

115TH CONGRESS  
2D SESSION

# H. R. 4829

To promote a 21st century artificial intelligence workforce.

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## IN THE HOUSE OF REPRESENTATIVES

JANUARY 18, 2018

Mr. SOTO (for himself, Mr. KRISHNAMOORTHY, Mr. FERGUSON, Mrs. DINGELL, Mr. MITCHELL, Mr. TAKANO, Mr. NORMAN, Ms. BLUNT ROCHESTER, Mr. GALLAGHER, Mrs. COMSTOCK, Mr. SCOTT of Virginia, and Mr. COURTNEY) introduced the following bill; which was referred to the Committee on Education and the Workforce

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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 “Artificial Intelligence  
5 Job Opportunities and Background Summary Act of  
6 2018” or the “AI JOBS Act of 2018”.

7 **SEC. 2. SENSE OF CONGRESS.**

8 It is the sense of Congress that technology can im-  
9 prove the lives of individuals, but can also disrupt jobs,  
10 and for this reason, innovation should be encouraged while

1 training and retraining American workers for our 21st  
2 century economy.

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

4 (a) REPORT REQUIREMENTS.—Not later than 1 year  
5 after the date of the enactment of this Act, the Secretary  
6 of Labor, in collaboration with the individuals and entities  
7 described in subsection (b), shall prepare and submit to  
8 the Committee on Education and the Workforce of the  
9 House of Representatives and the Committee on Health,  
10 Education, Labor, and Pensions of the Senate, a report  
11 on artificial intelligence and its impact on the workforce,  
12 which shall include the following:

13 (1) Outline the specific data, and the avail-  
14 ability of such data, necessary to properly analyze  
15 the impact and growth of artificial intelligence.

16 (2) Identification of industries that are pro-  
17 jected to have the most growth in artificial intel-  
18 ligence use, and whether the technology will result in  
19 the enhancement of workers' capabilities or their re-  
20 placement.

21 (3) Analysis of the expertise and education (in-  
22 cluding computer science literacy) needed to develop,  
23 operate, or work alongside artificial intelligence over  
24 the next two decades, as compared to the levels of

1 such expertise and education among the workforce  
2 as of the date of enactment of this Act.

3 (4) Analysis of which demographics (including  
4 ethnic, gender, economic, age, and regional) may ex-  
5 perience expanded career opportunities, and which  
6 such demographics may be vulnerable to career dis-  
7 placement, due to artificial intelligence.

8 (5) Any recommendations to alleviate workforce  
9 displacement, prepare future workforce members for  
10 the artificial-intelligence economy, and any other rel-  
11 evant observations or recommendations within the  
12 field of artificial intelligence.

13 (b) COLLABORATION.—In preparing the report under  
14 subsection (a), the Secretary of Labor shall collaborate,  
15 through a series of public meetings, roundtables or other  
16 methods, with—

17 (1) local educational agencies, institutions of  
18 higher education (including community colleges),  
19 workforce-training organizations, and National Lab-  
20 oratories;

21 (2) a broad range of industrial stakeholders in  
22 the technology and manufacturing sectors, including  
23 companies (large and small), think tanks, and indus-  
24 try organizations; and

1           (3) the Secretary of Commerce, the Director of  
2           the Bureau of the Census, and the heads of any  
3           other Federal agency the Secretary of Labor deter-  
4           mines appropriate.

5 **SEC. 4. DEFINITIONS.**

6           In this Act:

7           (1) **ARTIFICIAL INTELLIGENCE.**—The term “ar-  
8           tificial intelligence” means systems that—

9                   (A) think like humans (including cognitive  
10                  architectures and neural networks);

11                   (B) act like humans (such as passing the  
12                  Turing test using natural language processing,  
13                  knowledge representation, automated reasoning,  
14                  and learning);

15                   (C) think rationally (such as logic solvers,  
16                  inference, and optimization);

17                   (D) act rationally (such as intelligent soft-  
18                  ware agents and embodied robots that achieve  
19                  goals via perception, planning, reasoning, learn-  
20                  ing, communicating, decision-making, and act-  
21                  ing); or

22                   (E) automate or replicate intelligent behav-  
23                  ior.

24           (2) **COMMUNITY COLLEGE.**—The term “commu-  
25           nity college” has the meaning given the term “junior

1 or community college” in section 312(f) of the High-  
2 er Education Act of 1965 (20 U.S.C. 1058(f)).

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

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

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