Hello and welcome to my personal site and online Portfolio! A little bit about me, I have quite the passion for everything IT and love learning about all the different fields of Computer science. The last few years I have been teaching myself all that I can in my free time and in University Classes. I got interested in computer programming after I got an itch for game development after being inspired by what Toby Fox did with his hit game Undertale, using Game Maker Studio. After this, I knew I wanted to learn more about computer programming and IT, and this is what started my journey into pursuing CS and Software development. Recently, I finished my master’s degree in cybersecurity just a few short months after finishing undergrad at Salisbury University. Currently I am working with SAIC as a software engineer and UI developer.

Certifications

AWS cloud Practitioner

After migrating my personal website to Amazon Web Services, I was quickly amazed at the endless possibilities available from this service. I decided to use my free time to prepare for the AWS certified cloud practitioner exam to help me become more skilled in using AWS since many companies are now starting to switch over to cloud environments. I learned the Fundamentals of AWS such as ec2 instances, autoscaling groups, serverless architecture, AWS vs customer managed infrastructure, CloudWatch and much more. I plan to pursue the Certified Developer Associate certification next.

Certified Ethical Hacker

As part of my master’s degree program at WGU I was required to take the certified ethical hacker exam. The CEH is ­a widely recognized certification required by many companies to work in Netsec. The exam covers many areas of ethical hacking including many hacking / penetration testing tools, practices, and compliance policies. It also delves into network forensics, postmortem analysis and recovery.

Skills

Python

MYSQL

C++

Java

GameMaker Studio 2

Linux, Bash

Html5

CSS

Javascript

Git Version Control

Ubuntu Server

Networking

Experience

Over the past few years,I have accomplished quite a lot , and learned many different technologies. This is how I did it, through a combination of self-teaching, personal projects, YouTube / online tutorials, university classes, internships and quite a bit of elbow grease. Here is my story from when I started to where I am now.

**Formal Education**

**Master’s Degree : Cybersecurity & Information Assurance**

Immediately following graduation from undergrad, I was able to start my graduate program for my M.S. in Cybersecurity & Information Assurance through WGU’s accelerated online program. I was able to complete the program in just about 3 months, I started July 1st and graduated in late September which according to my Mentor, is not a common feat. (He noted that most students finish in 1- 2 years, and it is rare to see even 1 or 2 students a term finish the entire program within one 6-month term, let alone halfway through the term. I learned a lot about InfoSec during grad school, and took multiple classes involving the Penetration Testing, data and file recovery and postmortem forensics. Additionally, I took classes involving Cybersecurity management, designing of secure networks and secure software development, including secure SDLC methods and code practices.

**Bachelors of Arts : Communication Media Production**

I am graduated from Salisbury University in 2022 with Cum Laude honors, with a Major in Communication: Media Production. In this track, I took multiple classes focusing on web development with Html, CSS, and JavaScript. Additionally, I took classes focusing on audio and video production, and writing for media and film

**Minor : Computer Science**

I took a minor in Computer Science at my university. The CS minor at SU is very software development based as it includes all the fundamental core classes from the CS Major, which taught me a lot of essential skills that are standard in the industry. All Development classes I took at Salisbury are available to view on my GitHub. This includes core languages like Java and C++ , CS concepts such as Data Structures and algorithms, and multiple math classes.

**Professional Experience**

**Software Engineer / UI developer at SAIC (USPTO) – *Present***

In late July, I started my first post grad fulltime developer Job working with SAIC for the US patent and Trade office. I was hired as a full stack developer, to be able to understand both the frontend and backend of the processes at USPTO. We work in an Agile / Scrum environment with 2-week sprints and a point system. On the frontend side of things, I work with JavaScript, html, handlebars, and Jquery to connect the UI to the BE service calls. We develop UI interfaces for product owners of the patent examination web applications. On the backend side of things, I have used Java, spring and Junit to write Unit tests for our service classes to increase code coverage. Additionally, I am expecting some work with SQL as I get assigned more backend responsibility as well as some Devops work down the road. Since I started at SAIC I have learned so much from many talented senior devs that have been at the company a long time. I look forward to continuing my work with SAIC and moving forward and see where it takes me down the road.

**Pendant Automation, My first tech job**

With my knowledge I had gained making games over the past year and through online videos and tutorials I watched, I was hopeful to find a summer job in between my sophmore and junior year doing something tech related. Luckily, I was able to join a small startup that manufactures conveyer belt control systems in Havre de Grace Maryland, that gave me a chance to prove myself in the field. I started out as a PLC (Programmable Logic Controller) technician and programmer, in which I worked with Rockwell Automation programming and testing software. When I first joined the team my boss and company founder, was the only software developer at the time. He decided to shift my duties to also include python and MYSQL scripting to support the ever-increasing amount of clients we had with WCS (Warehouse Control System) related projects. I learned a lot and coded multiple projects for clients that included python, MySQL database, as well as some Linux projects involving configuration of raspberry Pis for automation. Other responsibilities included remote management of windows servers, continued microcontroller testing as well as some PowerShell configuration. I continued this internship through the whole summer and even returned and continued interning with them in the winter. Over the course of my internship, we did projects for Amazon, Pampered Chef, Eby Brown, and Bd Sparks. I made many great connections at pendant and was sad to part ways with the team. This startup had grown dramatically from when I had joined until when I left, and I hope that the company continues to grow and be successful for many years to come! Additionally, I was later able to receive credit for this as an internship at my university. (This Internship Presentation can be viewed [here](https://drive.google.com/file/d/1wcrMiahdIMQjMWCmTdlxjVGKR8xDXmdB/view?usp=sharing).) Additionally , here is a link to their company site, if you have any industrial control system needs, these are the guys to do it.

<https://www.pendantautomation.com/>

**Internship with Johns Hopkins**

During the summer in between my Junior and Senior Year, I was able to land a great opportunity at John Hopkins Carey business school in Harbor East, Baltimore city. I took on the role of a technical support analyst, in which I was responsible for assisting our students and staff / faculty, as well as help with system administration of their fleet of computers. My duties included management of Active Directory, Microsoft Endpoint Configuration Management console, setting up classrooms and conference rooms with hybrid and remote on-site technology with zoom rooms, mxl microphones, and video conference cameras, imaging new laptops, performing upgrades and repairs on their computers, and taking support calls via zoom to assist remote faculty and staff as well as assisting those present on campus. By the end of the Summer, I had learned quite a bit about system administration, troubleshooting, OS issues, as well as working in a bigger more corporate style workplace. I made a bunch of great connections at Hopkins and still keep in touch with multiple members of my team from time to time, I am very grateful to have had an experience to work with such a prestigious university such as Johns Hopkins as well as the chance to work with such a talented team of techs.

**Personal Projects**

**Game Dev/Intro to Tech**

After being inspired by Toby Fox, a solo developer who made the now hit game Undertale almost entirely by himself, using YoYo Studios Gamemaker Studio, which comes with its own UI, built in scripting language with Object-Oriented functions, pixel art editor and much more. I spent the entire summer after my freshman year working nonstop on my MacBook air and learning the fundamentals of programming as well as game design, and pixel art by working with Game Maker Studio 2. I continued working on game development in my free time throughout the next school year and even learned a bit of audio production to produce my own music for the games since I took piano lessons for quite a few years. (If you are curious about the music, you can check that out [here](https://soundcloud.com/jeremy-scheuerman-76586).) These projects and their code are available to view on my GitHub if you are interested in seeing some of the game mockups I made. These first few game-dev projects will always hold a special place in my heart for introducing me into the tech field and I will always cherish game development for putting me on this exciting career path.

A tech demo i made in Game Maker Studio 2

**Building a Desktop**

As my projects grew larger in scale, my MacBook Air wasn’t cutting it for me, with high compile times, due to its lack of a GPU to process the graphics of the games, relatively small 8 gigs of memory, and a laptop i5 processor, building my projects was taking much longer than I would like. I decided it was time to build a desktop from scratch to better handle my programming needs. I built a PC with a 9th gen i5 processor, 4GB GTX 1650 GPU, and 32 gigabytes of RAM. This was a neat experience, because this was the first time I had ever built a PC or really worked with computer hardware hands on. Since then I have built multiple computers for others, and I haven’t been scared to open computers, swap parts, repair computers, laptops, game consoles etc. I’ve fixed computers, upgraded computers and even broken a couple machines by accident in the process, it’s all part of the learning experience.

My current desktop setup

**A Linux Server from scratch**

Over winter break I decided I wanted to spend some time working on some personal project ideas I had. I wanted to make a Linux server and use it for a multitude of personal reasons. I decided to buy a used Dell OptiPlex desktop computer (i5 16 gigs of ram) since I figured it would be a perfect server and it only cost a couple hundred bucks. I installed Ubuntu server with Ubuntu desktop overtop of it so I could access GUI applications if I needed to, although at this point, I am so comfortable in command line I usually just connect via SSH anyway. I did everything from scratch, I installed the OS, setup the port forwarding and firewall rules on both my router and the UFW firewall on Linux as well as configuring all the programs I needed. For my DNS I used noip2.com a free service which allowed me to get my host name (jerserver5712.ddns.net), I installed the update client to ensure that the DNS will update IP changes and even setup a script I found online which runs on a cron job to automatically renew the hostname for me every 30 days. I installed openssh server for both sshing into the server and for sftp file transfers, I got a 4tb and 2tb drive for the server to use for remote backups. For the remote backups I use a windows tool called sshfs which you can use to mount remote sftp servers as network drives, I use this in tandem with a tool called Cobian reflector, which allows you to backup files to either a remote drive, or a remote sftp server (as well as a bunch of other options). I use this across my laptop and desktop to back up my files so if anything, ever happens to one of my devices or I need to access something that’s on my pc I can just access the sftp server. I can even access it from my phone using an application called Andftp which allows me to access the files on the server and also backup my phone’s files as well. I learned a lot about bash, systemd services, cron jobs and had to even do a little bash scripting to get everything configured the way I wanted. I also wanted this server to host my website, I installed apache2 web server and got everything setup properly to host my personal website. I also run a Minecraft server to play with friends, which I have configured as a system service to run automatically on startup. I additionally configured a mail server which connects to a separate Gmail account I made just for the server, it emails me log files for when automatic updates are performed, whether or not the server needs to be rebooted to finish the updates or if there are errors or not, and it emails me a detailed log file from Cobian reflector for when a backup has completed successfully (or if the backup has errors). I learned a ton about networking, port forwarding, system/ server administration, a lot of bash and Linux command line and just a lot more about Linux overall.

**Making my own website and learning Version control**

After the server was set up, I figured it was time to make my personal website. I had got my feet wet with web development over the Summer and would look at it here and there after work when I had the time. I finished a few tutorials, and I had a firm understanding of Html, CSS and how they worked together in tandem. I even made a few small test pages to experiment around with how it all worked. However, now I decided to put it all together and make a Portfolio website, I used HTML5, CSS3, Bootstrap5 and a bit of JavaScript to develop this site. I went out of my way to optimize the site to be responsive on PCs as well as on mobile screens by using media queries. Additionally, I had been familiar with GitHub and have always uploaded my projects to my page when I was finished, but I had never integrated it into my workflow. Since this is the industry standard, I decided it was time to learn it, while making this website project, I decided to integrate git version control into my workflow. This made it easier for me to work back and forth between my desktop at my apartment, and my laptop when I was on campus. This project left me with some great skills in web development, and also a powerful upgrade to my workflow with git version control.

Using Web Development to help out local organizations around my university.

After working with web development, a decent bit, I was eager to apply my skills in a practical setting. Luckily, I got a few chances to do this, first I got a call from a good buddy of mine who works with the Wicomico Humane society and was asking me some help with their website. The website is made with WordPress, and he was having trouble implementing an online animal adoption form. The goal of the form is so that potential dog adopters could input the info in the form and the results be emailed to the shelter, as opposed to the way they had been doing it… getting the forms faxed over. I was able to get the embedded html form code sorted out with him and now adopting from the humane society is much easier. Another friend of mine works at a local bagel place, the bagel bakery café which is one of my favorite places around. She oversees their website, which is powered by Pop Menu, a site builder similar to WordPress and Wix. The goal was to implement a timer that would tell when the fresh bagels are ready as well as to clean up the site design overall. Similar to other site builders, pop menu also has a feature to implement custom html code as well. I was able to clean up the site overall by using embed html and CSS flexbox (to ensure responsive design) to embed their social medias into the site so users could see the updated feed . Additionally, I wrote the bagel timer feature in JavaScript and was able to implement that into the site as well as cleaning up some other visual aspects of the site as well. Finally, I am signed up to work with Salisbury university to work on building a website for their Arboretum project, which keeps track of historic plants on campus and where you can visit them. I believe the site is going to be designed with Html, CSS, and JavaScript.

Building WXSU a new responsive website

During the first semester of my senior year, I participated in Salisbury’s WXSU radio club to host a podcast. This semester as a personal project, and because I am friends with a few of the student managers, I offered to rebuild their entire website from the ground up as it was old and desperately needed to be updated. The old site which you can view here (for now) was quite rough. The colors didn’t mesh, it looked very dated and some links to main pages didn’t even work. Additionally, the site was completely broken on mobile to the point where it was almost unusable. This site also lacked organization as well as the ability to listen to the radio station live straight from in site. I rebuilt the entire website from a blank slate from the ground up. I used CSS flexbox as well as media queries to ensure responsive design, as I feel this is one of the most important things to have, especially for a site used by college students who are always on mobile. I built a responsive nav bar with some JavaScript and a dedicated page for forms to apply to host a show. The coolest feature I added was the ability to listen to the show straight from the websites home page. I achieved this by embedding the caster.fm player into the site, I also hyperlinked the station’s phone number right above it, so in just a couple clicks you can call into the show live. Salisbury currently hasn’t put up the site yet (they are planning to soon) as there are some technical formalities that need to be gone through with the university for it to be posted by them. However, you can check it out here on my GitHub pages to see the full site.

**Moving Forward**

In the next upcoming years, I am excited to continue this journey in the tech field and learn more about development. My goal is to hopefully land a remote role as a Software Developer, Full stack Developer, Web Developer Cyber Security Engineer, or something closely related. Over the past few years, I think the most important thing I’ve learned is that there is always more to learn, and always more ways to improve your skillset. I am looking forward to continuing to grow, network, and develop as I move forward into my career.