DEB HODGE, DIRECTOR OF PROGRAMS, CAPITAL COLAB

SARAH GARDENGHI, CHIEF OF STAFF, DIVISION OF PROFESSIONAL STUDIES, UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

SHAWN KRASA, SUPERVISOR, WORK BASED LEARNING, MONTGOMERY COUNTY PUBLIC SCHOOLS

JACK SUESS- CIO, UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

JANUARY 2021
THE CAPITAL REGION
FROM BALTIMORE TO RICHMOND

Our region has great diversity, tremendous assets and immense potential. We've changed the narrative on the region. We're thinking big about our future.

OUR REGION

The super-region—Maryland, Virginia, and the District—stretching from Baltimore to Richmond has an intertwined economic future.

Our region has the 3rd largest economy in the United States and the 7th largest in the Global Economy.

- 115 federal labs and federally-funded research and development centers
- 45% of the population 25 years+ hold Bachelor’s degree or higher
- 184 languages spoken; 175 international embassies
- 53 Fortune 1000 companies headquartered in MD, DC, VA
- 4 significant airports, two major shipping ports
The Capital CoLAB is an action-oriented partnership of employers and academic institutions focused on developing the talent needed for the jobs of today and tomorrow.

**Vision:** The Capital Region will have the most diverse Digital Tech workforce in the country.

**Mission:** Build the Capital Region's diverse digital tech ecosystem by partnering with employers and educators to build industry-aligned digital tech pathways that ensure inclusive growth.

**Key Outcomes:** By 2025, CoLAB will (i) have engaged over 45,000 students and adult learners in digital tech pathways (ii) ensure at least 50 percent of the people we engage are from underrepresented populations, and (iii) double the number of partner organizations working to scale CoLAB initiatives.
EMPLOYER PARTNERS

K-12 EDUCATION PARTNERS

BALTIMORE CITY

FAIRFAX COUNTY/NORTHERN VIRGINIA

MONTGOMERY COUNTY

PRINCE GEORGE’S COUNTY

DISTRICT OF COLUMBIA
KEY FINDINGS FROM OUR TECH TALENT REPORT

1. By 2025, the forecasted supply gap is about 50% for tech talent and about 67% for tech adjacent talent.

2. Tech talent demand is concentrated among a few occupations.

3. Workers need to improve their digital literacy to execute the same tasks as before, and automation will enhance this need.

4. Though the Capital Region’s tech and tech adjacent workforce is more diverse than that of our peers, Black and African American and Hispanic and Latino tech workers are underrepresented compared with the region’s workforce overall.
## TECH AND TECH ADJACENT GAP BY 2025

### FIGURE B: ANNUAL TECH AND TECH ADJACENT TALENT GAPS THROUGH 2025

<table>
<thead>
<tr>
<th></th>
<th>2018*</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Gap</td>
<td>18,897</td>
<td>21,811</td>
<td>20,153</td>
<td>20,711</td>
<td>20,647</td>
<td>19,016</td>
<td>19,901</td>
<td>17,037</td>
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<tr>
<td>Tech Percent Gap</td>
<td>58%</td>
<td>60%</td>
<td>57%</td>
<td>59%</td>
<td>59%</td>
<td>56%</td>
<td>57%</td>
<td>49%</td>
</tr>
<tr>
<td>Tech Adjacent Gap</td>
<td>36,156</td>
<td>43,802</td>
<td>42,030</td>
<td>43,640</td>
<td>44,287</td>
<td>42,821</td>
<td>44,620</td>
<td>41,893</td>
</tr>
<tr>
<td>Tech Adjacent Percent Gap</td>
<td>65%</td>
<td>69%</td>
<td>68%</td>
<td>70%</td>
<td>71%</td>
<td>70%</td>
<td>72%</td>
<td>67%</td>
</tr>
</tbody>
</table>
The CoLAB’s ultimate vision is to serve as the go-to employer signaling body for high demand, digital tech occupations and skills in the Capital Region. Through the CoLAB, employers take a proactive role in communicating their needs to regional stakeholders. The strength of the Employer Signaling System (ESS) emerges in its ability to directly influence the pathways of digital tech students as well as to structurally shift regional thinking about foundational education for the next generation of workers.

Employer Signaling System determines the future skillsets needed for Capital Region workers.

CoLAB education partners react, directly tailoring curriculum to meet the Credential standards and changing the dialogue around workplace demand.

As education bodies move in tandem to react to the ESS signal, non-CoLAB members – including government, nonprofit, and private actors – shift to follow suit.
MOVING THE SYSTEM FORWARD

Employers
Demand signaling through KSACs

Educators
KSAC-curriculum alignment

Students
Skills development and work-based learning
DIGITAL TECH CREDENTIAL PROGRAM

GENERALIST CREDENTIAL

Data Analysis, Visualization & Security

For undergraduate students pursuing degrees in non-technical fields such as HR, logistics, and finance

Incorporates knowledge, skills, and abilities needed by industry for entry-level positions in a wide variety of occupations

SPECIALIST CREDENTIAL

Cybersecurity, Machine Learning, Data Analytics

For undergraduate students pursuing 4-year degrees in technical fields such as computer science, statistics, and engineering

Baseline knowledge, skills, and abilities needed by industry for entry-level technical careers
**BUILDING THE BLOCKCHAIN**

1. **Determine Skills & Pathways**: Employers partner with educators to map in-demand skills to curriculum.

2. **Credential Learning Outcomes**: Education institutions and training providers create open-standards digital certifications to note skills acquisition.

3. **Reduce Systems Barriers; Drive Demand**: Degree audit systems must be configured to receive open-badge standard credentials and award credit for prior learning; employer applicant tracking systems (ATS) must be configured to accept open-badge standard credentials and prioritize candidates with desired skills. Without these configurations, widespread adoption of skills-based hiring is slowed.

4. **Publish Credentials to Blockchain**: Publish credentials to blockchain for enhanced verification.

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**Capital CoLAB Education/Employer Partners**

- CoLAB + Blockchain Partner
CoLAB Cyber Pathway

MCPS (K12)

MC (Community College)

UMBC (University)

AEFIS CLR
*Created upon enrollment at UMBC

Acclaim Account
*Created upon first badge acceptance

KEY:
- Open standards credential sent
- Open standards credential awarded

INDUSTRY
(Job Applications)

INDUSTRY
(Professional Certifications)

Work Based Learning

Blockchain (Bitcoin)

Blockchain (TBD)