

Dear Members of the Virginia Research Investment Committee:

I am writing on behalf of George Mason University to express our support for the Commonwealth Cyber Initiative. Like our many colleagues at Virginia Tech and at our sibling institutions, we are deeply committed to strengthening the Commonwealth's position as a global leader in cyber and to effecting lasting changes that diversify and enhance Virginia's cyber economy, including creating strong federal and commercial market components.

President Sands delivered to you on December 1, 2018 a Blueprint that reflected discussions shared by many individuals representing organizations in the Commonwealth's higher education, industry, government and non-profit sectors. Five of my George Mason University colleagues and I participated in these discussions, both in person and in teleconferences. I also shared and am grateful for a number of private conversations I had with Drs. Mayer and Miner regarding the development of a more collaborative implementation strategy that would enhance the impact of the initiative, Commonwealth-wide. On November 20, Dr. Miner shared the first draft of the Blueprint for the consideration of all interested parties, and on November 28, as requested, we provided to Dr. Miner proposed changes to the draft.

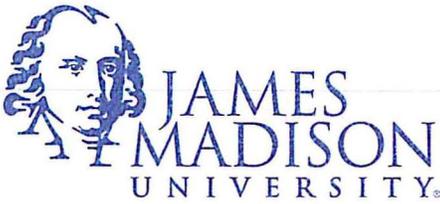
We understand that the timeline to deliver the Blueprint to you was exceedingly tight, and so some of our concerns remained unaddressed in the document provided to you by President Sands. Specifically, we respectfully draw your attention to four outstanding issues – issues we are confident can be resolved in the coming weeks.

1. We believe that each regional node should be co-led by a university representing the interests of all higher education institutions in the node and a private sector partner representing the interests of all private sector entities in the node. This ensures that universities, colleges and the industry partners with whom we look forward to working are co-invested in generating optimal CCI outcomes.
2. We do not believe there is merit to the absolute requirement that eminent scholars recruited to universities other than Virginia Tech spend one month each year at the Virginia Tech hub in Northern Virginia. We believe there is value to encouraging co-location when it clearly benefits the research and commercialization interests of the individual scholar, but that an absolute requirement is needlessly strict and possibly counter-productive.
3. We believe that the CCI governance model should be fine-tuned to ensure that a merit-based, conflict-of-interest-free allocation of CCI resources is implemented. For example, we might consider appointing a CCI board consisting of university and private sector members to oversee and approve all CCI investments in both the regional nodes and the hub.
4. We noted the request in the Blueprint for "additional funds" to scale CCI. While we believe that additional investments beyond those provided in the Biennium will be necessary to achieve the goals described in the Blueprint, to the best of our knowledge the specifics of the request were not discussed with CCI partners. We believe further discussion about this, including the possibility of re-allocation of funds between Biennium and "additional fund" components, would be productive.

We do hope you will find this input helpful to the deliberation process. We are grateful for the opportunity to work with our colleagues at Virginia Tech, our sibling institutions, our industry partners and you to advance the Commonwealth's cyber economy.

Sincerely yours,

Deborah Crawford, Ph.D.  
Vice President for Research  
George Mason University



November 26, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Mr. Blake,

I write to you today to express my support for the Commonwealth Cyber Initiative (CCI) Blueprint that will be submitted to the Virginia Research Investment Committee on December 1st.

We believe CCI will connect public institutions of higher education across Virginia with industry partners to develop a collaborative ecosystem of research, innovation, commercialization, and learning. This collaborative ecosystem will help establish the Commonwealth as a world leader in cybersecurity while also striving to close our existing workforce gap.

Capitalizing on the existing research capabilities across many fields related to cyberphysical system security at Virginia's institutions of higher education will help us establish focused areas of research and innovation we need to move the Commonwealth forward.

James Madison University appreciates the opportunity to have served on the CCI Blueprint Executive Committee and participated in the Blueprint's development. We look forward to participating in the implementation of this initiative going forward. If you have any questions or concerns, please contact me directly at (insert contact information).

Sincerely,

Jonathan R. Alger  
President

JRA/deb

Office of  
THE PRESIDENT  
MSC 7608  
91 Alumnae Dr.  
Harrisonburg, VA 22807  
540.568.6868 Phone



We see the future in you.

November 29, 2018

Mr. Peter Blake, Director  
State Council of Higher Education for Virginia  
101 N. 14th Street, 10th Floor  
James Monroe Building  
Richmond, VA 23219

Dear Mr. Blake:

Norfolk State University strongly supports the Commonwealth Cyber Initiative Blueprint and looks forward to a continued partnership with Virginia Tech as we collaboratively lead the Commonwealth toward the forefront of cybersecurity technologies.

Norfolk State has long been a leader in cybersecurity education, garnering highly coveted designations as a Center of Academic Excellence by the National Security Agency and the Department of Homeland Security. The University offers bachelors and masters degree programs in cybersecurity and information assurance. Since 2010, NSU has won 18 major cybersecurity grants and contracts totaling \$42 million and has a history of partnering with federal agencies and laboratories, industry and other universities resulting in designation as a Department of Defense Center of Excellence in Cybersecurity and Department of Energy Cybersecurity Consortium Leader.

The University recently opened a \$4 million leading-edge facility consolidating its cybersecurity research and education. The 6,000-square-foot Cybersecurity Complex provides an enterprise-grade datacenter for cybersecurity research and experimentation, four research and training labs, workstations for 120 students, offices for 16 faculty members and a lab dedicated to the emerging field of cyberpsychology. Research areas will also include Digital Forensics, Cloud Computing, Wireless Security, Wireless Sensor Networks, Big Data Analysis, Security Policy, and Intelligent Intrusion Detection Systems. The complex houses the Center of Excellence in Cyber Security where faculty and students work on developing a Cyber Analysis, Simulation, and Experimentation Environment.

The Commonwealth Cyber Initiative Blueprint is an excellent example of what is possible when Virginia's institutions of higher education work together. Norfolk State looks forward to exploring opportunities to contribute proactively within the Tidewater regional node, and will continue its efforts to expand existing capabilities through partnerships with other universities and industry.

Sincerely,

Melvin T. Stith, Sr., Ph.D.  
Interim President



**OLD DOMINION UNIVERSITY**

Office of the President

Koch Hall  
Norfolk, Virginia 23529  
Telephone: (757) 683-3159  
FAX: (757) 683-5679

December 6, 2018

Dr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Dr. Blake,

*Peter*  
I am writing to offer my support for the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1st.

The need to expand both research and education in cybersecurity is clear. Here at Old Dominion University, we have grown our cybersecurity research programming significantly through collaborative research with our partners. Our cybersecurity academic programming has also grown dramatically. The only problem we face is keeping up with demand for cybersecurity graduates.

By connecting Virginia's institutions of higher education, we can create a collaborative ecosystem of research, innovation, commercialization, and learning that is greater than the sum of its parts, establishing the Commonwealth as a world leader in cybersecurity. We support CCI's mission to connect Virginia's institutions of higher education with industry to create a Commonwealth-wide network of regional ecosystems. We have seen first-hand how this approach can work through the regional efforts Old Dominion University has led in Hampton Roads. I look forward to helping spread these ideas across Virginia.

Institutions of higher education across Virginia have research and innovation capabilities that can contribute to CCI's greater focus on cyberphysical system security. By investing in and connecting a collaborative research system, CCI will help us establish focused research and innovation programs to move the Commonwealth forward. ODU strongly supports the goal of providing CCI funds to recruit and support eminent researchers across the CCI network to enhance innovation and commercialization in each regional node.

Old Dominion University appreciates the opportunity to have contributed to the Blueprint development through our service on the CCI Blueprint Executive Committee and co-chair of the Educational Programs and Experiential Learning working group. We look forward to participating in CCI implementation. If you have any questions or concerns, please contact me directly at (757) 683-3159.

Sincerely,



John R. Broderick  
President

**RADFORD**  
**UNIVERSITY**

Brian O. Hemphill, Ph.D.  
President

November 30, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, Virginia 23219

Dear Mr. Blake:

Please accept this letter of support from Radford University for the Commonwealth Cyber Initiative Blueprint to be submitted to the Virginia Research Investment Committee on December 1, 2018. By connecting and growing the cybersecurity research and education capabilities of Virginia's institutions of higher education, Commonwealth Cyber Initiative will create a collaborative ecosystem of research, innovation, commercialization, and learning that establishes the Commonwealth of Virginia as a global leader in cybersecurity. By developing a network-of-networks that connect regional higher education and industry strengths, we will enhance Virginia's economic competitiveness.

Higher education institutions across Virginia have research and innovation capabilities that can contribute to the Commonwealth Cyber Initiative Blueprint's greater focus on cyberphysical system security. By building a collaborative research system focused on cyberphysical system security, we will expand the diversification and growth of Virginia's cyber economy.

Radford University appreciates the opportunity to have contributed to the Blueprint's development through participation on the Advisory Committee. As a participating institution and strong partner, we look forward to the opportunity to work with Virginia Tech and other institutions in our region and the Commonwealth to implement this initiative as we move forward together. If you have any questions, please do not hesitate to contact me.

Sincerely,



Brian O. Hemphill, Ph.D.  
President

cc: Tim Sands, Ph.D., President, Virginia Tech



November 28, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Peter:

I wanted to reach out to you and express my support for the Commonwealth Cyber Initiative (CCI) Blueprint that will be submitted to the Virginia Research Investment Committee on December 1, 2018.

CCI's goal of establishing a collaborative ecosystem of cybersecurity research, innovation, commercialization, and learning will position the Commonwealth as a leader in the cybersecurity arena for decades to come.

The University of Mary Washington is uniquely positioned in our region to contribute to the goal of filling the large gap in cybersecurity jobs and developing a workforce to fill those jobs in partnership with Germanna Community College and Northern Virginia Community College. These partnerships will position UMW as a leader in the Fredericksburg region to create a workforce that can meet the cybersecurity needs and produce highly skilled graduates.

The University of Mary Washington appreciates the opportunity to have had representatives on the CCI Blueprint Advisory Council and to have collaborated on the development of the Blueprint. We look forward to continuing that collaboration on the implementation of CCI going forward. The implementation and selection of the nodes will be critical, as Virginia strives to produce adaptive, innovative, and talented workers to support the cybersecurity needs in Virginia and to support a 21<sup>st</sup> century economy for years to come.

I would be happy to answer any questions you might have and look forward to working with you on these and other matters impacting higher education in the Commonwealth.

Sincerely,

Troy D. Paino, J.D., Ph.D.  
President

  
**UNIVERSITY of VIRGINIA**  
OFFICE OF THE PRESIDENT

December 10, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 North 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Peter,

I am writing to convey my support for the programs described in the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1st.

Connecting the cybersecurity research and educational programs across Virginia's public institutions of higher education will create an ecosystem that is greater than the sum of its parts, establishing the Commonwealth as a world leader in cybersecurity. By joining this network with industry partners, CCI will develop a collaborative ecosystem of research, innovation, commercialization, and learning.

The promise of cyber-physical systems to grow the global economy is well documented, and Virginia has the opportunity to lead the development and commercialization of cybersecurity technologies to enable that future. CCI will build on existing research strengths at Virginia's institutions of higher education to help us establish focused research and innovation programs to move the Commonwealth forward.

Through UVA's leadership at the National Academies of Sciences to define for the nation the emerging field of cyber-physical systems and strategies for a 21<sup>st</sup> Century cyber-physical systems education, and the establishment of the Link Lab, a first-of-its-kind incubator for cyber-physical systems R&D and workforce preparation, we are very well-poised to participate and contribute to the success of the CCI.

The University of Virginia appreciates the opportunity to have served on the CCI Blueprint Executive Committee and collaborated on the Blueprint's development.

Best,



James E. Ryan

c: Melur K. Ramasubramanian, Ph.D.  
Vice President for Research



# VCU

December 5, 2018

**Virginia Commonwealth University  
Office of the President**

910 West Franklin Street  
Box 842512  
Richmond, Virginia 23284-2512

**804 828-1200 • Fax: 804 828-7532**  
TDD: 1-800-828-1120  
president@vcu.edu

Mr. Peter Blake  
Director  
State Council of Education for Virginia  
101 North 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
Richmond, Virginia 23219

Dear Peter:

I am writing in support of the programs described in the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1.

Through connection of the cybersecurity research and educational programs of Virginia's public institutions of higher education, an ecosystem that is greater than the sum of its parts will be created. These programs will establish the Commonwealth as a world leader in cybersecurity. The CCI will develop a collaborative ecosystem of research, innovation, commercialization, and learning, by joining this network with industry partners.

Virginia has the opportunity to lead the development and commercialization of cybersecurity technologies to enable cyber-physical systems to grow the local, national and global economy. Building on existing research strengths at Virginia's institutions of higher education, CCI will help us establish focused research and innovation programs to move cybersecurity forward in the Commonwealth.

Virginia Commonwealth University appreciated the opportunity to have collaborated on the development of the Commonwealth Cyber Initiative Blueprint. We look forward to participating in the CCI network. If you have any questions or concerns, please contact me directly at [president@vcu.edu](mailto:president@vcu.edu) or at 804-828-1200.

Best wishes.

Sincerely,

A handwritten signature in black ink that reads "Michael Rao".

Michael Rao  
President  
VCU and VCU Health System



December 6, 2018

Mr. Peter Blake  
Director  
State Council of Higher Education for Virginia  
101 14<sup>th</sup> Street, 9<sup>th</sup> Floor  
Richmond, VA 23219

Dear Peter:

On behalf of the Virginia Community College System and its 23 colleges, I am writing in full support of the Commonwealth Cyber Initiative Blueprint delivered to the Virginia Research Investment Committee on December 1, and would appreciate your sharing this letter of support with them.

The CCI Blueprint will ensure Virginia as a global leader in securing cyberphysical programs and address Virginia's current workforce gap and today's new economy. Moreover, the Blueprint complements the tech-talent pipeline emphasis that was such a critical component of the Commonwealth's success in landing the Amazon HQ2 project.

As a partner in the preparation of the Blueprint, the VCCS recognizes the importance of developing a talented cybersecurity workforce. Five of our colleges are designated as Centers of Academic Excellence for 2-Year Colleges (CAE2Y), an award established by the National Security Agency and the Department of Homeland Security; Northern Virginia College is a national Center of Academic Excellence leader. In addition, five of our colleges also have guaranteed articulation agreements with Virginia Tech, George Mason University, and Old Dominion University to be able to move students seamlessly from community college cybersecurity programs into baccalaureate degrees. We encourage dual enrollment pathways in high school to increase the pipeline of students in cybersecurity and information assurance programs, designing maps from certificates to associate degrees to baccalaureate degrees that align with job requirements so that students can transition seamlessly to the workforce or higher levels of education.

Thank you for the opportunity to communicate the Virginia Community College System's full support of the Commonwealth Cyber Initiative Blueprint to the members of the Virginia Research Investment Committee.

Sincerely,

A handwritten signature in black ink that reads "Glenn DuBois".

Glenn DuBois  
Chancellor

c. Timothy D. Sands, President, Virginia Tech



Makola M. Abdullah, Ph.D.  
President

**VIRGINIA STATE UNIVERSITY**  
VIRGINIA STATE, VIRGINIA 23806  
P.O. Box 9001  
(804) 524-5070  
(804) 524-6506 FAX

November 30, 2018

Dear Mr. Peter Blake:

I write to you today to convey my support for the programs described in the Commonwealth Cyber Initiative (CCI) Blueprint that will be submitted to the Virginia Research Investment Committee on December 1, 2018.

Connecting the cybersecurity research and educational programs Virginia's public institutions of higher education will create an ecosystem that is greater than the sum of its parts, establishing the Commonwealth as a world leader in cybersecurity. By joining this network with industry partners, CCI will develop a collaborative ecosystem of research, innovation, commercialization, and learning.

The promise of cyberphysical systems to grow the global economy is well documented, and Virginia has the opportunity to lead the development and commercialization of cybersecurity technologies to enable that future. CCI will build on existing research strengths at Virginia's institutions of higher education to help us establish focused research and innovation programs to move the Commonwealth forward.

Virginia State University appreciates the opportunity to have collaborated on the Blueprint's development. We look forward to participating in the CCI network. Furthermore, we hope to become a primary contributor for this initiative and play a greater role as we continue our work of providing transformative experiences for our students as well as increase the diversity in the STEM fields.

If you have any questions or concerns, contact Mr. Osubi Craig, special assistant to the president for strategic initiatives and director of government relations, at (804) 524.5247.

Sincerely,

A handwritten signature in blue ink, consisting of several overlapping, sweeping strokes that form the name 'Makola M. Abdullah'.

Makola M. Abdullah, Ph.D.  
President



December 6, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Mr. Blake,

I write to you today to express my support for the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1st.

Investing in research and talent development in the Commonwealth is critical to ensuring we maintain and advance our leadership position in cybersecurity. CCI represents a unique opportunity to make Virginia a leader in cybersecurity research, innovation, commercialization, and learning. Connecting Virginia's institutions of higher education in a strong Network will provide companies a single point of access for research collaborations and talent development in cybersecurity.

I am enthusiastic about the CCI's potential to contribute to research in cyberphysical system security. A leading research and innovation capability at the Hub focused on securing the Internet of Things, with a focus on 5G communications and artificial intelligence and machine learning, connected to growing expertise and activity at Nodes across the Commonwealth, will support innovation in sectors across the economy, including energy.

I appreciated the opportunity to participate in the development of the CCI Blueprint. We look forward to participating in the implementation of this initiative going forward. If you have any questions or concerns, please contact me directly at 804-819-2435 or via email at [Rodney.Blevins@dominionenergy.com](mailto:Rodney.Blevins@dominionenergy.com).

Sincerely,

A handwritten signature in black ink, appearing to read "P. Rodney Blevins", with a stylized flourish at the end.

P. Rodney Blevins  
Senior Vice President and Chief Information Officer  
Dominion Energy, Inc.

December 6, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

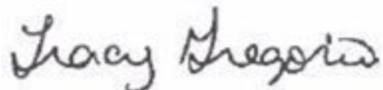
Dear Mr. Blake,

I write to you today to express my support for the Commonwealth Cyber Initiative (CCI) Blueprint submitted to the Virginia Research Investment Committee on December 1<sup>st</sup>.

I have seen first-hand how partnering regionally can create new opportunities in research and workforce development in cybersecurity. I look forward to the potential synergies that will come from connecting industry, government, and institutions of higher education across the Commonwealth. This collaborative ecosystem will help establish the Commonwealth as a world leader in cybersecurity while also striving to close our existing workforce gap.

I appreciated the opportunity to serve on the CCI Blueprint Executive Committee and co-chair the Partnerships and Investment working group. This has been a collaborative and inclusive process, and I look forward to CCI's implementation. If you have any questions or concerns, please contact me directly at [Tracy@g2-ops.com](mailto:Tracy@g2-ops.com) or 757-578-9092.

Sincerely,



Tracy Gregorio  
President  
G2 Ops, Inc.

December 6, 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Dear Mr. Blake,

I write to you today to express my support for the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1st.

Investing in research and talent development in the Commonwealth is critical to ensuring we maintain and advance our leadership position in cybersecurity. CCI represents a unique opportunity to make Virginia a leader in cybersecurity research, innovation, commercialization, and learning. Connecting Virginia's institutions of higher education in a strong Network will provide companies a single point of access for research collaborations and talent development in cybersecurity and cyberphysical system security.

I appreciated the opportunity to participate in the development of the CCI Blueprint. We look forward to participating in the implementation of this initiative going forward. If you have any questions or concerns, please contact me directly at 703-983-2943.

Sincerely,

A handwritten signature in black ink, appearing to read "Gabriel F. Galvan". The signature is fluid and cursive, with a large initial "G" and "F".

Gabriel F. Galvan

Executive Director

The MITRE Corporation

7 December 2018

Mr. Peter Blake  
Director, State Council for Higher Education  
101 N. 14<sup>th</sup> Street, 10<sup>th</sup> Floor  
James Monroe Building  
Richmond, VA 23219

Peter – I am writing you today to express my support for the Commonwealth Cyber Initiative (CCI) Blueprint that was submitted to the Virginia Research Investment Committee on December 1st.

Peregrine Technical Solutions, LLC., (Peregrine) has been a leader in cybersecurity research and talent development in the Commonwealth. With the first Department of Labor-registered cyber apprenticeship in Virginia, as well as our support for cyber academic conferences and peer reviewed cyber warfare journal, we are always looking for ways to improve the cybersecurity posture and economy of the Commonwealth and the nation.

Investing in research and talent development in the Commonwealth is critical to ensure we maintain and advance our leadership position in cybersecurity. CCI represents a unique opportunity to make Virginia a leader in cybersecurity research, innovation, commercialization, and learning. Connecting Virginia's institutions of higher education in a strong Network will provide companies a single point of access for research collaborations and talent development in cybersecurity and cyber-physical system security.

I appreciated the opportunity to participate in the development of the CCI Blueprint. We look forward to participating in the implementation of this initiative going forward. If you have any questions or concerns, please contact me directly at (insert contact information). Cheers



Dr Leigh Armistead, CISSP  
President  
Peregrine Technical Solutions  
[larmistead@gbpts.com](mailto:larmistead@gbpts.com)  
(757) 871-3949