Internship/Job Final Reflection Paper

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Job Name: ODU ITS Help Desk Support

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For my internship, I chose to work at ODU's ITS Help desk for two simple reasons. For one, I knew that it would give me real world experience that I could use as a steppingstone to get to cybersecurity. During my ODU career I took some Information technology classes, so I had a basis of the concepts in theory but being able to work on different things hands on allowed me to gain skills. Having a regular internship would have allowed me to have a broader variety to learn but having this job allowed me to be in the field and to go through training and then be put into the real world to hone those skills. Also, with having to help people in real-time with their issues, it seemed like the perfect opportunity to perfect my knowledge of the different components of information technology, as well as learn some new ones that I did not get a chance to learn while in my classes. When working for the It help desk, you need to have a good understanding of hardware, software, troubleshooting, and problem-solving, all of which are all important when going to the next step into cybersecurity. Cybersecurity does involve a lot more, but I think that IT is a good place to start off and to get familiar and gain experience that can help get your foot in the door with cybersecurity, because one thing that bigger companies look for in terms of cybersecurity professionals is experience. During my time at the help desk I have learned and improved many various skills, both technical and soft skills. Some soft skills are as important as the technical ones are because they can simply just help your technical skills the more you use them. Being at the help desk really allowed me to use my collaboration and teamwork skills. When a fellow coworker had a problem that they were not able to fully find the solution to, the other people working at the help desk would step up and help. Seeing that happen and being able to assist sometimes helps improve my teamwork because in the end, we are all doing the same job and having the same major objective. Some of the major objectives that I hoped to achieve were the improvement or gaining of technical skills, improvements in customer service, and better knowledge of the Its workplace. Since I was in a technical field, it was important that I learn the necessary skills to do the job and learn more for future jobs. You can only learn so much in a classroom so I hoped that having an actual job would help you gain more insight into what will happen in the real world. It allowed me to problem solve real life problems and make my own diagnostics using my critical thinking ability which helps allowed me to improve on the necessary skills. Working in a real job environment allows me to see real life situations that you may have not learned about in class, so it is better to be prepared for them. One thing about working in IT is that you are going to be talking to people a lot, so it was important that I also improved my communication and customer service abilities. Sometimes, you find a user that may not have as much knowledge of computers or anything information technology related, so you must communicate with them on the level they know. I was hoping to be able to learn how to communicate more complex concepts of IT in simpler terms for someone who would know as much as me. Learning patience and listening and communication skills are particularly important in roles like this, so it was important that I enhanced those skills as well. One last objective I had through the job was to learn the IT job layout. It is one thing to learn about it in a classroom, but to be within it is something quite different. Every day is not the same and you have to learn the ins and the outs of the place and how everything flows. The It help desk oversees a very vital

room and it has a level of proficiency and expectation that must be met so people are satisfied. I had to learn all of that as well as the concepts within the help desk such as the ticketing system function as well as the different protocols of assigning which tickets to the specific departments and which tickets to handle first. By learning the workflow of the ITS help desk, it allows me to be able to adapt to faster paced environments so that way in the future I am not as lost when I am in environments that are faster paced with more to offer.

The start of my job was slow paced since it revolved more around training to learn about the job. The organization that I was working for was the ITS department for the whole ODU campus as well as for EVMS, and it plays a vital role in making sure that systems are running smoothly and that all the users are satisfied. The department offers a wide range of support for both students and faculty. Essentially the major organization that I am working for is the university, since the help desk caters to everyone on the campus. In addition to assisting current students and faculty, we also assist students who are expecting to come to ODU as well as alumni. Newcomers could have issues navigating the technology and alumni could have questions about recovering certain data, so it is our job to try to assist anyone who is affiliated with ODU. At the start of my job, my initial orientation and training included first learning about the department and all of the key people within it. It was important for me to get familiar with the workplace first since I was going to be working there of course. The training was in a classroom type of setting where we had to first learn about the different systems and procedures for how to conduct business around the workplace. I was introduced to the different softwares that we utilized and the different ways to use them. I also had to learn about the different policies in place to keep the help desk efficiently running. More towards the end was where we started to do more hands-on learning with troubleshooting more common requests just so we can get a feel for how a normal day would look like. Even some of the common requests that we get can sometimes be tedious, so it was important that we knew had to appropriately get through each instance. From the start I really enjoyed how everything was run and the support staff welcomed me in as if I was one of their own. They all have provided me with great guidance and insight to be able to perform at the workplace with little to no issue and they also give me assistance whenever I may need it. It is not a big help desk so there are not many people there at a time so there is a level of importance with teamwork and communication to keep the department running smoothly. Overall, it is an enjoyable experience, and I look forward to continuing with the job as well as contributing to the department with my knowledge and skills so that the department can maintain its efficiency.

The management environment of my Job is by far one of the best I have experienced in terms of all the jobs I have had. My supervisor did an excellent job providing us with the information to succeed in the ITS department and even after training he continues to provide useful assistance to make sure we are taken care of. On a day-to-day basis, either my training supervisor will be there or one of the team leads. Either of those are our "higher ups" if we need help with anything. They are there to make sure that we are on the right track, and they are there also working on different tickets as well as working on phone calls. They have been working in the department for a longer period of time than the rest of us, so they know more about the ins and outs of the department and ways of handling the different tickets, so I make sure to ask questions when needed. The general structure of the department is mainly just everyone working together with a slight hierarchy. There may be people higher than me, but we all are working together on tickets and making sure the department stays proficient. The overall supervision during my training was consistent and very effective. It did not feel forced or dragged on, it had a nice flow, and it truly felt like I had learned everything that I was supposed to in good detail as well.

Since I did not have an actual internship and instead had a job, I did not have many projects that I have done but I did have a various number of duties that I did on a day-to-day basis. The main one being troubleshooting and technical support. Being that I work in an IT department, my primary task each day was to troubleshoot any problems that uses ask about, whether it was through a ticket or phone call, or if someone simply just walked in. Troubleshooting is very important within the department since that is the whole purpose of what we do there, we troubleshoot all the problems that users have. If we did not do our part and give the proper support to the many users that ask for our assistance, then there would be no point in having our department if we couldn't do our job. Another important task that I had that somewhat ties into troubleshooting is ticketing management. We must stay up to date without tickets to make sure that all the tickets are carried out in an orderly fashion so people can get the service they need. On a slow day, sometimes we may have to go through all the guest tickets and try to solve those problems or match a user to that specific ticket. Managing the tickets ius essential for maintaining the workflow for the department and it allows us to stay actively doing tasks while there. Sometimes going through tickets can reveal that there is some type of outage on campus or a phishing email going around that we need to send out a warning to all users to prevent damage from happening. Maintaining the tickets is a vital part of the help desk and a big part of troubleshooting since most of it comes from the tickets that people send through. Another task within technical support that I had to do was user account management. A lot of times, people waited until the last minute when it came to changing their password which as a result, led to their account being locked. Once that happens and they notify us, we walk them through the process of recovering their account and setting up a new password. That is our most major issue in the IT department, and it is always going to happen. The process for when that happens is not challenging at all but sometimes the person on the phone can make it a little bit more difficult if they do not fully understand what to do. One thing that I always try to remember is to be patient because they probably are frustrated that they cannot get into their account, so we just must try to

assist them with it. In addition to just forgetting to change their password, if there ever is a scam attempt on campus and someone's account gets compromised, we must reset their password and then when they realize, we walk through the same steps with them so they can get their account back. The reason why is because once the account is compromised, we reset the password so that no one can get access to it just in case someone does have access when they are not supposed to.

Since this job is more geared towards information technology than cybersecurity, I did not use as much as I would have if I had had a traditional cyber internship, but there were some concepts that were familiar due to my knowledge of cybersecurity. For example, Phishing attacks are commonly talked about within the department. Surprisily they are more talked about than I thought due to the occurrence of so many at different times on campus. Phishing comes in different forms, and I have seen the different types of phishing attacks that have come through the department. Another one that I have noticed but is not really talked about is access control. I have noticed that they implement a good procedure when it comes to allowing certain people to have specific controls as well as giving users specific controls when they try to request it. Additionally, multi-factor authentication is also one I am around, but it is not talked about. For users to sign into their campus softwares they must go through two security points for authentication. That is a very good practice for maintaining strong security and preventing unwanted people from being able to access your sensitive information. Seeing these in an actual work environment makes me have a better understanding of the importance of security and what can happen if you do not utilize the proper practices to ensure confidentiality of your personal data. Through the various phishing emails, I have improved the ability to be able to detect whether or not an email is a phishing attempt. Sometimes people will send in screenshots or forward an email asking whether it's a phishing attempt, so it is important to be able to differentiate between which is what.

Odu's curriculum helped me with a few of the concepts that I must do. Since I took a handful of IT courses, I was able to utilize my learnings and apply them for hands on situations. In terms of my cyber courses however, I did not utilize too much since the job is more IT based instead of cyber based. Thankfully the few IT classes that I took over the course of my time at ODU helped me familiarize myself with working at the IT department. Some concepts that tie together between IT and cyber I have noticed such as Multi factor authentication and phishing like I have previously stated, as well as Ip addresses and access controls. As far as many other cyber concepts, there were not too many that I have observed. What I did enjoy however, was being able to branch out and explore more of the IT side since I did not spend too much time with that class wise. I think that it will allow me to have a better foundation once I switch over to a more cybersecurity-oriented role.

Working at the ITS help desk has allowed me to gain some new experiences as well as achieving what I was looking for objectively. I was able to gain practical experience with my field that I

can translate into more. Being able to have IT experience right before graduating will be useful since a lot of the bigger organizations look for experience when looking for people to hire. Throughout working at the IT department, I was able to assist numerous people with their technical problems and provide assistance for them which allowed me to gain more insight and improve my skills for the next job. Being at the help desk also allowed me to see the behind-the-scenes of what it is like to work in a place like that and it was a great experience to be a part of because it allowed me to understand how an environment like that operates. The job gave me a handful of tasks throughout every shift and each component was never the same which allowed me to adapt to every situation since it could be a new scenario I have not come across yet. While working at the IT department, it sharpened my customer service skills. From previous jobs I have had a great foundation for my customer service skills, but this one allowed me to have to use different approaches. As stated before, not everyone understands as much IT as I do so I must take more difficult concepts and simplify them for other users to a level they understand. When a user has an issue as well, they may not fully know what it is or understand the steps I'm telling them, so I must try to navigate the situation in a way that helps them understand. Being able to communicate with people is a vital skill to have and one that I constantly try to improve on. The main objective of doing this job was to gain hands with technical skills and I believe that I did. Most of my job is centered around troubleshooting technical issues with users so I have built a good foundation for that. Being able to incorporate my course knowledge and gain hands on knowledge in my respective feild was my primary objective that I was satisfied to of achieved.

The most exciting part about working at the ITS help desk stems from the variety of possibilities that can arise. No two days are the same which I like being if it had the same consistent pattern, it could get dull. Having different technical issues each day allows for my brain to think in more critical ways. It is unpredictable how many tickets come through or how many calls may happen as well as the concept of each. Some days a phishing attempt may come through as well and you just never know. It allows me to stay engaged at the workplace which is a reason why I like working there. It gives me a chance to expand on my technical support skills and broaden my abilities for the future whereas if everything stayed consistent, I would have a limited scope for what I can do. In addition to that, I also am actively expanding my knowledge about what you can do in the IT field. Although information technology is not my major, it is very beneficial to learn about it as a cybersecurity major because they feed into each other. Working here really makes me feel like I am starting and progressing through my cyber career and adapting in the field. Not everyone has the opportunity to start while in college so i am grateful that I managed to get the opportunity to get a little bit of a head start and gain experience before I graduate.

In contrast, there are a couple of discouraging factors of working here. Although the majority of the time spent here was all good, there are sometimes where I feel discouraged about

working here. Sometimes it is frustrating when I cannot solve a technical issue due to the complexity of it or just because I have not had too much practice with it. It is not straightforward at all and can have different routes for similar issues. Sometimes Issues must get escalated to a higher department level or I just must pass it off due to me not having the right knowledge for it. IT support does take time to master but not being able to sometimes solve an issue can discourage me since IT is all about fast paced solutions. Something I keep note of to not get discouraged as often is that IT is all trial and error and it is a learning experience so I must just keep moving forward and absorbing knowledge since I am still new in the field. In relation to that, sometimes dealing with frustrated users can be discouraging. Most of the time people understand what's going on or if I can't help them with a specific issue since it's not within our department, but sometimes people will be demanding or upset due to those reasons. I understand that they have problems that need to be solved so I try to remain calm to help them out, but it still is discouraging. Sometimes they do not understand how long certain solutions will take and they will not listen to what you have to say so you just must try to maintain the professionalism and keep moving. Sometimes dealing with those users is draining to say the least but thankfully it does not happen too often as from what I have seen so far working in this department. Sometimes a cause of the user's frustration is unclear communication. There may just be an unclear barrier between you and the user that the user is not getting and so they may get frustrated as well because they are not sure what to do. Whether they think it is a lack of instruction or it seems like we are not fully giving them what they want to hear, there are many different variables to a user's frustration with us. Another discouraging aspect is when it gets super busy, and it seems like everything is all over the place. It can get overwhelming for someone new like myself because you are not used to that high paced environment as well as dealing with different levels of complexity of the tickets. You are going to have to figure out which tickets are more urgent as well as taking calls from users and it can get overwhelming. It can be really discouraging when I am trying to deal with technical issues, and I fully do not know how to troubleshoot it, so I feel like I am dragging myself down. Overall though I have not had too many of those busy days so far. Just like any job, this has its moment of upside as well as moments of downside but that is just the way it goes. I am thankful I have not dealt with too much of the bedside so far and I do still look forward to seeing what each upcoming shift holds for me. Each shift is a new experience and a new learning moment for me in the IT field, so I try to take everything in whether it is good or bad because I know that down the road I am going to have to deal with even more situations,, so it is better to learn early.

Since this is an IT related job, it is going to have its challenging moments in terms of the job itself. One instance is of course the complexity of certain technical issues. Sometimes a technical

issue has multiple steps that need to be completed before the actual issue can be addressed. Sometimes when the user does not give adequate information about their issue, it could sometimes lead to more steps than what was needed if they just would have specified one or two more things. On top of complicated issues, trying to figure out which ones to prioritize first can be a challenge. Normally it is just by newest first but with multiple people looking at the same ones you must figure out which ones are open to troubleshoot. One issue with that could be the amount of knowledge you know about that specific issue, which sometimes I am not sure how to approach a ticket. In the end, however, it comes with time to gain more knowledge and new experiences to overcome those kinds of challenges. There are a lot of factors when it comes to those challenges but the more you see them the more you are better equipped to deal with them.

Overall I like to think that the journey of this job has been a success so far through this semester and I look forward to what else comes from it. I have learned many things during this job that I will carry though the later stages in my career. One of those key things was the improvement of my critical thinking and problem-solving skills. The help desk has been exposing me to many different problems that need fast-paced answers and in doing so has allowed me to gain faster problem-solving skills and have a deeper understanding of the different technical issues that could arise. Being able to adapt is important when it comes to cybersecurity, so it is better to learn earlier rather than later. The more that I used those abilities the better that they became. Another key point that I picked up was my communication skills. Just how problem solving is vital in IT and cyber, the ability to communicate is also important so you can fully address problems and solutions clearly. In terms of the influence my job has on the rest of my time here at ODU, I think that it will just allow me to gain experience within my field and hopefully allow me to get started after college a lot sooner than if I had not had the job. In addition to the job, I will probably find some cyber events to go to like capture the flags to also broaden my horizon before I graduate in the spring. The job will be the starting point in terms of my professional path, and I can only go higher from here. It has allowed me to see the ups and downs of It with hints of cyber, and now that I am at least a little better prepared for what is going to come after I graduate, I will also be pursuing certifications to also better demonstrate my knowledge in the field as an addition to the job experience. This job has given me a lot of experience and value which I appreciate. In terms of what I can pass on to other people for when they join this join, one thing is for certain is that you should not give up no matter what and absorb all the information you are given and ask for assistance when needed. This is a great starting job for anyone trying to get into the IT and cyber field and it is important to fully learn from this job and to allow it to be a steppingstone for the jobs for the future.