Aspect of Security Issues in Computing Industry

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**Introduction**

Over the past decade, the internet has been ubiquitous to people in the United States. Almost everyone has access to the internet, there handheld devices that allow user to search the web, stream music, communication and so on. The increase in availability of broadband connections allow the people to do all everything while on the go (Boeckeler, 2004, p.3). Unfortunately, there also other entities that use the World Wide Web to harm individual or an organization in order to make profit, personal gain or just for fun using collection of tools and techniques to steal information. Although there are way to prevent steal of information, but not everything can be prevented (Boeckeler, 2004, p.3). The FBI/CSI survey showed that even the best security fails to stop a determined attacker (Boeckeler, 2004, p.5).

**Security Curriculum**

At a minimum, University should be teaching something about Authentication and authorization, basic of cryptography, basic network security hazards and information about virus infection and protection (White, Marti & Huson, p.2). These are some recommendation that Computer Science majors should be expose in an undergraduate Curriculum(White, Marti & Huson, p.3).

– Fundamental computer security principles (confidentiality, integrity, availability)

– Risk analysis (an understanding of basic trade-offs)

– Authentication

– Access controls

– Basic principles of cryptography

– Knowledge of the types of malicious software that exist

– Basic network security (including a discussion of web security)

**Security Jobs and Issues**

Cyber security is a field where the good guy pitted against the bad guys. It’s expected for the Cybersecurity market to grow from $75 billion in 2015 to $170 billion in 5 years. A career for the good guys can mean up to six-figure salary, job security and a lot of potential to move up (Morgan, 2016). According to the 2015 analysis from the Bureau of Labor, there are more than 200,000 unfilled cybersecurity jobs in the U.S (Morgan, 2016).

For newbies to the tech field who are contemplating a career in cybersecurity, they will often start out as information security analysts. U.S. News and World Report ranked a career in information security analysis eighth on its list of the 100 best jobs for 2015. They state the profession is growing at a rate of 36.5% through 2022. Many information security analysts earn a bachelor’s degree in computer science, programming or engineering (Morgan, 2016).

**Conclusion**

In conclusion, this paper is designed to provide an introduction to what cybersecurity is about for computer Science majors. Not everyone can relate to some of the information in this paper. This paper goal is to provide information and statistic about Security and how can a newly graduated can use it for future reference.

**Reference**

Boeckeler, M. C. (march 17, 2004). Overview of Security Issues Facing Computer Users. *SANS Institute,* *V1.4b*, 3-24. Retrieved March 22, 2016, from <http://www.sans.org/reading-room/whitepapers/awareness/overview-security-issues-facing-computer-users-1399>

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Morgan, S. (2016, January 2). One Million Cybersecurity Job Openings In 2016. *Forbes/Tech*. Retrieved March 22, 2016, from <http://www.forbes.com/sites/stevemorgan/2016/01/02/one-million-cybersecurity-job-openings-in-2016/#35ce0ca07d27>