

THE GROWING NEED for Data Literacy and Cybersecurity

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BUSINESSPEOPLE LIVE in a world dominated by information. We are constantly bombarded by fast moving, complex and vast data flows characterized by the 3V's (Volume, Velocity, and Variety). Even finding somewhere to put the stuff is daunting, let alone knowing what questions to ask of it. Traditional approaches to data handling cannot cope with this new paradigm. These forces make life challenging enough, but we need to be able to make sense of this river of information in near real time and more importantly be able to leverage it for rapid, consistent, and accurate decision making. Bad decisions have consequences. Just ask Blockbuster, Kodak and Barnes and Noble.

Consequently, data science and data analytics have emerged as important and growing disciplines and as a route to well-rewarded employment. Students with skills in data science, data analytics and related data wrangling approaches will soon be twice as employable as those without such skills, and even now there is a serious shortfall of qualified data analysts. Added to this is the fact that business employers are crying out for graduates with good data literacy skills, and there is ample concern that many graduates currently lack vital data literacy skills. Many of them show a puzzled puppy expression when you mention pivot tables.

This is where Neumann University's program in Data Science and Analytics fills the gap. Our DSA major makes students both more employable in terms of academic qualifications and also equips them better for a world where the ability to extract actionable meaning from vast, complex – and rapidly growing – amounts of data is no longer just nice to have but absolutely necessary. The program takes students from novice to well-prepared graduates in a structured arc covering basic concepts, statistics, analytics, data visualization, database, data warehouse, and business intelligence applications. Graduates will be well prepared for the data world we live in and able and eager to adapt to the inevitable, immense, and inexorable changes we will see in the coming years.

Cybersecurity

Cybercrime is one of the most serious threats facing individuals and industries around the world today. The lack of cybersecurity professionals continues to be of grave concern as the number of devices connected to the

internet is estimated to reach 50 billion worldwide by 2030, according to a study by Strategy Analytics. Tim Cook, Apple's CEO, was quoted as saying that "criminals are using every technology tool at their disposal to hack into people's accounts. If they know there's a key hidden somewhere, they won't stop until they find it."

The result is that the demand for skilled professionals with the expertise to prevent and fight cyber intrusions and breaches is growing exponentially. According to the security jobsite CyberSeek, every year, in the United States alone, 40,000 security analyst jobs go unfilled, and employers are struggling to staff over 200,000 other security-related positions. This is a great opportunity for students to embark on a challenging and exciting journey where they can make a difference.

The Neumann University Cybersecurity program prepares students for these demanding roles that protect critical computer systems, personal information, and intellectual property from cybercrime in both the private and public sectors. Graduates can expect to be competitive in the job market as demand for cyber professionals with a bachelor's degree in cybersecurity is expected to grow 18% through 2024 (Bureau of Labor Statistics, 2018). In addition, the program aligns with certification exams such as Security + and Certified Ethical Hacker (CEH). Neumann University students who complete the Cybersecurity program will understand how hackers hack, how to manage security incidences, how to protect critical infrastructures from the bad guys and become a vital resource in the battle to stop cybercrime. ■



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