7 Steps to your Cybersecurity Career

How to begin your career in Cybersecurity
By: Chris Romano, CISSP

Founder: CareerUP
Cybersecurity Career Program
https://www.careerup.tech

My introduction:

Nice to meet you, I am Chris Romano, Cybersecurity professional with over 20 years experience in private and public spaces. During my career, I have authored courses and mentored candidates from entry to senior levels to establish and enhance their careers. In my career, I have held positions as a Senior Network Engineer, Security Engineering SME, Senior SOC Analyst, Malware Analyst, Lead Forensics Analyst, Manager, and Director.

Throughout my career, I have been fortunate to work with some of the top engineers in the world. They have helped mentor me and in return, I have helped and mentored others from entry-level with no experience to senior level to help them further their careers. Now, I am providing you with this guide to help you.

If you would like a program that provides guidance through all of the steps detailed in this guide, visit:

https://www.careerup.tech and book a call to discuss how my program can help you begin your career in as little as 3 months.

I hold the following certifications and degree:

CISSP, ITILv4, CIW Data Analyst, Network+ CE, Project+, CIW Site Developer, AirWatch Certified Expert, Paraben Drive Examiner, and Certified Reverse Engineering Analyst.

Bachelors of Science in Data Management/Data Analytics

As you begin this guide, it is important to realize that everyone's path into Cybersecurity may differ.

There are many different ways to enter Cybersecurity and the recommendations will also vary.

The guide below highlights one of many different ways, this guide is not the only way!

My hope is that you find some useful information within this guide to help you on your journey into Cybersecurity.

Some people will find their way on their own, others will attend school, and for others a bootcamp may help.

What is important is for everyone to realize that you **CAN** have a career in Cybersecurity.

Learning, Dedication, Creativity, and Resilience are just a few traits that will help you along the way.

Remember, if you feel lost or want guidance, my program is here to help you. Learn more at https://www.careerup.tech - My program contains a full bootcamp, certification material, and professional career mentoring to help you begin your career.

Now let's get started!

Step 1 - **Finding** your Cybersecurity ***interest***

Step 2 - Learn your interest, **data collection**

Step 3 - What experience and skills do you **have**? What to you **need**?

Step 4 - Make your plan!

Step 5 - Fine tune your **knowledge**!

Step 6 - Creating a GREAT **Resume**

Step 7 - ***Insights*** into the position

Step 1 - **Finding** your Cybersecurity ***interest***

The very first step you need to take when you begin a career in Cybersecurity, is to first figure out **what** you want to do!

Cybersecurity is an ever evolving field, attacks constantly change.

Malicious users use different attack vectors, methodologies, restructure and reuse existing attacks, expand attacks into new hardware, software.

They constantly find new ways to exploit existing vulnerabilities.

Often, they are skilled, at times unskilled, however, motivated.

In other words, the field is dynamic and offers many different areas.

Step 1 - **Finding** your Cybersecurity ***interest***

Here is where you want to read news, find what positions interest you, and begin to research what the positions do, what is required, and decide if that is something your want to pursue.

Even without experience, there's a need for people who are willing to learn, work hard, and most of all….**THINK SECURITY!**

A **few** of the common entry-level positions are:

Entry-Level or Junior:

SOC Analyst

Pentester

Security Specialist

Security /Network Engineer

GRC Analyst

Information Security Analyst

Cybersecurity Specialist

Cloud Security Engineer

Digital Forensic Examiner

Step 1 - **Finding** your Cybersecurity ***interest***

The positions I listed are just ***some*** of the common positions with requirements that allow people new to the field with limited experience to obtain. Typically, these positions have openings for people with 0 to 1 year of experience. For now, let's focus on WHAT position interests you most.

Some of the positions falls into two general categories that we will discuss below - **Analysis** and **Engineering**.

Analysis - Positions within this area work with the characteristics, trends, analytics, of data to evaluate security events. Positions such as SOC Analyst, Pentester, Security Specialist, and other positions work with evaluating data collected to determine outcomes.

Engineering - These positions involve design, configuration, and implementation of network, security software, and hardware to secure environments.

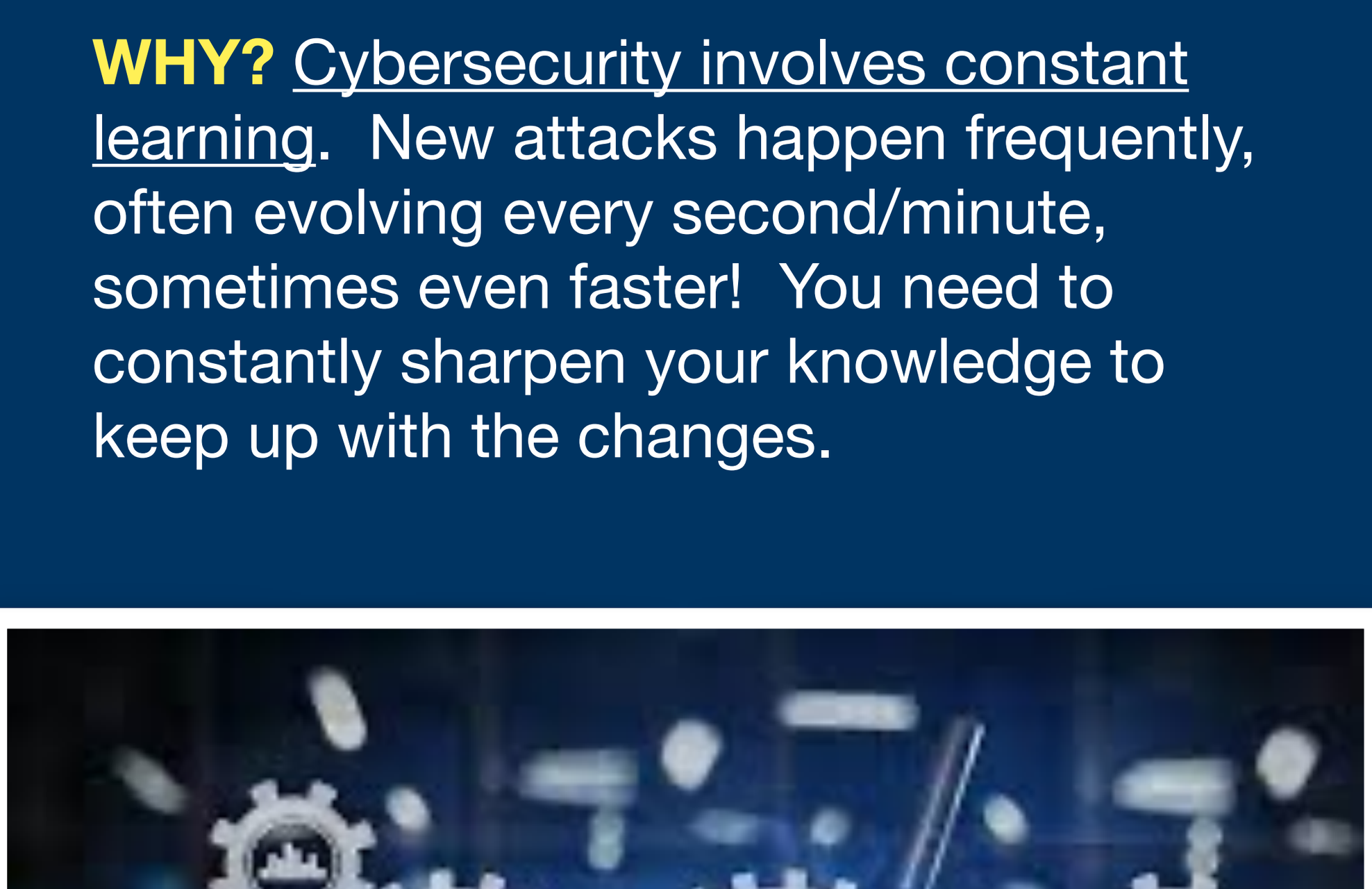
Step 1 - **Finding** your Cybersecurity ***interest***

This is where you will need to evaluate what you actually enjoy, and begin researching the specifics of the positions which attract your interest.

I highly recommend focusing on an area, which you have interest, as learning will be easier if you have an actual interest.

After all, why work towards landing a job you do not have an interest in?

WHY? Cybersecurity involves constant learning. New attacks happen frequently, often evolving every second/minute, sometimes even faster! You need to constantly sharpen your knowledge to keep up with the changes.

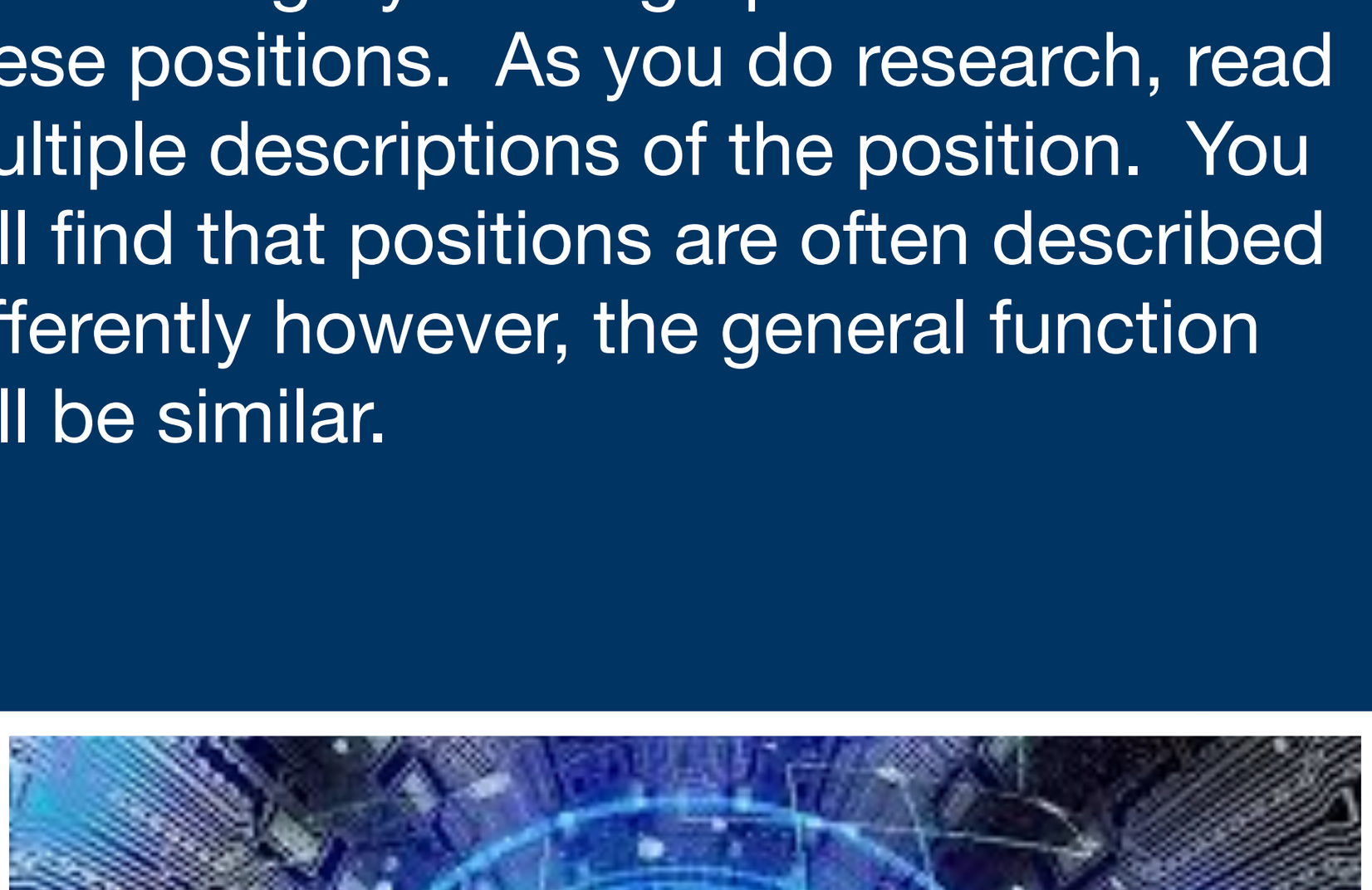


Step 2 - Learn your interest, **data collection**

Once you have determined the area of interest, it's time to begin to learn the specifics of the area.

It's time to collect some data! After all, to excel in the field of Cybersecurity you need to have an interest in finding the story behind the data and develop your investigative skills!

First, write down a few positions that interest you. The next step is to start researching by looking up the details of these positions. As you do research, read multiple descriptions of the position. You will find that positions are often described differently however, the general function will be similar.

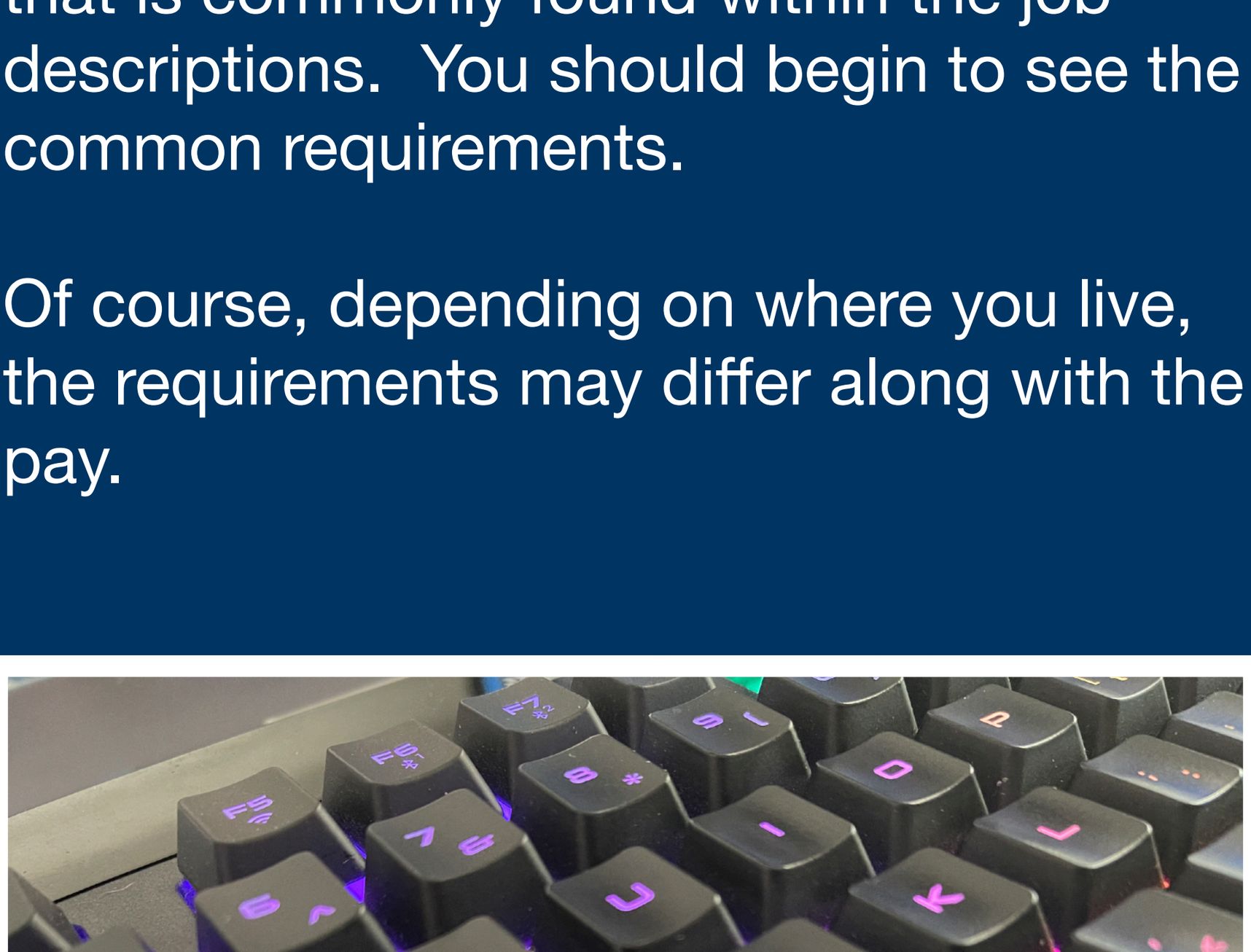


Step 2 - Learn your interest, **data collection**

I recommend searching the position of interest in various job sites to learn the requirements, responsibilities, and experience. How? The easiest way to obtain the data is through your favorite job site: indeed, glassdoor, zip recruiter, simplyhired, and of course any position listings on company career sites.

I recommend reviewing five or more to allow you to begin to gather information that is commonly found within the job descriptions. You should begin to see the common requirements.

Of course, depending on where you live, the requirements may differ along with the pay.

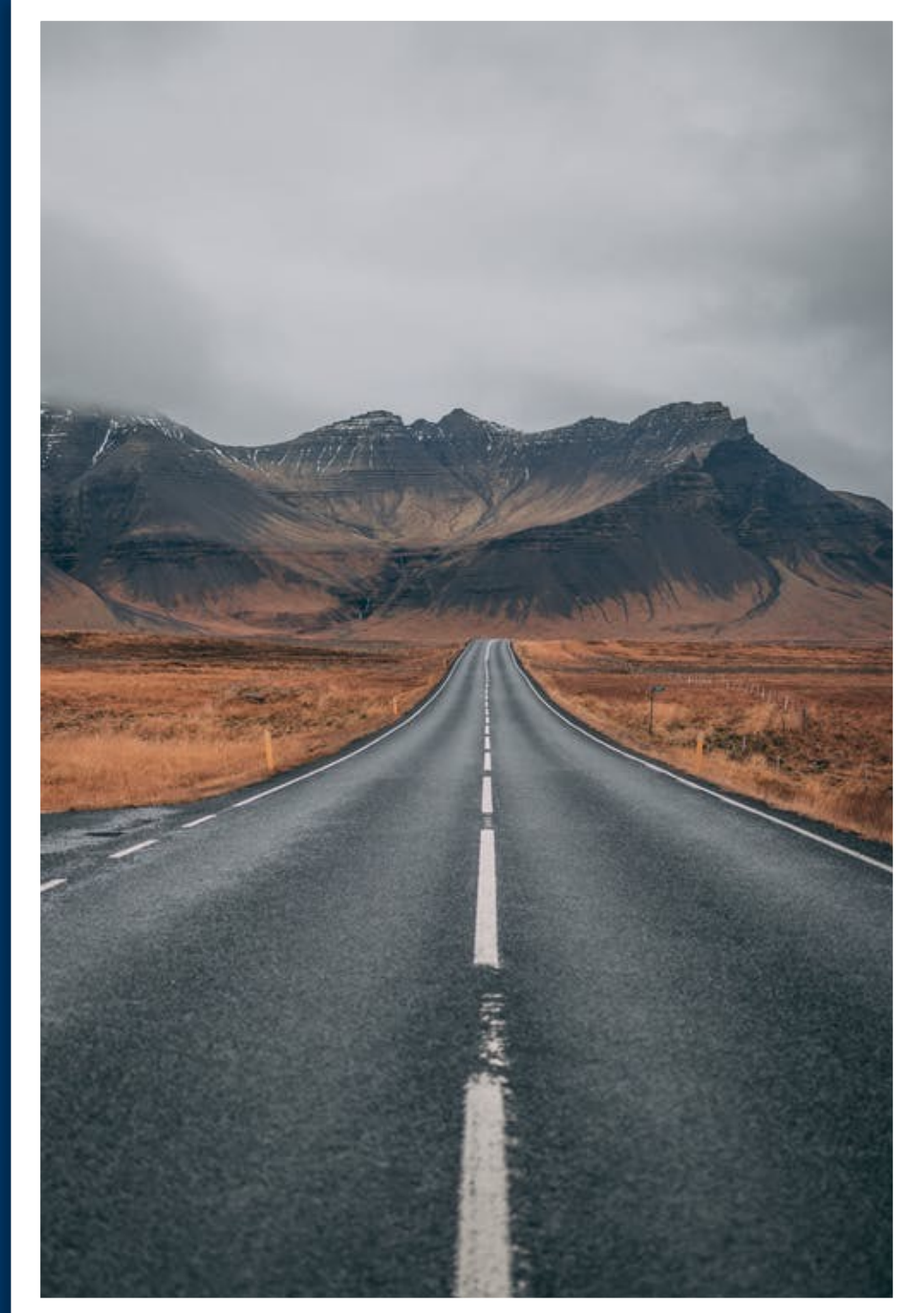


Step 2 - Learn your interest, **data collection**

You are now one step closer. By now you should have better insight into what employers are looking for due to your collection of data. As you can see, starting your career is really the result of having a good plan.

Now, allow me to provide you some industry insight from my 20 years of working in Cybersecurity.

Often, the requirements will appear to be daunting and you will see words and descriptions which make you think that you need a doctoral degree for an entry-level position! Here is where you really need to focus in on what I call the "**core**" functions of the role.



Step 2 - Learn your interest, **data collection**

Primarily, the role position name will dictate overall what the employer is looking for.

What I mean by this is, if you break down the roles and look at the fundamentals, they will provide you with the areas of focus for the position.

Of course, as with anything, there are exceptions however, for the entry-level positions, you will find that this is fairly consistent.

You may find some which differ, that it is fine, the important thing is to simply understand what is common between the job openings you researched.

Step 3 - What experience and skills do you **have**? What to you **need**?

Let’s quickly recap. We first identified what area interests us. We then performed some data collection. Now, let’s take what we have learned so far and see where we stand.

I have helped many people begin their careers where they’ve had **NO EXPERIENCE**, some without IT experience as well. Let’s first set your mindset: **You can do this!**

In this step, it’s time to write down what IT and Cybersecurity skills you have. Believe it or not, if you’ve touched a computer, you have experienced some levels of Cybersecurity. Locking your phone, setting up accounts such as your email, Facebook, or any other account which required some security is experience.

Of course, any other type of computerized system counts as well.

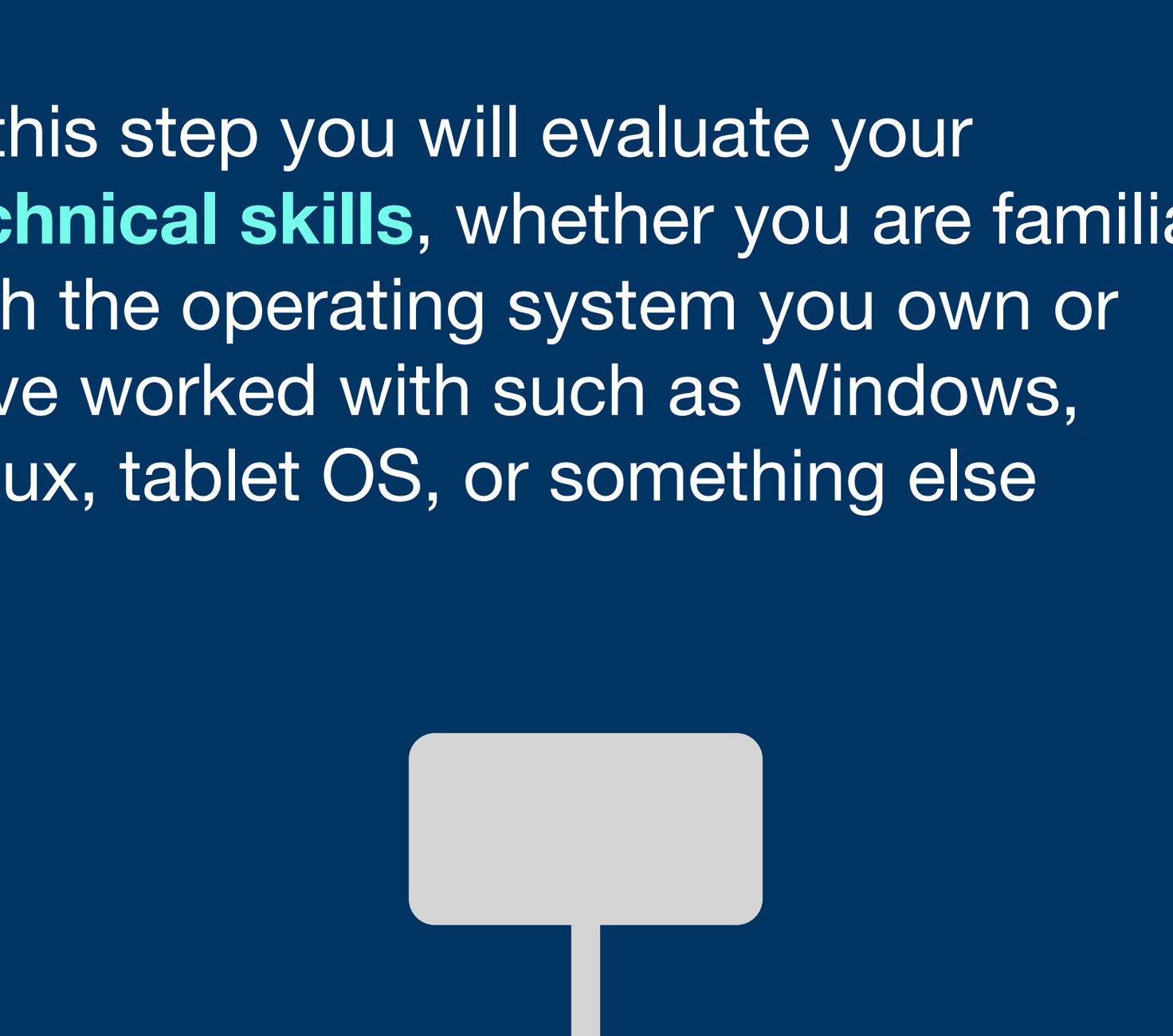
Step 3 - What experience and skills do you **have**? What to you **need**?

Some of you reading this may have worked in an IT role. Perhaps your title had nothing to do with Cybersecurity.

However, I can assure you that the chances are, you were applying some manner of Cybersecurity practice.

If you have never worked an IT job, that's fine, we all have to start somewhere right?

In this step you will evaluate your **technical skills**, whether you are familiar with the operating system you own or have worked with such as Windows, Linux, tablet OS, or something else



Step 3 - What experience and skills do you **have**? What to you **need**?

I want you to create a list of your qualifications and skills then see if they match directly or indirectly with any with the requirements of the positions you researched in Step 2 (data collection).

Here is where you want to be **honest.** You will use these to build your resume and state your experience.

Here's another tip: ***If you are good with any aspect of Cybersecurity such as problem-solving, math, learning, or any other type of related skill, include that in your list of skills!***

Cybersecurity is **dynamic**, what employers look for are people who match up or have the potential to perform the job. Often, this can come through direct experience, or sometimes indirect such as people who show that they are good with analysis, learning, or problem-solving.

If you have certifications, school, or any relevant experience we will highlight them on your resume. If not, don't worry we'll figure out what you need…or don't need!

Your goal in this step is to simply begin to list out your qualifications and skills, it will give you insight into what you have or what you need to apply for positions.

Step 4 - Make your plan!

It’s time to make your plan! Now that you have identified the area of interest, collected data, and identified your qualifications and skills, the next step is to make your plan based on what you have learned.

By now, you should have a view of how your qualifications and skills compare to the position’s requirements.

Your plan should be based off your experience, qualifications, and skills.

The data you collected on each position will give you insight into what employers are looking for and how your qualifications do or do not match up.

Step 4 - Make your plan!

If you find that your experience, qualifications, and skills match up well, that is great! The next step will be to create a resume that will get the attention of hiring manager or recruiter.

If you find that you do not have the experience, qualifications, or skills that’s ok too!

Here is where we make your plan.

Since having experience, qualifications, and skills aligns with a position, use the following plan as a checklist to ensure that you are not missing any elements which may work against you.

If you are starting from the beginning, let’s build your plan to achieve your goal!

Step 4 - Make your plan!

The **plan** is to step you through a sequence to establish experience, qualifications, and skills.

Establish experience that relates to the role you want to fill. This can be done by either looking for opportunities around you that allow you to apply Analysis or Engineering to help build experience you can show on your resume.

If your job is related to IT, look for opportunities to involve yourself in any Cybersecurity duties.

If you **do not** have an IT related job or do not have the opportunities, **join a group** which involves any activity related to the position you want and participate.

Step 4 - Make your plan!

Be creative! Building your own home lab, working on a project, looking at the position requirements and using them to work on something that is related will help you develop your experience.

Employers realize that not everyone has the opportunity to work in a related position, showing the employer that you have an interest and have applied yourself goes a long way.

TIP: **Make sure you can speak to your project in detail! Plan your project, design, and document it.**

It is important that you can detail your project to an employer and show them as much detail while illustrating that you are organized.

Why?

Often, these types of projects show the employer that you are applying areas needed to fulfill the position. Also, a lot of times, ***employers like to see someone who is detailed and driven to design and implement a project.***

Step 4 - Make your plan!

There are Facebook groups such as: **(Link - Path to Cybersecurity),** local groups (meetup.com), and even research projects that you can use to build your knowledge and experience.

VERY IMPORTANT: PROFESSIONAL NETWORKING

Create a **LinkedIn** Profile and begin to connect and build a network.

Today, it is absolutely vital that you establish relationships and a professional network.

Join groups of interest, post about what you are learning, provide information, and contribute to topics and posts.

This will help you showcase your knowledge and also begin to develop your professional network.

Also, if there are companies near you or of interest, connect with people from those companies and create meaningful conversation.

Follow and connect with me and others to learn and begin to grow your network:

https://www.linkedin.com/in/chris-romano-career-up/

Step 4 - Make your plan!

Build your qualifications by identifying the type of degree or certification that employers are listing in the requirements section.

You will want to determine whether utilizing your degree if you have one (even if it is not directly related as nearly any B.S. degree may work) or identifying what certifications and experience are needed.

Step 4 - Make your plan!

You will notice what is commonly listed under the requirements for certifications, the most popular entry-level certifications are: Security+, Network+, CySA+, Microsoft, and other certifications.

The focus of this step is to list what employers are looking for in the position of interest. Typically, employers will list multiple certifications or degrees.

TIP: **You DO NOT need to have all of the certs or degree listed in the job position to apply!** A combination of experience and a certification or degree is usually what is needed.

Having multiple certifications without experience will not provide much benefit. Obtain what you need and build up your certifications as you gain experience.

That being said, I will say that some positions will REQUIRE a bachelor's degree. These are usually related to specific positions.

However, many jobs will fill in experience or a certification in place of a degree. This may vary depending on your position and location.

Step 4 - Make your plan!

Build your experience as you work on your certifications and or degree.

It is important that you use any opportunity to build related experience, as you work through a certification or degree. Use the time to also build your experience.

As I wrote earlier, use any opportunity at your current job or research and develop your own project to implement at home.

Step 4 - Make your plan!

If you have a computer, use open-source tools, trial versions of software, or any other related material to engage and apply those skills.

This will help when it comes time to list out your experience and will show during interviews.

TIP: ***A degree and or a certification can work against you, if you cannot speak to the subject!*** Here is where you need to hone your skills and have confidence in the areas you have studied and applied yourself.

I can tell you from experience, the best way to learn something is to build and configure it yourself. Along the way, you may run into issues, those are the best times to really learn!

Rarely do any implementations go smoothly. If you ask any professional in the field, they will tell you about the issues related to implementations.

With the **GOOD** comes the **BAD,** having sound troubleshooting skills is a strong skill to display on a resume or in an interview!

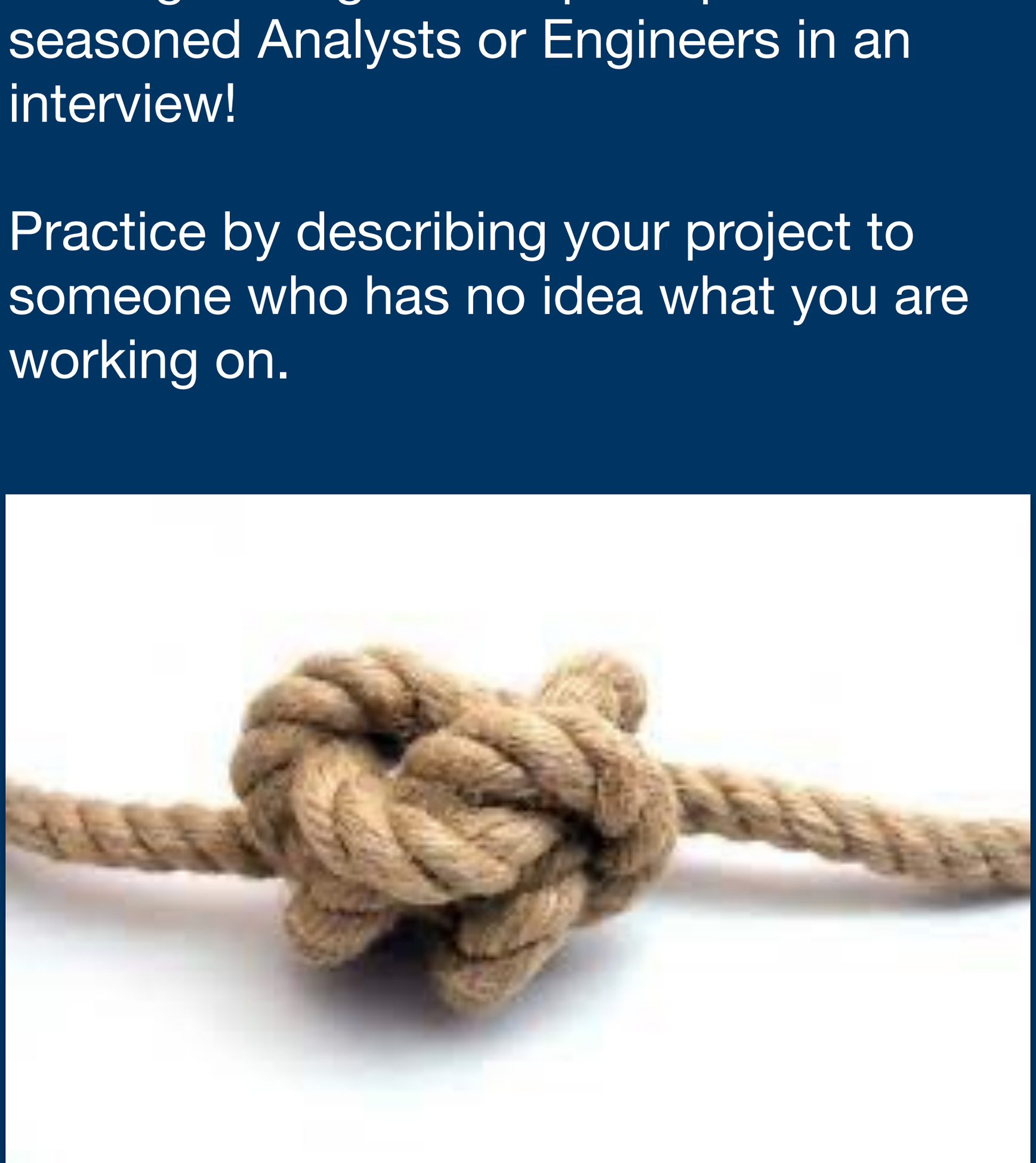
Step 4 - Make your plan!

Complete your projects, certification, or degree and make sure to organize the details so that you are able to describe it in detail.

The key to this step is to clearly walk someone through your experience in an organized manner.

Sounds easy right? Trust me, it's not as easy as it seems when you are in front of a hiring managers and perhaps a few seasoned Analysts or Engineers in an interview!

Practice by describing your project to someone who has no idea what you are working on.



Step 4 - Make your plan!

By the end, if they are able to summarize what you did in your project, then you have completed this portion successfully.

Along the way, you've began to build up your experience, qualifications, and skills!

Also, you will find that actually working on something will help once you begin the actual job.

Will things match up exactly? Probably not however, the first time something goes wrong, you will have experienced troubleshooting and know that steps are required to resolve the issue.

Also, you will find that you are able to gather and organize your approach, which is a skill that will benefit you from entry-level all way through the rest of your career.

Step 4 - Make your plan!

If you have a certification and simply focused on the exam, they will very quickly see that you may not actually know or understand the material.

Some common Cybersecurity areas you will want to know are:

Networking basics

Operating Systems such as: Windows and Linux

Application Security basics

General understanding of protocols

Security basics of Analysis - event analysis, using dashboards, and documentation/communication/ticket creation

Offensive and Defensive Cybersecurity techniques and common tools

Programming - Python, R, C++, or Bash scripting

Languages - SQL, HTML, and JSON

Use your position research to identify other common areas needed

Step 5 - Fine tune your **knowledge**!

Cybersecurity typically involves multiple systems. In order to protect them, you need to have a good understanding on how systems interconnect and allow users to actually use the systems.

Here is where you want to develop your well-rounded knowledge. Certifications are useful in organizing and providing material for you to learn in a particular cybersecurity area.

My recommendation, **DO NOT** simply focus on the exam itself, make sure you are able to speak to the knowledge areas of the certification!

The hiring managers and experienced Analysts or Engineers are in their positions because they have solid foundational knowledge.

Step 6 - Creating a GREAT **Resume**

You've put in a lot of hard work, now it's time to showcase it! Your resume should reflect all of your relevant experience, qualifications, and skills to show the potential employer that you are a good match.

There are many different formats to creating a resume. Here are the most important areas you will want to include when creating your resume:

Summary - Should directly identify your experience and **EXACTLY** match up to the position listed on the **position description**.

Work History - List your work history and highlight areas that align with the position. Include **exact words** that are used in the position description to help align your experience with the position.

Within each portion of your position description, use **metrics**, illustrate your **value**, and align the descriptions to be *relevant* to the position.

Avoid too much detail on **irrelevant** topics

Step 6 - Creating a GREAT **Resume**

Certifications - If you have certifications, list them on the first page if they directly match up to what the employer is looking for.

Education - List your education and make sure and highlight any activities, awards, accomplishments, or highlights which may be of interest.

References - Include references if required otherwise, simply state: References available upon request.

Spelling/Grammar - Use spelling and grammar checks to avoid small errors. Believe it or not managers pay attention to this!

Have someone read over your resume and provide feedback.

Step 6 - Creating a GREAT **Resume**

It’s important to match up the keywords as resume filters may filter out a candidate who qualifies, but does not have the matching keywords Pay attention to these!

Identify the keywords and use them throughout your resume as much as you can.

The more you can match up, the better it looks and the higher the chances of your resume standing out!

Your personal information - Make sure your name and email are formal, your email should not reflect badly (avoid gamer tags or anything unprofessional)

Resume length - Your resume should be 1 to 2 pages maximum, avoid lengthy resumes!

The key to building a **GREAT** resume is matching up as much as you can in every area to the position description and requirements.

Step 6 - Creating a GREAT **Resume**

If you are unsure how to structure your resume, there are multiple ways you can create your resume.

Google resumes related to your position and review their format.

Pick out the ones which stand out and mimic the structure.

Use a resume builder. There are sites which provide formats that allow you to simply fill in the details and output a nicely structured resume.

Some are free while some may charge a fee.

A hiring manager should be able to determine whether or not you are a good fit, **should be obvious immediately.**

Step 6 - Creating a GREAT **Resume**

TIP: **You should create a specific resume for each job you apply for!** While you do not need to recreate the entire resume, it is important that your resume directly reflects your experience, qualifications, and skills to match up as closely as possible.

This is important as using a single resume and either posting it or applying with the same resume, may not lead to you reaching a recruiter or manager due to keyword and other resume filters.

TIP 2: **Your summary is an important area of your resume!** When you write your summary (first section) make sure that it immediately reflects your intention of filling the position and states how or why you are qualified.

Step 6 - Creating a GREAT **Resume**

Being a hiring manager myself for many years, the first page is what I look at and often determines whether the candidate may be considered or not.

If I am looking for a SOC Analyst and the summary states that you are looking for something else or is not clearly stated, it does not focus your resume. This requires me to see if the rest of your experience or qualifications fit the position.

The manager should not have to determine whether or not you are a good fit, it should be obvious immediately.

Use the first page to show your interest, qualifications, and highlight areas that show that you are the right person for the position.

Step 7 - ***Insights*** into the position

The position itself, what to expect? The first question you might have is, can I actually do this?

Did I study enough?

Did I do enough?

AM I READY?

Here’s the reality, with your first position or nearly all entry-level positions, the employer is looking for someone they can teach and train.

“Most” employers are going to have you follow a training sequence or work with one of the experienced members of the Security team to help you learn HOW they work.

Step 7 - ***Insights*** into the position

The most important aspect of the position, is taking everything you have learned, and applying it in the manner in which your employer requires.

What exactly does this mean?

As you may or may not know, there are thousands of security products. Nearly every company uses what they feel works best for their need.

The key is being able to learn and apply what is needed to learn and apply the company's security methods to help protect their users, data, systems, and all other resources.

In other words, you will most-likely **not** know the job going into it!

There are some exceptions such as specific roles using specific hardware or software however, those are more specialized roles which allow you to focus as necessary.

Step 7 - ***Insights*** into the position

It’s perfectly normal to apply for many positions as you begin your career.

I want you to remember that each step good or bad is a *learning process*, don’t become discouraged if you are passed up for a position.

Take the opportunity to ask the employer if they can give you any insight as to why you were passed up.

Sometimes they simply picked someone before you interviewed, sometimes you may need to work on an area, and sometimes it is simply not a good fit.

While difficult, do not take this personally, there are a variety of factors that are often beyond your control.

Always, continue to keep working towards your goal. If you stop, your chances are 0 - If you continue, learn, and adapt then your chances increase substantially.

Step 7 - ***Insights*** into the position

Learn from each experience and adjust as necessary, this is the key to improving and landing your position.

Thank you for your time, I hope you found this valuable and that it helps you.

If you want help beginning your career, visit: https://www.careerup.tech to learn more about my program.

Join my LinkedIn group:

https://www.linkedin.com/groups/12565777/

OR my Facebook (Meta) group:

https://www.facebook.com/groups/pathtocybersec

Thank you!

Chris Romano, CISSP
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