**My Internship Experience at Lockheed Martin & The United States Air Force**

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* Introduction

Because I am someone who aspires to be successful in life and provide for my future family, I believe that it is imperative that I can provide for my family in every way shape and form. This would also include having a job that I am not only interested in myself but also puts the interest of family first as well. The most important thing I believe a job can offer is security and reassurance that you are wanted in that specific career field and at that specific company. Relating the previously mentioned concept to cyber security allows me to explain how cybersecurity is virtually the future of the world. In an ever-changing landscape of digital technology, we see new changes every day to the objects that we use on a daily basis. Cybersecurity is used essentially with anything that involves technology whether it be your personal cell phone, your computer at work, or even your home appliances that may even connect to the Wi-Fi there is some type of cyber security aspect attached to those devices that you deal with unknowingly or knowingly. Judging from the volume that technology is used not only at home but from a geopolitical perspective as well, this is what gives countries the upper hand in situations such as espionage, information gathering, and future planning for potential wars or diplomatic fallouts. Backtracking to my beginning statement regarding my family, I believe that cybersecurity can help me achieve the goal of stability and protection that I seek to obtain. I believe that my understanding of the importance of cybersecurity directly correlates with my idea of stability of life because I will have the ability to provide to my family and simultaneously have the necessary protection from what is potentially the future of our world.

* Why I Chose My Internship

Believing in the concept is the easy part however, achieving the status is what I am primarily focused on and to take a step in the right track towards this goal I took up an internship with Lockheed Martin and the United States Air Force in a partnered agreement to allow me to experience a what an IMIS technician experiences on a day to day basis. I took up this membership because I believe it steers me towards the goal that I achieve in life for myself and family in the future. I believe that becoming a temporary IMIS technician benefited me in ways that I will not be able experience from any normal IT company because of their mission and what they seek to achieve. I believe that I sought three main takeaways from this opportunity that I was fortunate enough to experience, those takeaways are leadership, professionalism and legitimate IT work. Starting with my first objective that I intended to gain from the internship, I believe that being an effective leader in anything that I do is imperative to whatever it is that you seek to accomplish. From my personal experience I have seen far too many people that are genuinely great people be put into managerial roles in their professions and they always seem to as if they have too much on their plates. They show signs of being overwhelmed, disconnection with their employees, and unpreparedness in critical situations. I would like to avoid these instances because they simply lead to negative work relations that hinder the end goal that the company that I work at is seeking to achieve. My second learning objective is professionalism, I chose this because being a professional worker shows that you are confident in yourself and allows for positive work relationships. I hoped that during my internship I would experience this heavily from the military side of the two companies due to their strict rules and policies and I got what I wanted to an extent and can say that I am content with what the internship had to offer me. My final learning objective was obtaining some type of IT experience so that I can show competence within my work center regarding IT. I believe that although I will start a job that I am new to, I believe that first impressions are important as well. This will put me ahead of my peers that I work with and will allow me to continue to grow my over capabilities as an IT professional. In this paper I will analyze how the internship effectively helped me further my understanding of these three concepts that I have listed previously.

* Company History

Lockheed Martin is a renowned aerospace, defense, arms security, and technology company that works extremely closely with the US military, specifically the Air Force. They are responsible mainly for producing aircraft such as the P-38 Mustang and the F-22 fighter jet. They have suitors worldwide that they work with, however the USA is the primary buyer and arguably their closest ally in terms of defense funding. Because of their influence in the defense industry world, they have remained a leader in innovation, defense technologies, and even space exploration. Their primary demographic of customers is First World countries across the globe to which they cater specifically their militaries with aid in the form of mainly defense machinery. However, they do have a cyber warfare section of their company that works directly with the USAF. The IMIS (Integrated Maintenance Information System) is used for obtaining and maintaining special access programs for special clearances and the operations of defense machinery.

* Internship Negatives

In the internship I was able to explore many different avenues of what I could possibly do as an IMIS technician and how it could potentially further develop my career. During my temporary tenure I operated under Lockheed Martin's IMIS in which my job was to maintain the avionics of the software that is used in the fighter jet which is located on the terminal. My first week of the internship I was mainly learning the technical portion of the IMIS software, system administration, data management, network administration, and tier 1 and 2 support duties. This also includes working with military personnel who are on site with the aircraft and fixing technical issues that arise with them. My initial impression after learning what I was doing within the unit was a little overwhelming at first and it did not seem like something that I could see myself doing in the future do the abrasive nature of the companies'' employees and their strict rules since a lot of the information was secret. During my initial orientation of the job, I was able to talk to the commander of the unit and he was part of the reason I was able to keep going in despite the adversity that I faced in the beginning during my initial welcome into the internship. He helped me understand what was expected of me and how I can manage stress better as an IMIS technician. The company itself had put this sort of heavy “cloud” over my head and it felt as if it was impossible to make it go away because they explained how important the job was in the grand scheme of things and I was just doubting myself. I would show up every day to roll call and just have such a negative outlook on my job and began to ponder if this is what I really wanted to be doing in the future let alone in the present. It got to the point where I even considered quitting and getting a new internship due to my negative thoughts. Despite the melancholy first impression I was still able to persevere and see the brighter side of the company with the help of my supervisor and those who I worked with. With this newly gained perspective I began to realize the importance of how positivity and good work relationships can help increase productivity and overall morale within myself. Although I have renewed my willingness to come to work and strive for excellence, I was again met with adversity in the form of poor management within my workplace. I would like to point out that most of these negative experiences came from specifically those individuals in the military because of their hardy and gritty nature that I was unfamiliar with. The management that was in place for the military members was simply put, awful at times. They would bash me for not knowing the answers to problems as an IMIS technician while simultaneously slandering me for asking too many questions. I was perplexed at them behavior and referred to my supervisor who was more familiar with the military members and he explained to me that a lot of it had to with the way that they were raised in the beginning of their military careers and that’s just how they were treated so now they think it's normal to behave that way as leaders because tough love is effective. In conjunction with their poor leading methods, they also had many leaders who were put in charge because of a system that in my opinion is bad for promoting individuals which in return effectively created many leaders of who I discussed previously were unprepared for the responsibilities that they faced. A lot of leaders were younger than some of the people that they supervised and the only reason why they were seen as more knowledgeable was due to their experience in the job. They didn’t include any other factors such characteristic traits, leadership qualities, or even critical thinking skills when some of these people were selected for their positions.

* Internship Positives

I once again felt like this was the wrong decision and sought insight from more of the more personable individuals in the military to understand how they dealt with the issues that I faced. When consulting them it felt refreshing and rejuvenating to say the least, they were some of the wisest and most easily likeable people I ever met. They had tenacity to adjust to the same problem I faced and somehow turned it to work for them while simultaneously maintaining a perfect balance of respect and superiority in way that didn’t feel like they were in charge of you because of a rank and nothing but, it was more like they supervised you because they cared for you and they were legitimately trying to help you further develop not only as an employee but, a person as well. This was the kind of experience I sought after, this why I picked this internship because I knew there were people of this caliber here to help me learn and grow as a human being. The only downside is that there was so few of them they were hard to stick around with because everyone clung to them which in the end, I was okay with because their positive energy and knowledge affected my perspective so much in the little time that I spent with them that even the minutes felt like hours when I was with them. I believe if every person in the management hierarchy in Lockheed/USAF bodies was as personable and beneficial as the select few people that I met I could have had a much better experience with the overall job as a whole. The negative and unmotivated people did not necessarily ruin the job entirely, but they certainly did not help make it enjoyable as an intern who was trying to understand why what I was doing was so important. They in fact held me back so much that at times it was hard to retain information because I was so focused on trying to understand their actions at times that I would get caught up in my emotions and lose focus on the task at hand. If I had to use a sentence to describe the management at the internship, I would say overall toxic not including the golden bunch of individuals who helped me see the importance of my internship. This is why I believe that it is important to have good leadership in place when having such an important task at hand. If I learned one thing while I was there, I learned the importance of workplace morale. If everyone who you work with is unmotivated and pessimistic in nature it creates a sort of culture where everyone is just embracing negativity and depression and they are just miserable while they are working. The saddest part is that these people seem to forget that although they are in the military, or work alongside those individuals, they forget to be human at times and that causes so much strain on the employees who work within the unit. These same people are also bound by a contract mind you and have no other option but to show up to work every day and suffer through the pain.

* Intern Duties/Duty Importance

I would say that most of the positive feedback of my internship came from this portion of the experience, I got to meet great people and participate in some very interesting and intriguing projects that most people will not have the luxury of doing. A vast sum of these projects included IT jobs while a small portion of them were on the flightline working alongside some mechanics as well. I was focusing primarily on the system software firewall maintenance aspect of being an IMIS administrator and I got experience of what actual IT work is like when you are performing live tests for a program. I was also fortunate enough to have the opportunity to work with the tier 2 administrators and they were so informative about not only my IT position, but they also gave me insight on how I can further my career in IT with Lockheed Martin. I also performed many duties such as backups, restoration of corrupted data, augmenting, and installing security software into the databases. I also dealt with a lot of account monitoring and maintenance on accounts because of the heavy usage of the network. I was also involved in database management where I collected data that was required for analysis by engineers. All these instances were amazing IT opportunities that I am so grateful to have been a part of because they covered a wide spectrum of what a lot of IT professionals conduct daily and that will help me in my future job positions. Being an IMIS technician is so important to geo-politics regarding the USA and its adversaries because it helps us maintain air superiority over our adversaries. Apart from the actual IT experience I was able to acquire a keen eye for information regarding other countries and how they intend to interfere with our daily lives as Americans. I do not consider myself an extreme patriot however, I do feel a sense of dignity and pride when I can work as an IMIS technician because I understand why my role is pivotal in our defense posture and I can protect others by contributing with the cyber defenses that I manifest when I work within IMIS.

* Prior Skill Application to Internship/ODU Curriculum Application

Prior to the internship I had no legitimate IT experience so a lot of what I used in the internship that would be considered prior skills would be information that I learned specifically from ODU. was able to apply a great deal of what I learned from ODU in my experience as an IMIS technician. I took a lot of the information that I learned specifically from classes that focused on international affairs and how the cybersecurity world is tied to it. Classes such as Cyber War, Cyber Law, Cyber Security Fundamentals, and Topics in Cybersecurity (Human Factors and Policy Management in Cybersecurity) were great resource to call back when understanding why the Lockheed company operated in the way that they must otherwise countries such as China and Russia will easily obtain intelligence dominance over the USA and cripple our country without even launching a legitimate formal war against us. I was also able to benefit from learning how malicious attackers travel from network to network in classes like Cyber War in lab studies where I would play as the attacker and try to attack a network using systems such Ubuntu and Kali Linux (Attacker Terminal) in which I was able to transfer that knowledge to the IMIS terminals. Besides the previously mentioned instances however, I can confidently say that the IMIS world was an entirely new beast that I had to learn. Nothing that I learned at ODU could have prepared fully what the terminal had in store for me. Not to say that ODU’s program was bad but, IMIS terminal was so advanced and robust that I took separate training for what I learned while I was there. Although the connections were made; they were only made on a beginner level meaning that I understood what was happening however, I did not understand it to its deepest point. I was able to use my knowledge of Virtual Modules a miniscule amount when I was training in my beginner phase, but it was only to learn how the IMIS terminal’s user interface was controlled. In the future to better prepare ODU’s students I believe that there could more in-depth classes that geared towards specific program development such understanding the operating system of Kali Linux or Ubuntu instead of the classes just focusing solely on command prompt. As I stated before, I do not believe that there is anything necessarily wrong with ODU’s program I believe that I prepared me to the best of its ability while I attended the previously mentioned classes, the IMIS terminal was just more advanced than what I learned previously.

* Aspects from the Internship

I confidently believe that this experience has been overall very beneficial for my career as an IT professional. Being able to work with such experienced and knowledgeable personnel within my career of interest has elevated my ability to comprehend detailed concepts that are required by a cyber professional on a daily basis. I have gained better understanding of skills such as self-motivation, critical thinking and problem solving, time management and many more concepts that can be applied to not only cyber jobs, but other jobs that I may hold in the future. Apart from the information that I learned from that I learned from my peers working within the cyber career aspect of the job, I was fortunate enough to work with other people who I will work alongside with and gain new perspective on the job and have better understanding of how I can affect people that I do not directly work with in my job. This was a great experience overall, and I am so glad that I chose this internship as my choice for this class. This internship allowed me to gain beneficial insights on the military as well and be able to understand their sacrifice for us as well. Distributing the knowledge that I have gained to others is something that I look forward to in the future because I know there are plenty of people who want this opportunity as well and I am aware of that and do not take it for granted. When I am in the position too, I plan to share this information with those who are less fortunate to not experience what I was able to experience within the job. Looking back at everything that happened on the job while I was there, I can say in the moment I was not happy but, hindsight is 20/20 I can without a doubt say I am glad I saw every negative and positive thing that the internship had to offer. Experiencing those negatives with leadership was just too important for my development as professional in any capacity not only as cyber professional but as human being. I got witness firsthand how not to handle stress and project my emotions onto two others when my plan doesn’t go accordingly. I also got to meet people who were effective leaders, and I had the rare opportunity to pick their brains for information on how I can be a charismatic individual who others will take up after. Everywhere that I have worked up until my internship had poor leadership and those were the first people to show me what can be accomplished when real leadership is in effect. So, I would say that going back to my previously mentioned learning outcomes the leadership portion was easily fulfilled in every way possible. The professionalism learning outcome was the outcome that was not fully fulfilled however, I still was able to learn how to carry myself in a work environment better. I learned how to read people’s body language and respond accordingly because in the workplace everyone does not behave the obviously but, what a lot of people don’t know including myself previously, is how to respond to this variety of personalities. You cannot behave the same way around everyone, and some people even go as far as working with a different as well. Some people prefer to work in solitude and not to be bothered, some people prefer to talk while they work to make the time go by faster. These are things I personally never took into consideration when working in a professional work environment. While a lot of this was beneficial to me in the long run, I feel that in comparison to my other two learning objectives professionalism was not achieved as well as the other two objectives. Finally, the overall IT experience was arguably the best part of the internship. I was able to participate in so many fun and real IT activities that I would normally have to wait till I get an actual IT position to even consider trying so I’d say the learning objective was definitely fulfilled easily. Being able to take that experience to other jobs will help me so much in the future and I will be able to put it on my resume and then actually be able to apply what I learned in the internship.

* Advice to Future Interns

If I had to recommend a list of things to know before taking the internship that I took, I would say the most important thing is to not wear your heart on your sleeve or take everything with a grain of salt. A lot of people who I worked with while I was in the internship were great people outside of work but when they got to work, they were just miserable because of the circumstances that were put in front of them. I’d advise them to not be like me and do not let your emotions get the best you nor to succumb to the pressure that the job may put on you. Although it got hard at times there was always someone, I could count on to get me out of the funk that I was in at the time, and they would always cheer me up and boost me back to where I needed to be to keep going. My final piece of advice would be to take those moments where you are down to reflect on what you can do better and how you can prevent them from happening again. Sometimes it may be someone else’s attitude that brings you down, in the event of that all you can do is try to go to someone else to help you and if that doesn’t work then now you know that the person who hurt you is not someone you force yourself to be around. Once I learned that rule at my internship, I performed a lot better and had much overall better experience. Although I became slightly efficient, I feel as if I did not get to show my full capabilities to the Lockheed leadership. I can see myself performing at an even higher level as I get more familiar with the job and comfortable working within the IMIS terminal.

* Concluding Points

I have participated in cyber fairs and watched countless videos regarding cyber security professionals not to mention my extensive college career dedicated to the subject and despite all of that I feel that this experience was astonishing in nature. I believe that social media and entertainment devices such as tv shows or movies have programmed our brains to believe that people who work in IT are robots who only focus on the stereotypical 1’s and 0’s of their job. Contrary to the popular belief of a vast amount of people cyber security professionals are nothing like that and have so much more to deal with and interact with on a deeper level than just their jobs. Relating to the previous statement I mentioned to my internship, I can attest to the fact the people who work these jobs are human first and it will show when the time comes. While I did receive the majority of what I went to the internship for, I also left with much more than I expected as well. Being able to have a new profound perspective on working in IT has opened my mind to many possibilities and capabilities that I can explore and achieve in the IT career field. I have been exposed to the true nature of how working in legitimate work center can be and I have gained the knowledge on how to work through adversity and navigate the intricate relationships that I learned exist while being temporarily employed. The internship not only influenced me while being present at the facility but also affected my outside life as well. I feel that the internship did not necessarily have the opportunity to really have a great effect on my college career because this is my last semester at ODU, and I will be graduating afterwards. However, I would like to believe that had I taken this class in previous semester then it would have had very positive effect on my perspective of the IT career field. I was challenged emotionally and mentally but, I believe the in the saying that says “pressure makes diamonds”; This is opportunity would have only left me with a larger desire for the end goal in sight because the road to get there would have been so satisfying to complete. I do not think it would have made me change majors or even consider it in any way. I in fact believe that it would have motivated me to take harder classes because looking back on the classes I took to get to the point that I am now were nothing compared to what I experienced at the internship. The internship left a very big impression on me, and it will be hard for me to forget what I said there and how triggered me to become a better professional within my career field.

* How My Plans for My Future Were Affected by The Internship

Piggybacking off my previous statement, I must reiterate it in a deeper manner; I do intend to further my professional path in cybersecurity. The experience was too valuable to not take advantage of. I eventually got a lot better from when I started at the internship and as result, I ended up getting an honorary recommendation for hire by my supervisor. This career starting with a job such as an IMIS technician could be very lucrative for me in the future and could help me achieve my end goal I discussed in the beginning of my paper. I believe that this internship has helped decide what my first steppingstone into the world of cybersecurity will be and I believe that it will start with becoming an IMIS technician. I believe that this job will help me form better workplace relationship development skills and allow me to further my IT skills because of the extensive catalog of work that I dealt with every day while I was an intern for Lockheed. If I could I’d go through the internship again just to gauge how differently I behaved and handled stress during my second time around and see my own personal growth as a professional. While working at Lockheed I would also like the opportunity to go into the Air National Guard for VA and become an intel analyst within the ANG. Using my skills from Lockheed Martin that I will have more than likely mastered at the point of me applying for the ANG would help me secure a top-secret clearance and work to IT jobs simultaneously withing two different companies one of which will help me pay for schooling for my master's degree that I intend on pursuing in the future. Hopefully after I have a fruitful tenure with the companies, I can secure a job within the DoD and explore the world while being a defense coordinator for system operations. The most important thing to remember is that this plan that I have planned to pursue started with my internship at Lockheed Martin. I am so grateful that I understand the importance of what the internship offered me and how it can shape my future. If I didn’t realize the potential that is in Lockheed Martin’s company who knows what I could have ended up doing in the future. In February I can confidently say that I will be applying for the IMIS technician role and hopefully I will get a position on the team so that I may offer my services to the workforce in the company. Leaving with my final point, I would like to say that the internship was best worst decision I ever made for myself because although I experienced real and raw emotions both positive and negative looking back on the endeavor has left me with a unsatisfied hunger for more of adversity that I previously faced because now I know that I that I am more than capable of handling the situation and preforming to highest achievable level by any IT professional.