

116TH CONGRESS
1ST SESSION

H. R. 3611

To provide for a pilot project for a nationwide network of secure computing enclaves for federally funded research in universities, and other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 2, 2019

Mr. BABIN (for himself, Mr. WEBER of Texas, Mr. MARSHALL, Mr. NORMAN, Mr. GONZALEZ of Ohio, and Mr. BAIRD) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Armed Services, 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

A BILL

To provide for a pilot project for a nationwide network of secure computing enclaves for federally funded research in universities, and 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 “Securing American Re-
5 search From Cyber Theft Act”.

1 **SEC. 2. PURPOSE.**

2 The purposes of this Act are to help institutions of
3 higher education protect federally funded research from
4 cyber theft and interference by—

5 (1) directing the Networking and Information
6 Technology Research and Development Program to
7 provide for support and guidance on improving the
8 security of academic computing and networking sys-
9 tems that process, store, and transmit federally
10 funded research; and

11 (2) establishing a pilot program to support re-
12 gional secure computing enclaves for academia to
13 provide researchers with secure data storage and
14 adequately protect Federal Government data.

15 **SEC. 3. NETWORKING AND INFORMATION TECHNOLOGY**
16 **RESEARCH AND DEVELOPMENT UPDATE.**

17 Section 101 of the High-Performance Computing Act
18 of 1991 (15 U.S.C. 5511) is amended—

19 (1) by inserting after subparagraph (I) the fol-
20 lowing:

21 “(J) provide for improving the security, re-
22 liability, and resiliency of computing and net-
23 working systems used by institutions of higher
24 education and other nonprofit research institu-
25 tions for the processing, storage and trans-

1 mission of sensitive federally funded research
2 and associated data;” and

3 (2) by redesignating subparagraphs (J) through
4 (O) as subparagraphs (K) through (P), respectively.

5 **SEC. 4. COMPUTING ENCLAVE PILOT PROGRAM.**

6 (a) IN GENERAL.—The Secretary of Defense, in co-
7 ordination with the Director of the National Institute of
8 Standards and Technology, the Director of the National
9 Science Foundation, and the Secretary of Energy, shall
10 establish a pilot program to ensure the security of feder-
11 ally supported research data and to assist regional institu-
12 tions of higher education and their researchers in compli-
13 ance with regulations regarding the safeguarding of sen-
14 sitive information and other relevant regulations and Fed-
15 eral guidelines.

16 (b) STRUCTURE.—In carrying out the pilot program
17 established pursuant to subsection (a), the Secretary shall
18 select three institutions of higher education from among
19 institutions classified under the Indiana University Center
20 for Postsecondary Research Carnegie Classification as a
21 doctorate-granting university with a very high level of re-
22 search activity, and with a history of working with secure
23 information for the development, installation, mainte-
24 nance, or sustainment of secure computing enclaves.

25 (c) REGIONALIZATION.—

1 (1) In selecting universities pursuant to sub-
2 section (b), the Secretary of Defense shall give pref-
3 erence to institutions of higher education with the
4 capability of serving other regional universities.

5 (2) The enclaves should be geographically dis-
6 persed to better meet the needs of regional interests.

7 (d) PROGRAM ELEMENTS.—The Department of De-
8 fense shall work with Institutions of Higher Education se-
9 lected pursuant to subsection (b) to—

10 (1) develop an approved design blueprint for
11 compliance with Federal data protection protocols;

12 (2) develop a comprehensive and confidential
13 list, or a bill of materials, of each binary component
14 of the software, firmware, or product that is re-
15 quired to deploy additional secure computing en-
16 claves;

17 (3) develop templates for all policies and proce-
18 dures required to operate the secure computing en-
19 clave in a research setting;

20 (4) develop a system security plan template;
21 and

22 (5) develop a process for managing a plan of
23 action and milestones for the secure computing en-
24 clave.

1 (e) DURATION.—The pilot program established pur-
2 suant to subsection (a) shall operate for not less than 3
3 years.

4 (f) REPORT.—

5 (1) IN GENERAL.—The Secretary shall report
6 to the Committee on Armed Services of the House,
7 the Committee on Armed Services of the Senate, the
8 Committee on Science, Space, and Technology of the
9 House, and the Committee on Commerce, Science,
10 and Transportation of the Senate not later than 6
11 months after the completion of the pilot program
12 under subsection (a).

13 (2) CONTENTS.—The report required under
14 subsection (f)(1) shall include—

15 (A) an assessment of the pilot program
16 under subsection (a), including an assessment
17 of the security benefits provided by such secure
18 computing enclaves;

19 (B) recommendations related to the valued
20 of expanding the network of secure computing
21 enclaves; and

22 (C) recommendations on the efficacy of the
23 use of secure computing enclaves by other Fed-
24 eral agencies in a broader effort to expand se-
25 curity of Federal research.

1 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
2 authorized to be appropriated to the Secretary,
3 \$38,000,000 for fiscal years 2020 through 2022, to carry
4 out the activities outlined in this section.

5 **SEC. 5. DEFINITIONS.**

6 In this Act:

7 (1) INSTITUTION OF HIGHER EDUCATION.—The
8 term “institution of higher education” has the
9 meaning given such term in section 101 of the High-
10 er Education Act of 1965 (20 U.S.C. 1001).

11 (2) SECRETARY.—The term “Secretary” means
12 the Secretary of Defense.

○