Jong Kwan "Jake" Lee
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The Ohio Senate Workforce and Higher Education Committee
1 Capitol Square, Ground Floor
Columbus, OH 43215

Dear Committee Chair, Senator Cirino, and Committee Members,

I am a resident in Ohio and a Computer Science faculty member at the Bowling Green State University. As an advocate for computer science education in Ohio, I am writing to request your support for K-12 computer science education funding. Specifically, I am urging you to support computer science funding in the state operating budget at $24 million over the biennium. This critical investment will provide substantial benefits to our students, workforce, and national security.

Firstly, supporting computer science education will significantly bolster our workforce. The demand for computing and technology jobs in Ohio is growing rapidly, with an average of 18,000 computing job openings each month in 2022. These jobs offer a median annual salary of about $87,000. However, we had only 1,842 computer science college graduates in 2019, leaving many of these high-paying jobs unfilled. As a national level example, there were 1.4 million unfilled software engineer developer jobs in 2020. According to the Bureau of Labor Statistics, computing and technology jobs are expected to grow at a rate of 12.5% from 2014 to 2024, nearly twice the growth of the labor market. Some of sub-areas within computer science have much higher growth rates, e.g., over 30% for cybersecurity. By increasing computer science education, we can better prepare our students for future careers in this growing field, ensuring Ohio's future workforce remains competitive.

Unfortunately, Ohio currently ranks 34th in the percentage of high schools offering computer science courses and 33rd in the completion of computer science college degrees. Only 48% of our public schools offer a computer science course, with urban and rural districts being particularly underserved. The suggested computer science funding will support Teach Computer Science Grants, the Computer Science Promise, and the Computer Science Council, helping bring computer science education to underserved and low-income school districts that currently lack access to such courses. These are aligned with the recommendations made by the State Committee on Computer Science (established by the General Assembly in HB 110) that I served on last year.

In addition to the economic benefits, computer science education also plays a vital role in national security and cybersecurity. Skilled cybersecurity professionals are needed to protect our most sensitive information, from bank accounts to military communications. However, there is currently a significant shortfall in the number of qualified workers in this field. According to Cyberseek, there were 194,000 openings for Information Security Analysts and only 141,000 workers employed in those positions in 2022, resulting in an annual talent shortfall of 53,000 workers. This gap extends to cybersecurity-related positions in general, with 561,743 additional openings requesting cybersecurity skills. In Ohio alone, there were 18,504 total cybersecurity job openings from January 2022 to December 2022. The top job titles requested by employers, such as Cybersecurity Analyst, Penetration & Vulnerability Tester, and Cybersecurity Consultant, all require education in the computing and technology space. Investing in computer science education will help prepare our students to fill these crucial roles, ensuring the security of our state and country.

I would like to ask you to support the budget amendment for allocating the $24 million in funding as follows: $8 million over two years for Teach Computer Science Grants, providing professional development to teachers and prioritizing underserved school districts; $8 million for the Computer Science Promise, giving students access to computer science courses at no cost if their district does not offer them; and $8 million for the Computer Science Council, supporting afterschool programs, summer camps, and educational enrichment partnerships across all 88 counties in Ohio.

In conclusion, I strongly urge you to support K-12 computer science education funding in the state operating budget at $24 million over the biennium. As the computer science has become a necessity in education and daily life, this investment will provide long-lasting benefits for a brighter future for Ohio and its residents.

Thank you for your consideration.

Sincerely,

JK Jake Lee

Jong Kwan "Jake" Lee