



Certifications, Certificates, and Classnotes (oh my!)

(Please click on each hyperlink to view my certificates)

[CompTia Network+](#)

Networks are the backbone of business. This Comp TIA certification has enabled me to understand and troubleshoot physical and cloud-based networks and to help protect those networks by preventing attacks.

[CompTia Security+](#)

Security-in-depth is an important aspect of every part of our daily lives. This Comp TIA certification helped me to see a larger view of how physical security and digital security and identity are intertwined. Many of the tools and skills we use in cyber security enable families and employees to go about their normal activities with less fear of harm to their physical persons and relationships and assets or to their digital presence online.

[CompTia A+](#)

Comp TIA A+ certification encompasses all the physical and electrical components of digital devices and PCs. In order to protect our networks we first have to understand how computers and cell phones and IoT (internet of things) devices are constructed as well as their capabilities and limitations. This is especially important in protecting infrastructure by understanding physical components like those used in DCS/PLC and SCADA.

[Google Cybersecurity Professional Certificate](#)

Google as one of the major international information systems giants has teamed together with Coursera to create this extensive course which includes experience with security playbooks, Siems, and other practical tools and best practices to protect networks and businesses, as well as individuals.

[Hands On Linux Administration](#)

I am proficient with the command line interface (CLI) for numerous Linux Distributions from the tiny DSL Linux through Fedora, Debian, and Ubuntu, including many special purpose distributions such as Kali and Parrot OS Security.

[AWS Cloud Technical Certificate](#)

More and more businesses are moving networks and software into the cloud, which is basically a managed pool of data centers and servers and software with quick scalability and reliable up-time at less cost than purchasing and maintaining and patching local

hardware. One of the largest benefits of cloud computing is that a company can scale its resources up and down automatically as the needs of their customers change. This saves money because of the “pay as you use” concept of computing and database storage and enables businesses to respond more quickly to changing customer requirements. (Make sure that you install the billing alerts and caps or you may end up paying a lot more than you anticipated. Even their “free” tier is not entirely free and they will switch users from the free tier to standard billing without warning).

[Google Cloud Technical Certificate](#)

Google is one of the world’s largest cloud services providers. Their services and structure are similar to Amazon AWS but seems less complicated to figure out and to implement. Google Cloud offers Compute services, DB services, Kubernetes services, and others.

[Mosh Complete Python Mastery](#)

Python is a major programming language used for Artificial Intelligence, Linux Scripting, Containers, Security Tools, Cloud Computing, and numerous standalone and web-based applications. Advanced Python is not as easy to master as many would have us believe, but it does have a lot of community support and most of the modules are open source. I personally prefer more structured programming languages like C++ and Java with their semi-colon delimiters (white spaces “count” in Python) while Python seems to rely heavily on the fact that computing power is less expensive than before so it seems that many modules and programs are not as concise and resource-efficient as with C-based languages. (Try running Jupyter notebooks on less than 4GB of RAM). That and the fact that it is mostly an interpreted and not compiled language like C++. But Python is currently one of the major programming languages for software development.

[Network Security](#)

I teach Network Security for a major university. This certificate demonstrates that I have the necessary skills to protect both physical networks and hybrid cloud networks.

[Splunk SIEM \(Security Information and Event Management\)](#)

I installed Splunk Enterprise on an Ubuntu Linux computer. I was able to create indices, searches, import data csv files, and create dashboards to observe changes and anomalies in the system.

[Riverside CCNA Bootcamp](#)

This CCNA course was an intense 5-day hands-on lab where we learned both theory and practical Cisco networking skills. Many of the students went on to take their CCNA exam after this course. One takeaway from this course is that Cisco offers a free emulator (Packet Tracer) which allowed me to continue to learn and play with various emulated (but actual) network components like routers, switches, wireless access points, and others. It also presents an opportunity to watch packets traverse a network at various levels of the OSI model.

[Professor David Failor University Classnotes:](#)

I teach information science and programming courses at a major university. Courses include Info Security, Network Security, C++, Java, PC Repair, Web Design, Risk Management, Client Operating Systems, and Mathematics. Here is a link to an actual exam from one of my classes: [Final Class Exam December](#)