!!Caution this website is currently undergoing creation/

            construction

            and is only in its initial stages, expect changes !!

About me

Hello and welcome to my personal site! A little bit about me, I am a college senior finishing up my last semester at Salisbury University, I am receiving my Bachelor’s degree in Communications Media Production with a minor in Computer Science. I quite the passion for everything Computer Science, networking, IT, programming, and everything in between! The last few years I have been teaching myself all that I can in my free time and loving every second of it. It all started the summer after my freshman year, when I got an itch for game development after being inspired by Nintendo’s Earthbound game series. After this, I knew I wanted to learn more about tech, and this is what started my journey into this wonderful and ever evolving field and I haven’t stopped pursuing tech since. Immediately following my graduation in May 2022, I will be starting my Master’s program in Cybersecurity and Information Assurance at Western Governor’s University.

Skills

Over the last few years of self-teaching, troubleshooting, YouTube tutorials, Computer science classes, personal projects, multiple internships with hands on experience and A LOT of hard work, I have picked up quite a few things. Here are just a few things I have learned although this is not an exhaustive list, the skills I have picked up include:

Experience

I’ve come along way and accomplished a lot of things over the past few years to learn what I know now. This is how I did it through a combination of personal projects, YouTube /web tutorials, school classes, work, internships and quite a bit of elbow grease! Here is my story from when I started to where I am now!

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 a program called Gamemaker studio 2, which comes with its own UI, built in scripting language with OO functions, pixel art editor and so much more.. I spent that entire summer working nonstop on my MacBook and learning the fundamentals of programming as well as game development and sprite making by working with YoYo studios Game Maker Studio 2. These first few game-dev projects I made will always hold a special place in my heart for introducing me into the tech word and I will always cherish game development for putting me on this exciting career path.

Upgrading to a desktop and really getting into it.

As my projects grew my MacBook air wasn’t cutting it for me, with high compile times, due to its lack of a GPU, and relatively small 8 gigs of memory, and a laptop i5, 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 pretty decent desktop from scratch, with a GTX 1650 GPU, 32 gigabytes of RAM and a 9th gen i5 processor. 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 haven’t been scared to open computers, swap parts, repair computers, laptops, game consoles etc. I’ve fixed computers, upgraded computers and heck even broken a couple machines by accident in the process, it’s all part of the learning experience!

Continuing game dev and dabbling with audio production

I continued making games until the end of my sophomore year until I decided I wanted to move away from game dev and started to shift into to other fields of cs. I decided to take an introductory java class at my university to see if I would enjoy more traditional programming (I did! I got an A+ in the class) and then continued to teach myself a little python as well. Additionally, I started getting my feet wet with a little Linux as well!

Pendant Automation, my first tech job!

With my knowledge id gained making games over the past year and videos and tutorials I watched I hoped to find a summer job doing something tech related. Luckily, I was able to join a small startup and Havre de grace Maryland that gave me a chance to prove myself in the field. They gave me a job and I started out as a PLC microcontroller technician and programmer, in which I worked with Rockwell Automation programming and testing software. When I first joined my boss Rob Ward was the only software developer at the time and he decided to shift my duties to also include python and MYSQL Scripting to help him out. I learned a lot and coded multiple projects for clients that included python, MySQL database, as well as some Linux projects involving raspberry psi. 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 for the winter. I made many great connections at pendant and was sad to part ways with the team, although it was time for me to move on to other opportunities. This, startup had grown dramatically from when I joined until when I left, I hope that the company continues to grow and flourish and that they continue to be successful for many years to come! Additionally, I was later able to receive credit for this internship at my university! Here is a link to their company site, please check them out! https://www.pendantautomation.com/

Learning more linux and some cyber security

That same summer I decided to switch my laptops primary OS to linux to learn some more about it. This helped me with some raspberry pi stuff at work and helped me learn some bash which was a lucky skill that helped me out later. I also started looking into ethical hacking and network security!

Studying Computer Science at my university

After summer my interest in the field grew had grown even more, I decided I wanted to tack on a computer science minor to my transcript to learn more about the field. At my university, the Computer Science track is very software development based, which taught me a lot of essential skills that are industry standard. I took classes learning Java, C++, computer hardware, algorithms and data structures, as well as calculus and discrete mathematics. I finished my minor in CS my junior year and all of my code, projects, and homeworks that I have completed are available to view on my GitHub.

Intro to Web development

The winter break of my junior year I decided that since I already knew a lot of backend, (Java, C++, python , mysql, windows server and linux skills). That it was time to learn some front end. I started grinding videos on Html and CSS. I completed a few tutorials on youtube and learned the basics and made a few example projects. I uploaded them onto my github and it was a nice way to get my feet wet for webdev.

Tech job number 2 john Hopkins

Summer after junior year was here and I was looking for another opportunity in tech. I updated my resume, shopped around and was able to get a great gig at John Hopkins Carey business school in Harbor East, Baltimore city. I took on the role of a technical support analyst, to help school in assisting our students and staff / faculty, as well as help with system administration for their fleet of computers. My duties included management of active directory and, 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 and performing upgrades and repairs on our fleet of computers, and taking support calls via zoom to assist remote faculty and staff as well as assisting those present in office, present in the. 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 John Hopkins as well as the chance to work with such a talented team of techs!

A linux server from Scratch

After another semester winter break was here and I decided I wanted to spend some time to work on some personal project ideas I had. I wanted to make a personal Linux server and use it for a multitude of personal reasons. I decided to shell out for a refurbished dell OptiPlex with an i5 and 16 gigs of ram since I saw their reliability 1st hand while working at Hopkins (Hopkins uses mostly dell computers) and figured it would be perfect server. I installed Ubuntu server with Ubuntu desktop overtop of it so I could access GUI applications if I needed too (although at this point I am so comfortable in command line usually just SSH anyway). I did everything from scratch, I installed the OS, setup the port forwarding and firewall rules on both my router UFW firewall on Linux. For the DNS I used noip2.com a free service which allowed me to get my host name, 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 corn job to automatically renews the hostname for me every 30 days. I installed openssh server for both sshing into the server and 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 used this in tandem with a tool called Cobain reflector which allows you to backup files to either a remote drive or a remote sftp server. I use this across my laptop and desktop to back up my files so if anything ever happens 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 of the server and also backup my phones files as well! I also learned a lot about bash, systemd services, cron and had to even do a little bash scripting to get everything configured the way I want. I also wanted this server to host my website, I installed apache2 web server and got everything setup properly to host my personal website (which you are on now!). I also run a Minecraft server to play with friends (java and or bedrock) on the server 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, and it emails me a detailed log file from Cobian reflector for when a backup has completed successfully (or if the backup has errors). Ilearned a TON about networking, port forwarding, system/ server administration, and ALOT of bash and Linux command line and just a lot more about Linux overall and Linux overall.

Making my own website and learning Version control.

After I had all that configured, 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 sometimes. I finished a few tutorials, and I had a firm understanding of Html5, CSS and how they worked together in tandem. I even mad e a few small test pages but nothing serious. However, now I decided to put it altogether and make a Portfolio website, I used HTML5, CSS3, Bootstrap and a tiny bit of JavaScript to develop this site. Additionally, I had been familiar with GitHub and had always backed up my projects there when finished but had never integrated it into my workflow. Since this is the industry standard, I decided it was time to learn it, while making 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. Finally, this project left me with some great skills in web development, and also a powerful upgrade to my workflow which is part of the industry standard and will also allow me to work more seamlessly between all my devices.

Final semester of Salisbury University

I am currently in my final semester at Salisbury university, I am taking 2 classes (COMM 343 communicating on the web, and COMM 490 communicating with code) which BOTH focus on HTML5, CSS, and JavaScript! When I am finished with these classes I will be posting all of the work on my GitHub as usual. After this semester it’s time for graduation, which leads to my next endeavor. Additionally, I am currently in my final semester at Salisbury university, I am taking 2 cla

Graduate school at WGU and a M.S. in Cybersecurity

I have decided that immediately following graduation I will be pursuing my Master’s Degree in science focusing in Cyber Security and Information Assurance at Western Governor’s University. The program will focus on secure network design, system administration, IT management, ethical hacking, and secure software development. I decided to pursue this degree because I think it will complement a lot of the skills I already have very well (Linux, OS, servers, networking, system administration, programming, database, web development) as well as make me more marketable on the job market! I am very excited to start the program which I am starting in June almost immediately following my graduation, in May 2022.

The Future!

This is by no means an exhaustive list of everything I’ve learned in tech over the last few years, but I am excited to continue this journey in tech professionally and on my own time! There is always more to learn, and always ways to improve your skillset, I am looking forward to doing both and continuing to grow, network, and develop!

Links