Cyber Security Education: Why Don’t we do anything about it**?**

Daniel E. Krutz

Thomas Richards

The vast majority of today’s car accidents are caused by human error. They are preventable. Whether it is running a stop sign or failing to stay in their lane, most accidents could have been avoided. Very rarely do accidents occur due to hardware failure in the vehicle. Long ago, we learned to create cars where the wheels typically do not fall off while driving and lead to a catastrophic accident. Cybersecurity is much the same. Nearly all vulnerabilities are due to human error, by either the user or the developer and could have been prevented. We’ve long ago created practices and technologies that should prevent nearly every vulnerability. So why do they still occur? Why are cyber attacks still a regular topic on the nightly news?

It starts with including this important topic in our curriculums, by showing students that security is by and for everyone, and shouldn’t be left to the “experts”. Nearly every instructor will tell you that security is an important topic, but only one out of the top 36 Computer Science programs in the US require a course in cybersecurity [1]. So why are we so behind the times? Why are we not achieving this quintessential objective of the creation of software systems? Will it take a cyber attack that cripples our nation’s infrastructure? Will it take World War III (The Cyber War)

It is no secret that industry highly values not only trained cybersecurity experts, but even those who are at least somewhat reasonably well-versed in the topic of cybersecurity.

Thomas Richards, a Senior Security Consultant at Synopsys stated:

”Students that can demonstrate the basic concepts of cybersecurity will have an advantage over their peers as security is increasingly being integrated into industry job roles. Developers at major software development companies and other firms are required to follow security guidelines when developing software.”

Instructors need to finally take it upon themselves to include more cybersecurity courses in their curium. Secure systems need trained developers and maintainers that not only understand how to create these secure systems, but truly understand their importance. It all begins with education and awareness. Secure systems are no accident.

**References**

[1]”CloudPassage Study Finds U.S. Universities Failing in Cybersecurity Education”<https://www.cloudpassage.com/company/press-releases/cloudpassage-study-finds-u-s-universities-failing-cybersecurity-education/> Accessed 2017, August 9

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