

118TH CONGRESS  
1ST SESSION

# H. R. 4498

To promote a 21st century artificial intelligence workforce.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 6, 2023

Mr. SOTO (for himself, Mrs. CHAVEZ-DEREMER, Ms. BLUNT ROCHESTER, and Mr. GARBARINO) introduced the following bill; which was referred to the Committee on Education and the Workforce, and in addition to the Committee on Science, Space, and Technology, 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 promote a 21st century artificial intelligence workforce.

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 “Jobs of the Future  
5       Act of 2023”.

6       **SEC. 2. SENSE OF CONGRESS.**

7       It is the sense of Congress that—

8               (1) while the field of artificial intelligence is  
9       evolving quickly and has potential to disrupt jobs,  
10       there are opportunities to prepare the American

1 workforce to develop and work alongside this new  
2 technology and mitigate job displacement; and

3 (2) to ensure these opportunities, it is impera-  
4 tive to identify the following:

5 (A) Data and data access necessary to  
6 properly analyze the impact of artificial intel-  
7 ligence on the United States workforce.

8 (B) Industries projected to be most im-  
9 pacted by artificial intelligence.

10 (C) Opportunities for workers and other  
11 stakeholders to influence the impact of artificial  
12 intelligence across industries.

13 (D) Demographics whose career opportuni-  
14 ties are most likely to be affected by growth of  
15 artificial intelligence.

16 (E) The skills, expertise, and education  
17 needed to develop, operate, or work alongside  
18 artificial intelligence.

19 (F) Methods to ensure necessary skills, ex-  
20 pertise, and education are accessible to all seg-  
21 ments of the current and future workforce.

22 **SEC. 3. REPORT ON ARTIFICIAL INTELLIGENCE.**

23 (a) IN GENERAL.—The Secretary of Labor and the  
24 Director of the National Science Foundation shall, jointly  
25 and in collaboration with the individuals and entities de-

1 scribed in subsection (c), prepare and submit to the Com-  
2 mittee on Education and the Workforce and the Com-  
3 mittee on Science, Space, and Technology of the House  
4 of Representatives, and the Committee on Health, Edu-  
5 cation, Labor, and Pensions and the Committee on Com-  
6 merce, Science and Transportation of the Senate—

7           (1) not later 1 year after the date of enactment  
8           of this Act, an interim report on artificial intel-  
9           ligence and its impact on the workforce of the  
10          United States, which shall include the information  
11          and recommendations listed in subsection (b); and

12          (2) not later than 1 year after the date of en-  
13          actment of this Act, a final report on artificial intel-  
14          ligence and its impact on the workforce of the  
15          United States, which shall include the information  
16          and recommendations listed in subsection (b).

17          (b) REQUIRED INFORMATION.—The following shall  
18 be included in each report submitted under subsection (a):

19           (1) An identification of the specific data relat-  
20           ing to the workforce, and the availability of such  
21           data, necessary to properly analyze the impact and  
22           growth of artificial intelligence on the workforce of  
23           the United States and outline how much of this data  
24           is privately owned, and the effectiveness of Federal,  
25           State, or industry efforts (including public-private

1 partnerships) to make privately owned data on the  
2 workforce of the United States available for Federal  
3 research purposes.

4 (2) Identification of industries and occupations  
5 projected to have the most growth in artificial intel-  
6 ligence use, whether the technology is likely to result  
7 in the enhancement of workers' capabilities or their  
8 replacement, and level of education currently con-  
9 sistent with industries and occupations identified.

10 (3) Identification of opportunities for workers,  
11 educators, institutions of higher education, Con-  
12 gress, or other relevant stakeholders to influence the  
13 impact of artificial intelligence on workers across  
14 various industries.

15 (4) Analysis of which demographics (including  
16 ethnic, gender, economic, age, and regional) cur-  
17 rently stand to experience expanded career opportu-  
18 nities, and which demographics currently appear  
19 most vulnerable to career displacement, due to artifi-  
20 cial intelligence.

21 (5) Analysis of the skills, expertise, and edu-  
22 cation (including computer science literacy) needed  
23 to develop, operate, or work alongside artificial intel-  
24 ligence over the next two decades, as compared to  
25 the levels of such expertise and education among the

1 workforce as of the date of enactment of this Act,  
2 with a differentiation between core competencies re-  
3 quired across the entire workforce and competencies  
4 required within the industries and occupations iden-  
5 tified in paragraph (2).

6 (6) Identification of methods by which nec-  
7 essary skills, expertise, and education can be effec-  
8 tively delivered to various segments of the United  
9 States workforce.

10 (7) Identification of industry leaders and insti-  
11 tutions of higher education at the forefront of re-  
12 search and application of artificial intelligence in the  
13 industries and occupations identified in paragraph  
14 (2).

15 (8) Identification of the resources and opportu-  
16 nities required for institutions of higher education,  
17 including two year institutions, minority-serving in-  
18 stitutions, and institutions of higher education serv-  
19 ing rural areas to deliver skills, expertise, and edu-  
20 cation identified in paragraph (5).

21 (9) Recommendations to alleviate workforce dis-  
22 placement, prepare future workforce members for  
23 the artificial-intelligence economy, and any other rel-  
24 evant observations or recommendations within the

1 field of artificial intelligence, which shall include rec-  
2 ommendations on—

3 (A) methods to expand public access to  
4 privately-owned workforce data, for the purpose  
5 of researching the effect of emerging tech-  
6 nologies on the United States workforce;

7 (B) avenues for stakeholders (workers,  
8 educators, institutions of higher education, Con-  
9 gress, or other relevant stakeholders) to effec-  
10 tively mitigate perceived negative impacts of ar-  
11 tificial intelligence on segments of the United  
12 States workforce;

13 (C) methods to reskill or otherwise offset  
14 socioeconomic harm to demographics identified  
15 in paragraph (4) as most vulnerable to career  
16 displacement, due to artificial intelligence;

17 (D) methods to encourage low cost, open  
18 source sharing of industry valued credentials  
19 certifying the types of skills, expertise, and edu-  
20 cation identified in paragraph (5);

21 (E) methods to ensure core skills and com-  
22 petencies identified in paragraph (5) can be  
23 evaluated, updated, and made public by relevant  
24 stakeholders as needed, given rapid develop-  
25 ments in the field of artificial intelligence;

1 (F) methods to ensure 2-year institutions  
2 of higher education, minority-serving institu-  
3 tions, and institutions of higher education serv-  
4 ing rural areas receive resources and opportuni-  
5 ties identified in paragraph (8);

6 (G) methods to promote knowledge sharing  
7 and capacity building between industry leaders  
8 and institutions identified in paragraph (7) and  
9 two year institutions, minority-serving institu-  
10 tions, and rural institutions of higher education;  
11 and

12 (H) other methods to ensure that the  
13 skills, expertise, and education needed to de-  
14 velop, operate, or work alongside artificial intel-  
15 ligence are delivered to vulnerable demographics  
16 identified in paragraph (4), rural workers, and  
17 other historically underserved segments of the  
18 United States workforce (to include workers  
19 with disabilities).

20 (c) COLLABORATION.—In preparing the report under  
21 subsection (a), the Secretary of Labor and the Director  
22 of the National Science Foundation shall collaborate,  
23 through a series of public meetings, roundtables or other  
24 methods, with—

1           (1) local educational agencies, institutions of  
2 higher education (including community colleges, mi-  
3 nority-serving institutions of higher education, and  
4 institutions of higher education serving rural areas),  
5 workforce-training organizations, and National Lab-  
6 oratories;

7           (2) a broad range of industrial stakeholders in  
8 the technology, manufacturing, employment, human  
9 resources, and service sectors, including companies  
10 (large and small), think tanks, and industry organi-  
11 zations;

12           (3) the National Academies of Science, includ-  
13 ing by sharing relevant information obtained as a re-  
14 sult of the study conducted under section 5105 of  
15 the National Artificial Intelligence Initiative Act of  
16 2020; and

17           (4) the Secretary of Commerce, the Secretary of  
18 Education, the Director of the White House Office  
19 of Science and Technology Policy, the Director of  
20 the National Artificial Intelligence Initiative Office,  
21 the National Cyber Director, and the heads of any  
22 other Federal agency the Secretary of Labor and the  
23 Director of the National Science Foundation deter-  
24 mine appropriate.



1 **SEC. 4. DEFINITIONS.**

2 In this Act:

3 (1) **ARTIFICIAL INTELLIGENCE.**—The term “ar-  
4 tificial intelligence” has the meaning given the term  
5 in section 5002 of the National Artificial Intelligence  
6 Initiative Act of 2020 (15 U.S.C. 9401).

7 (2) **COMMUNITY COLLEGE.**—The term “commu-  
8 nity college” has the meaning given the term “junior  
9 or community college” in section 312(f) of the High-  
10 er Education Act of 1965 (20 U.S.C. 1058(f)).

11 (3) **INSTITUTION OF HIGHER EDUCATION.**—The  
12 term “institution of higher education” has the  
13 meaning given the term in section 102 of the Higher  
14 Education Act of 1965 (20 U.S.C. 1002).

15 (4) **LOCAL EDUCATIONAL AGENCY.**—The term  
16 “local educational agency” has the meaning given  
17 the term in section 8101 of the Elementary and Sec-  
18 ondary Education Act of 1965 (20 U.S.C. 7801).

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