

April 12, 2020

The Honorable Richard Durbin Chairman Senate Committee on the Judiciary 152 Dirksen Senate Office Building Washington, DC 20510 The Honorable Charles Grassley Ranking Member Senate Committee on the Judiciary 224 Dirksen Senate Office Building Washington, DC 20510

Dear Chairman Durbin and Ranking Member Grassley:

As the Chair and Vice Chair of the National Security Commission on Artificial Intelligence (NSCAI), we write to urge you to consider offering an amendment to the Endless Frontiers Act that would exempt science, technology, engineering, and mathematics (STEM) advanced-degree holders from the green card numerical limits. Suggested amendment language is attached.

The United States is in a global technology competition that will determine our position in the global economy, our military superiority, and the robustness of our national security. This competition will not be won solely by the nation with the best technology. It will be won by the nation with the best, most diverse, and technologically-advanced talent. To this end, in our Final Report, NSCAI recommended a three-pronged approach to growing talent that includes cultivating more talent at home, recruiting and retaining talent from foreign countries, and implementing robust research protection protocols to prevent technology transfer.

The United States has historically produced world-class technologists and been a global leader in technological innovation. Unfortunately, we no longer have the supply of homegrown talent to meet the increasing demand for advanced technologists in the government or private sector. According to Code.org, there are 410,020 U.S. computer science jobs available today with only 71,226 qualified computer scientists graduated on an annual basis to fill these openings.³ Until we can meet the demand domestically, we must recruit advanced technical talent from beyond our shores.

We don't need to look too hard; the talent wants to come to the United States. Our nation's education system remains one of the best in the world and is a magnet for foreign students seeking advanced education. In fact, according to a 2020 Georgetown University Center for Security and Emerging Technology review, approximately 70 to 90 percent of foreign STEM students in American PhD programs, depending on their STEM field, wish to remain in the United States post

¹ To cultivate domestic talent, NSCAI's Final Report recommended the passage of a National Defense Education Act II to bolster primary, secondary, and tertiary-level STEM education, as well as create new pipelines to technology careers in government. See Chapter 6 on *Winning the Technical Talent in Government* and Chapter 10 on *The Talent Competition* at https://www.nscai.gov/2021-final-report/.

² Chapter 14 of the NSCAI Final Report, *Technology Protection*, provides a suite of recommendations to implement in order to provide stronger research protections and prevent technology transfer. We attached two legislative recommendations to bolster research protections. See https://www.nscai.gov/2021-final-report/.

³ See https://code.org/promote.



graduation.⁴ Yet, many advanced degree students depart the United States after graduating due to the lack of pathways and barriers to remain.

We recommend that Congress grant lawful permanent residence to any foreign national who:

- graduates from an accredited U.S. institution of higher education with a doctoral degree in a STEM-related field in a residential or mixed residential and distance program;
- is vetted and deemed to not pose a national security risk; and
- has a job offer in a STEM-related field.

We should allow for an exemption for these foreign national STEM doctoral graduates to bolster our available national workforce without their numbers being counted toward existing permanent residency caps.

We, as a nation, should reverse the troubling trend of educating the world's best and brightest only to let them return home to work for our competitors. As we state in our Final Report: "[n]ations that can successfully attract and retain highly skilled individuals gain strategic and economic advantages over competitors." We call on Congress to help us meet these talent demands by expanding green cards for advanced-degree holders via an amendment to the Endless Frontiers Act.

China aims to challenge America's technological leadership, military superiority, and its broader position in the world. Emerging technologies are driving economic growth and national competitiveness. We cannot sit idly. We must act now, and the first step is having the talent to take action. The future of American economic and national security depend on it.

Sincerely,

Dr. Eric Schmidt

Chairman

The Honorable Robert O. Work

Vice Chairman

⁴ Trends in the U.S. Intention-to-Stay Rates of International Ph.D. Graduates Across Nationality and STEM Fields, Center for Security and Emerging Technology at 7 (Apr. 2020), https://cset.georgetown.edu/wp-content/uploads/CSET-Trends-in-U.S.-Intention-to-Stay-Rates.pdf.



Proposed Legislative Text

SEC.___.—STEM GRADUATES FROM ACCREDITED UNITED STATES UNIVERSITIES.—

- (a) IN GENERAL.—Section 201(b)(1) of the Immigration and Nationality Act (8 U.S.C. 1151(b)(1)) is amended by adding at the end the following:
 - "(F) Noncitizens who have earned advanced degrees in a field of science, technology, engineering, or mathematics ("STEM field") from an accredited United States institution of higher education."
- (b) DEFINITIONS.—Section 204 of the Immigration and Nationality Act (8 U.S.C. 1154) is amended by adding at the end the following:
 - "(m) ADVANCED STEM DEGREES FROM ACCREDITED UNITED STATES UNIVERSITIES.—For purposes of section 201(b)(1)—
 - "(1) the term 'STEM field' means a field of science, technology, engineering, or mathematics described in the most recent version of the Classification of Instructional Programs of the Department of Educationtaxonomy under the summary group of—
 - "(A) computer and information sciences and support services;
 - "(B) engineering;
 - "(C) mathematics and statistics;
 - "(D) biological and biomedical sciences;
 - "(E) physical sciences;
 - "(F) agriculture sciences; or
 - '(G) natural resources and conservation sciences.".
 - "(2) the term 'accredited United States institution of higher education' means an institution that—
 - "(A)(i) is described in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)); or
 - "(ii) is a proprietary institution of higher education (as defined in section 102(b) of such Act (20 U.S.C. 1002(b))); and
 - "(B) is accredited by an accrediting body that is itself accredited by
 - "(i) the Department of Education; or
 - "(ii) the Council for Higher Education Accreditation.".



SEC. ___.—ENHANCED REVIEW OF RISK POSED BY APPLICANTS FOR FEDERAL GRANTS.—

- (a) ENHANCED REVIEW REQUIRED.—Not later than 180 days after the date of the enactment of this Act, the Director of the Officeof Management and Budget shall revise section 200.206 of Part 2 of the Code of Federal Regulations ensure that Federal grant-making agencies maintain compliance operations to guard against malign foreign talent recruitment programs and to prescribe standardized disclosure and accountability measures to support such compliance operations.
- (b) DEFINITION.—For the purposes of this section, a "malign foreign talent recruitment program" is an effort directly or indirectly organized, managed, or funded by a foreign government to recruit science and technology professionals or students (regardless of citizenship or national origin) engaged in research funded by a federal agency to share information with or otherwise act on behalf of such foreign government.

SEC. ___.—**AMENDMENT TO FOREIGN AGENTS REGISTRATION ACT.** —Section 611 of title 22, United States Code, is amended in paragraph (1) of subsection (c) by—

- (1) Striking "and" at the end of clause (iv); and
- (2) Inserting at the end a new clause (v), as follows:
- "(v) directly or indirectly organizes, manages, or funds an effort to recruit science and technology professionals or students (regardless of citizenship or national origin) engaged in research funded by a Federal agency to share information with or otherwise act on behalf of a foreign government; and".