Enhancing Access to Cybersecurity Education, Training and Awareness

ISSA Baltimore Chapter Meeting - June 24th 2015

{Presented By}
Michael Volk, Anne Arundel Community College
Disparity between workforce need and employer demand:

KEYW CEO: Cyber firms want to hire disciplined workers, not policy wonks

College students like Mike Bonniwell are not impressed by your knowledge of cyber security. Moons pays, the CEO of KEYW Corp., said most students coming out of college with an interest in cyber aren’t prepared enough to work for computer security firms like his.

Fewer Cyber Pros, More Cyber Problems

Wired Workplace

Millenials Kind of Clueless About Cyber Security Careers

The Future of Cyber Security

5,000
The U.S. Cyber Command is actively seeking 5,000 cybersecurity professionals.

10,000
The U.S. Federal Government is seeking 10,000.

600
The Department of Homeland Security has an open demand for 600.

News Specials on Stanford News

Demand to fill cybersecurity jobs booming

The number of jobs in information security is going to grow fast in the next 10 years, said Virginia Lehmkuhl-Dakow, director of the Applied Physics Laboratory's Education Center at Stanford University, which mentors youth in engineering and math careers. "We have to do much more if we want to meet that demand, at the university level as well as K-12."

Demand is leading to better salaries for information security professionals compared to other IT jobs. According to the National Association of Colleges and Employers, the average starting salary for IT security professionals was $55,000 in 2013, compared to $60,000 for all computer-related jobs.

This chart shows the top 20 cities by percentage of cybersecurity jobs in the United States.
The cybersecurity workforce demand is not industry specific:

National Initiative for Cybersecurity Education (NICE) – “Workforce Categories”
Insider Misuse By Position

Most Affected Industries: Public Sector, Healthcare, Financial Services

Interesting Fact: “This year, we saw more incidents involving the end user than ever before. And check this out: Since 2011, cashiers have topped the actor charts for misuse, but no longer. This is disconcerting news, considering how many regular end users make up the population of any given organization.”

- Source: 2015 Data Breach Investigations Report, Verizon
AACC’s Approach: Creative Collaboration

**Creative Partnerships:**
- Academia
- Industry
- Government
- Non-Profit Organizations

**Programmatic Outputs**
- Job Relevant Education and Training
- Education and Training Designed to Develop the Creative Class
- Leverage Technology to Increase Access

**Outputs**
- Community Colleges - “Incubators for Innovation”
- Job Seekers
- Retrain/Up-Skill
AACC Cyber and Technology Training:
Cybersecurity Career Training Pathways
Increasing Access to Cybersecurity Awareness Training

Meaningful, accessible, instructor-led cybersecurity awareness training:
The CyberCenter at Anne Arundel Community College

- The CyberCenter is a training resource for businesses, government organizations, nonprofits and other industry groups.
- As a leader in cybersecurity education, AACC established the CyberCenter to help increase the general cybersecurity awareness and technical capacity of the existing workforce.
- The CyberCenter does this by bringing the resources of the college directly to clients and delivering hands-on, job-relevant information assurance and cybersecurity training in formats that are minimally disruptive to the normal flow of business.
Thank You!

Michael Volk  
Strategic Partnerships Coordinator  
AACC, Center for Workforce Solutions  
410-777-7047  
wmvolk@aacc.edu