by inserting after paragraph (3) the

12 following new paragraph:

13 ''(4) support technical standards and guidance

14 to describe tasks, knowledge, skills, abilities, com-

15 petencies, job pathways, and work roles to guide ca-

16 reer development, education, training activities, and

17 professional certifications related to artificial intel-

18 ligence risk management, including careers related

19 to helping organizations govern, map, measure, and

20 manage artificial intelligence related risk, including

21 testing, evaluation, verification, and validation of ar-

22 tificial intelligence systems;''.