October 2017 Cyber Security Awareness

The need for cybersecurity professionals:

There has never been a better time to pursue a career in cybersecurity. A study by the Center for Cyber Safety and Education estimates there will be a shortage of 1.8 million information security workers by 2022. To ward off cyber-attacks from adversaries effectively, organizations need workers qualified with the necessary knowledge and skills in cybersecurity who can find solutions for vulnerabilities in organizational resources and cope with attacks in day-to-day operations. However, employing qualified professionals in cybersecurity is a challenging goal because of the shortage of security professionals across organizations in the United States. According to the data by CyberSeek, at the national level, the total number of cybersecurity job openings is 348,975 (July 2015 - June 2016) whereas the total number employed in the cybersecurity workforce is 778,402 (estimated number in 2016) (CyberSeek, 2017). The supply/demand ratio of cybersecurity workforce (i.e., existing cybersecurity workers/cybersecurity job openings) is only 2.2 compared with 5.0 for all jobs. CyberSeek's statistics indicate that the field demands 128,000 professionals for cybersecurity analysts every year, but only 88,000 positions are currently filled (CyberSeek, 2017). As such, organizations end up hiring less experienced candidates or leaving positions unfilled, making the defense effort less effective.

One of the most effective ways to increase the pool of security professionals is to provide education and awareness on the importance of and abundance of jobs in cybersecurity to young talent and drawing their interest to the field early on.

The University's security programs:
University of Louisville is designated as a National Center of Academic Excellence in Cyber Defense Education (CAE/CD) by the National Security Agency and the Department of Homeland Security. The University offers cybersecurity programs in the Computer Information Systems (CIS) department at the undergraduate level in the College of Business, and in the Computer Engineering and Computer Science (CECS) department at the graduate level in the J.B. Speed School of Engineering. To support these programs, the university has established Cyber Security Initiative (CSI) as a focal center that consolidates cyber security-related resources throughout the campus.

For additional cybersecurity career information, visit these resources (more info on page 2):
- The National Centers of Academic Excellence in Cyber Defense (CAE-CD) program helps produce cybersecurity professionals capable of reducing vulnerabilities in our national information infrastructure.

- Cyber Seek aims to help close the cybersecurity workforce gap by making it easier to understand the cybersecurity job market. The site helps job seekers explore cybersecurity careers through interactive career paths and an interactive heat map listing total job positions and in-demand skill sets for cybersecurity positions.
- The CyberCorps® Scholarship for Service Program provides scholarships for college students in cybersecurity-related fields in exchange for a commitment to work for the government in a cybersecurity role
- The cybersecurity workforce void - http://diverseeducation.com/article/103778/?utm_campaign=DIV1710%20DAILY%20NEWSLETTER%20OCT 25&utm_medium=email&utm_source=Eloqua
- University Cyber Security Initiative (CSI): http://www2.cecsresearch.org/csi/