

Ethan Weber  
Brooks Crossing Innovation Lab  
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## Section 1

Last semester I received an email from the school of cybersecurity about potential student internship opportunities that would be offered directly by ODU with the Brooks Crossing Innovation Lab in Newport News. One major worry I have had in my time here at ODU is the fact that my graduation is dependent on me finding an internship and completing this class, so when I saw the email, I jumped at the chance to check that box for my curriculum. I had just received a rejection from an on-campus job, so I did not have my hopes very high. But lo and behold, I got an email saying I had gotten picked to be a social media manager for the iLab, it felt like a giant weight had been lifted off my shoulders.

Some of the things I hoped to get out of this internship were to gain experience in a more professional environment, exercise some of the skills I had gained in high school that I was not able to use as much, and to learn more about cybersecurity in an educational environment. Most of the jobs I have held before this one have been very guided experiences. I usually was working directly under someone and had to follow directions quite a bit, with only in the last year I have been able to escape jobs like that, and I have been able to learn what is expected of me and perform without constant hand holding. In high school I took many classes that gave me a fairly advanced knowledge of graphic design and fabrication, things like making logos, stickers, t-shirts and 3D printing were all things that I learned throughout my high school career. And the iLab has a makerspace, where they have all those types of machines for people to use, so during times when I went into the lab, I was able to stretch my legs when it came to working with that kind of machinery again. And finally, throughout college I have only ever learned about cybersecurity from the avenue of it being taught to me, I never learned about how it is taught in an educational setting. Even though I was not the one creating the programs that would teach students about cybersecurity at the lab, I was still involved in the process, and I was able to learn about what stimuli kids would respond with the best when it comes to learning about cybersecurity.

## Section 2

“Brooks Crossing Innovation Lab (iLab) is an instructional hub for STEM learning driven by team building and collaboration allowing opportunities for students and people of all ages, abilities, and disciplines to learn by designing creative solutions to real-world problems. The iLab is an Old Dominion University community outreach facility that opened its doors on August 24th, 2019. We're located in Newport News' Southeast Community, adjacent to Downtown. “This is the description that is given on the ODU website, the Lab was opened in 2019 to give people from around the community the opportunity to come and learn about STEM in an environment where prior knowledge is not expected of them. The main services the iLab provides are educational event, field trips, and outreach programs aimed to teach, students,

teachers, and other prospective learners about some part of STEM. This could be basic robotics, 3D printing, or even hydroponics, which is the process of growing plants on top of water. Most of the field trips and outreach events are aimed towards kids, with the outreach events being hosted at STEM nights hosted in the nearby schools. With the lab being owned by ODU, the available outreach is much larger than what a smaller company would have, with this being the case, many of the open and family makerspace events are sponsored by Verizon, which gives the lab the resources it needs to operate, since all of the events they do are free and open to the public.

The orientation was pretty straight forward and very flexible. When the orientation was scheduled, it was for a day that I would not be able to make. As it was during the winter break time period, and I would not have been back in the Hampton Roads area to be able to make it. But luckily, I was able to reach out to the supervisor to be able to reschedule when I would come in to after I would be back. When the day of orientation came around, I got there on time and sat down. It was very informal; it was me and another guy who was not able to make it on the initial orientation day either. Kaitlyn McCoy, who has served as my supervisor for the entirety of this internship, went over what my duties would be, where to find the schedule to see when events would be, and gave me the usernames and passwords to all of the social media accounts. She made sure that I was familiar with all the tools we use for graphic design and how to make posts that would be scheduled to go up on the various social media platforms that the iLab has.

### Section 3

My supervisor at the lab was Kaitlyn McCoy. Since I am a mainly remote intern, I did not have a lot of face-to-face contact with her other than occasional texts about posts I was working on, and the weekly and then eventually monthly intern meetings. After the first couple posts that I made, she told me that she trusted my judgment when it came to posts, and that for day-to-day flyers and other event advertisements, I did not need to get approval for every single thing I created. This was a system that I enjoyed, as I work very quickly when it comes to a lot of projects, so not having my work timeline being bottlenecked by waiting for approval was something that made me enjoy doing the work more, as I could start a post, finish it, and post it all within my own timeline. What was also nice was the kind of supervisor Kaitlyn is, she has her boots on the ground just as much as all the interns, so knowing that not every single bit of responsibility was on my shoulders definitely made the job easier to manage. She was also very understanding when it came to our schedules. I think the positions at the iLab were unique, since it is a business of ODU, it is a much more understanding environment when it came to school getting in the way. This semester was the first time I had 3 in person classes in about a year and a half, so I found myself much more bogged down by going to class and the work that I had to complete, since the workload of an in-person class is much different than the workload of an online asynchronous class. So being able to have the ability say that I had class or that I was working on something for school and not being made to feel guilty about the fact that I would not be able to come in or that what I was working on would not be the priority for the day created a much more comfortable environment to work in.

## Section 4

My work duties were pretty simple, I created flyers and advertisements for the different event that were being held at the iLab. I have made many, but the main events I made flyers for were the Open Makerspaces (1) and the Family Makerspaces. (2) These were public events that were held a few times a month, where anyone could come in and either freely use the makerspace, or there would be a guided seminar where families could come in and learn how to make something. The main tools that I used were Canva, a free and very accessible graphic design program, that I used to make flyers, advertisements, and posts about different field trips going on at the lab. (3) I used Wondershare Filmora, a user-friendly video editing software, which let me professionally edit videos, such as tutorials, fun fact videos, and event recaps from some of the camps that were hosted at the lab. But the main tool that I used was Loomly, which is the website that allows you to connect all your social media accounts to it and post on every account simultaneously.

Creating the posts helps advertise the events that we do at the lab, and with the algorithms that platforms like Instagram, Twitter, and Facebook have, allows for more people to see the posts other than those who follow the lab's social media accounts. So, creating posts frequent enough to stay in these platforms' algorithms helps keep the lab relevant to the public. Without the social media accounts, I do not think the lab's events would be as consistently full as they usually are.

## Section 5

So, while I was not able to use a lot of cybersecurity skills when I got into this internship, I did have a lot of skills that I previously learned that I was able to exercise that I learned in high school. As I briefly mentioned in the first section, during high school, I took multiple classes that taught me basic fabrication, I learned how to cut vinyl, how to use a laser cutter, how to 3D print, and I learned enough graphic design knowledge that would have qualified me to get a certification with some Adobe products, but scheduling and technical issues prevented me from getting them within the time limit.

But coming into the internship with this knowledge made it easier to get acquainted with all the technology, since I already had a background in most of the machines that are at the lab. I even used my previous knowledge to create a TikTok that did not just apply to the customers of the lab, and it gave information that could be used by anyone, anywhere. Even though those kinds of videos do not directly bring new people into the lab, I think it is just as beneficial because if you can teach one person something that they can use in their day-to-day life, or to use in a hobby, it is worth it.

## Section 6

I do not think that anything in the ODU curriculum prepared me for this internship, which is not a bad thing. But for what my duties were in this position, none of the classes I took prepared me very much. Like is stated before, most of my experiences that carried over were from high school and in personal projects that I did. But one thing that carried from the internship back to my schoolwork was the improvement of my work ethic. After I started this position, I felt that my work ethic improved when it came to finishing my homework. Even though it was an unpaid position at the lab, that did not hinder the incentive of the fact that I was given a responsibility to the business that I had to handle. So, taking that sense of responsibility and applying it to my work ethic in class has caused me to have one of the best academic semesters I have ever had, with no grades less than a B, and I believe that is a direct cause of this position.

I think the main reason why I was not able to bring a lot over from what I learned here at ODU was the fact that my duties were vastly different than what I have had to do for my classes. But what I had to do for the position helped me expand my previous knowledge, while also learning a few new things. Which makes me glad that I did not know everything I needed to know for the position, because I was able to learn way more than I had hoped for.

## Section 7

I think that this position met every goal I had handily. Gaining more experience in a professional environment was the one I was the most worried about, I have had internships and other lower level jobs in the past, but I never got a sense of what the day to day was like in an office setting as an independent worker, so being treated as an employee rather than as an intern or as an assistant, so it gave me a good idea on what life will be like when I eventually do get into an office setting after I graduate.

When it came to rebuilding the skills I gained in high school, it was slower than I expected it to be, but I still achieved it. I expected all my skills to rush back to me when I started back up again, like riding a bike, but there were so many steps that had completely slipped my mind, that I found myself asking for help a lot more than I expected I would be. But luckily the help was very helpful and once I got it down again, I had it down.

And finally, learning how cybersecurity was taught in an educational setting was something that I was able to get bits and pieces of from some of the other interns and Kaitlyn. Being able to see what lessons kids responded to the best was something that was really cool to see. Because I could tell when kids were really excited about what they were doing, and when some kids were obviously dropped off by a parent who had work or errands to run. But the ones who enjoyed it really responded well to things like robotics and basic electronics.

## Section 8

The most motivating part of the internship was the fact that I got to help out in any way I could. I enjoy helping, sometimes to a detriment, so being able to know that I was making a difference at the lab was something that kept me going. And the fact that there was not a lot of pressure in this position. There were so many times where school bogged down my life for a week, and it made me have to put things at the lab on the backburner for a bit, and I was able to, without feeling guilty or getting in trouble for it, so it was nice to have that ability, and it helped me be able to jump right back in without feeling I missed anything and without any consequences other than the fact that some things did not get posted.

## Section 9

I would not say there was really anything discouraging from this position. I think if there was anything discouraging it was before I got the position. Making it so that my degree was contingent on getting an internship in this job market genuinely terrified me. I had been sending out resumes left and right and was either being rejected or hearing nothing at all. So, getting this position was a huge weight off my shoulders, and being able to see that it is now checked off on my DegreeWorks page is a fantastic feeling. I think if there was anything else that was discouraging, it would be the nature of this position. I was hoping that I would get one of the more cybersecurity focused positions, but after I realized that this would still count towards the requirement, the discouragement disappeared, and I was left feeling more confident in what I was doing. But other than those two things, I cannot say that there was really anything else discouraging about this internship.

## Section 10

I think the most challenging thing I faced when it came to this internship was scheduling things. I rely very heavily on the Canvas calendar; it is one of the handiest things I use to keep track of my schoolwork and other work. But none of the events that I created posts for were listed on the Canvas calendar, which made it extremely difficult to remember when I had to make something for the social media accounts. This was only an issue early on, but I really needed to lock in after I forgot a couple events. But after I remembered to check the calendar a few times a week and to add everything to my own calendar, I was able to remember everything.

## Section 11

Some advice I would give to future interns in my position would be a few things. The first one, is to get your time management skills in check, there may have been no consequences for me when I did this, but that could change and if you do not improve your ability to make time when time is necessary then you are not going to find any success in this position.

This next piece of advice is important, learn the tools and machines. Even though, as a social media manager, I was not in the lab every day, working with the machines, it was still extremely helpful that I took the time to jog my memory with the machines I was familiar with, and to learn all the machines I was not familiar with. This made it so that when I had to make a post regarding some of the machines, I did not need to turn to someone to ask how it worked, I could just use the knowledge that I had to write down correct information, and I was able to feel confident that the posts I made were all factually current and did not have any errors.

This last piece of advice is the biggest, and it is to not be afraid to ask for help. Too much pride can be a dangerous thing, and asking for help is pride's biggest weakness. So being able to put that to the side and ask for help when you need it, will make this position so much easier. There were so many times where I felt like I was taking too much on, and I was able to turn to the other social media manager and ask her if she could handle some of the things I had on my plate, and she did. And the same went for her, if she was already handling some posts, I would offer to handle some of the posts she had in her docket as well. Building a level of trust with your coworkers so that you can help each other is extremely important, as it will make your life and position easier by taking some of that excess weight off and giving to people who have more time and energy to pick up the slack.

## Section 12

I think that I had two main take aways from this opportunity, and those are that it does not hurt to rely on people, and that there are more incentives in life beyond material. Before this, I would have described myself as someone who works best alone, I did not like having to rely on people for things, and a part of me still does not. But in this setting I found myself surrounded by people who were in the same boat as me, they wanted an opportunity that would get them more experience and one that would take care of the internship requirement on our curriculum, and having that in common with everyone made it a lot easier to adjust to the position, since my first day was the same as everyone else's first day. So, the pressure of turning to someone and asking for help was not there. And the other take away about incentives, I will not lie, I think money is the greatest incentive, so in the beginning there was a part of me that was disappointed that it was an unpaid position, but after I started, I found immense satisfaction from doing the work, and the disappointment left me very quickly, the feeling of completing every task I had planned out on my spreadsheet was very nice, and it motivated me to keep working on other posts and my schoolwork.



Like I stated in a previous section, this position has greatly improved my work ethic, I believe that I can work even more efficiently than I could before, and I am really happy about that fact. I believe that that change in me will help carry me to success in my last year of college, and it will help me greatly in my future career. Overall, I enjoyed this position greatly, I am really happy that I did it and to be honest, I am going to miss it.

## Work Samples

### 1. Open Makerspace Flyers



The flyer features a large blue circular logo on the left containing a white stylized 'M' and the text 'BROOKS CROSSING INNOVATION LAB' and 'ODU'. To the right of the logo, the text 'OPEN MAKERSPACE' is written in large, bold, dark blue letters. Below this, the date 'FEBRUARY 7TH' and time '4-7 PM' are displayed in the same font. A list of activities is provided in a smaller font, followed by a 'REGISTER HERE!' section with a URL. A 'The fine print' section is located to the right of the registration information. The bottom of the flyer contains contact information for the ODU Brooks Crossing Innovation Lab and a list of sponsors.

# OPEN MAKERSPACE

FEBRUARY 7TH  
4-7 PM

- Use the recording studio to create music or record a podcast!
- Use the direct-to-garment printer to create products such as t-shirts, tote bags, and more!
- Use the laser engraver to create art on metal or wood!
- Design and print using the 3D printers!
- Use the UV printer to print full color on a variety of materials!
- Use the vinyl cutter to create stickers or shirt designs!
- Use our professional graphic design software to make your vision come to life!
- Assistance is offered by our staff!

**REGISTER HERE!**  
[BIT.LY/OPENMAKER24](http://bit.ly/openmaker24)

The fine print: Space is limited. Registration is required. No-shows will be prohibited from reserving Makerspace slots in the future. All ages are welcome, but minors **MUST** be accompanied by a parent/guardian. Please bring your own materials to print on as materials will not be provided. If you have a specific project you'd like to work on or have questions, please reach out to us!

**THE ODU BROOKS CROSSING INNOVATION LAB**  
BROOKSCROSSING@ODU.EDU 757-975-5320  
550 30TH ST, SUITE 101 NEWPORT NEWS, VA 23607  
ODU.EDU/BROOKS-CROSSING-INNOVATION-LAB

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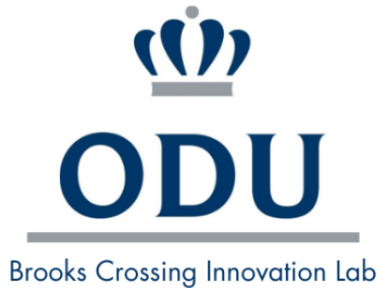
**SPECIAL THANKS TO OUR SPONSORS:**  
BELL Techlogix SAP  
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MORGAN TRUST

## 2. Family Makerspaces



# FAMILY MAKERSPACE

**March 28th,  
5-7pm**



**OUR FAMILY MAKERSPACE NIGHTS ARE A GREAT WAY FOR FAMILIES TO EXPLORE STEAM TOGETHER! EACH EVENT FEATURES THEMED STATIONS WITH ACTIVITIES GOOD FOR ALL AGES. YOU MIGHT EXPLORE 3D PRINTING, LASER CUTTING, ROBOTICS, AND MORE! THESE EVENTS ARE FREE AND OPEN TO THE PUBLIC!**

### 3.Field Trip Post

