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CYSE 368

Cybersecurity Internship

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In the first 50 hours in this internship under the context of the CYSE 368 course, I have started integrating my Cybersecurity education with my work as an IT Technician. In this first week, I have already aligned my actions with my predetermined learning objectives to some extent. Working for an organization that has many clients, many networks, and thousands of endpoints, it is incredibly important that there is sufficient focus on Cybersecurity.

During this week, there were many instances where security best practices must be followed as prescribed by many standards and regulations. These instances relate to data protection, proper data destruction, endpoint security, and user education. This presented me with an opportunity to reflect on our implementations of security practices. There has not been any issues with the security protocols themselves, but there are certainly ways in which our methods can be optimized in order to grant us more time to allocate our focus elsewhere. One such example of this is data destruction methods. We have hardware data destruction solutions that erase drives in correspondence with Department of Defense (DoD) standards; however, the amount of drives that we can erase at a single given moment is limited. Based on my reflection of this limitation, I implemented a more comprehensive solution that increases the amount of drives we can wipe simultaneously by 200% (at the lower end of the range).

One of our clients also was due for a network overhaul. During this process, we noticed multiple opportunities for improvement. These opportunities resided not only in a potential increase of network performance, but also enhanced security. We had already implemented VLANs and other network isolation methods, but had yet to place phones on their own dedicated network due to hardware limitations (lack of cable runs). We ran more cables, that allowed us to place every single phone on a dedicated network separate from the main network. This further isolated the network, reducing the present attack surface.

In my work with this company, I have not only been incredibly thankful for the kind individuals who have been running the place, but also with their comprehensive focus on secure network implementations. As a Cybersecurity student, it is a refreshing view of the current landscape of companies who work with technology.