

Congress of the United States

Washington, DC 20515

March 16, 2018

The Honorable Tom Cole
Chairman
Subcommittee on Labor, HHS & Education
Committee on Appropriations
United States Congress
2358B - Rayburn House Office Building
Washington, DC 20515

The Honorable Rosa DeLauro
Ranking Member
Subcommittee on Labor, HHS & Education
Committee on Appropriations
United States Congress
1016 Longworth House Office Building
Washington, DC 20515

The Honorable John Culberson
Chairman
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Room H-310, The Capitol Building
Washington, DC 20515

The Honorable José Serrano
Ranking Member
Subcommittee on Commerce, Justice,
Science, and Related Agencies
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairs and Ranking Members:

As you work to develop the Fiscal Year (FY) 2019 Labor, Health and Human Services, Education and Related Agencies Appropriations bill, and FY2019 Commerce, Justice, Science and Related Agencies Appropriations bill, we write to respectfully request \$250 million for new development grants to further computer science education; and robust funding for the National Science Foundation's (NSF) Research and Related Activities (R&RA) and Education and Human Resources Directorate (EHR) to support the computer science education for all students.

Providing all students from preschool through high school access to computer science instruction is a critical step to preparing them for jobs in the 21st century global economy. According to the Level Playing Field Institute, it is estimated that there will be 1.4 million new tech jobs by 2020; however, seventy percent of those jobs will be unfulfilled at the rate American universities are producing qualified graduates for these roles. Currently, just 40 percent of all the K-12 schools in the United States offer at least one computer science course that includes programming and coding.

It is no surprise then that in 2012, the United States slipped to tenth place among Organization for Economic Co-operation and Development (OECD) nations in overall research and development as a percentage of GDP.^[1] The U.S. ranking has wavered between 10th and 9th among OECD countries since then.

Clearly, we must urgently support education in the science, technology, engineering, and mathematics (STEM) fields to ensure that our nation continues to lead in innovation. We must ensure that America's students are equipped with critical skills needed to succeed in the world economy. **This is why we respectfully request \$250 million in FY2019 for development grants which will help build on current efforts to prepare students for careers in a 21st century economy.**

The Department of Education building a program with a particular focus of supporting girls and students of color in computer science would increase enrollment and participation. In 2017, only 27 percent of the nearly 100,000 students who took an Advanced Placement computer science exam were girls. Those numbers are even starker for students of color as 5 percent of test takers were African American and 15 percent were Latino. While these numbers remain low, they doubled from 2016 because of the introduction of a new course in computer science principles – suggesting that increasing opportunities for girls and students of color works.

Recognizing that students can only be prepared if their teachers are, **we also request full funding for the National Science Foundation's (NSF) Research and Related Activities (R&RA) and Education and Human Resources Directorate (EHR).** This will build on ongoing efforts to enable rigorous computer science education in schools across the nation. Funds will support the development and assessment of prototype instructional materials, scalable and sustainable professional development models, approaches to preservice preparation for computer science teachers, and teacher resources. Full funding for both the National Science Foundation's R&RA and EHR accounts will help facilitate research into effective approaches to the teaching and learning of computer science across grades Pre K-12.

In order to lead the world in innovation, we must make an investment in our children's education now by ensuring that all children have access to computer education.

We appreciate your consideration of this request.

Sincerely,



Barbara Lee
Member of Congress



Suzan DelBene
Member of Congress

^[1] OECD (2017), *Main Science and Technology Indicators, Volume 2017 Issue 1*, OECD Publishing, Paris. Available: <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>

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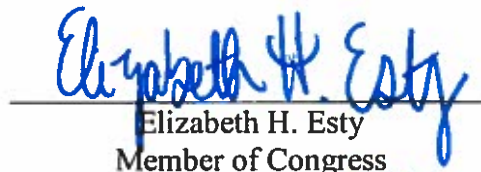
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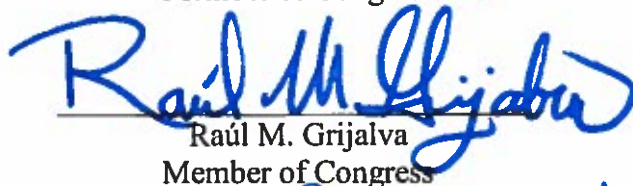
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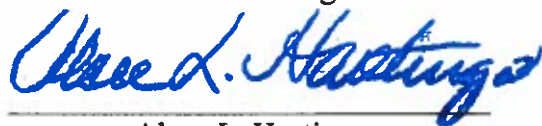
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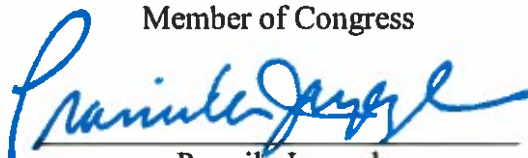
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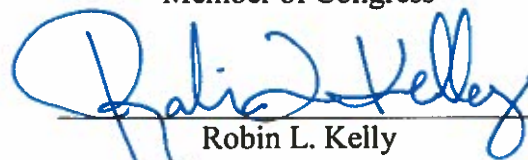
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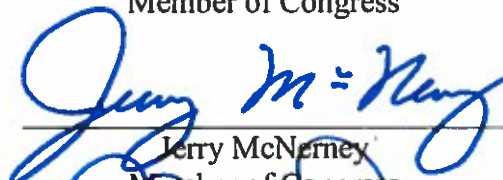
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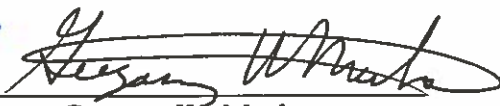


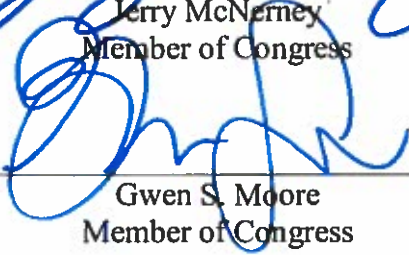
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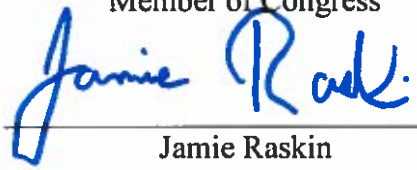

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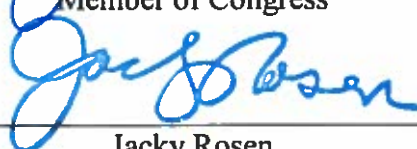

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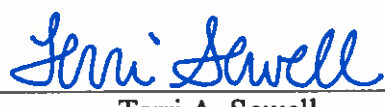

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