Cyber Security CAREER GUIDE

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6 Resumes, Applications, and Interviews

This chapter covers

- Building and tailoring a resume to accommodate Applicant Tracking Systems
- Choosing the right job opportunities to apply to
- · Making informal learning and skills development stand out credibly
- Preparing for screening, technical, and team interviews
- Avoiding common pitfalls that often trip up candidates
- Negotiating and accepting terms of a job offer

So far, we have taken a look at the cyber security landscape, the roles that fall within it, and the skills required for those roles. We have talked about you, how to find your interests, and how to align your skills to the job you want. As you have seen, there are many obstacles standing in your way of landing that first job and we have acknowledged those as well. So now it's time to take all that prep work and put it into action. Let's dig into the key aspects of the job search process itself and talk strategies for how you can be successful and avoid common pitfalls.

There are three main steps that make up the job search: building your resume, choosing and applying to jobs, and going through the interview process. We are going to go through each step and talk about how you can put yourself in the best possible position to be successful. We will also look at common mistakes applicants make and how you can avoid them. As you might expect, we will start by talking about your resume.

6.1 Mastering the Resume

What is a resume? Many people would answer that question by talking about a document that lists details of skills, work experience, and education. All of that is true. However, I would like to think about your resume in a different way. Think about it as your portfolio. It is that thing that makes your first impression with any prospective employer, before they have ever had a chance to speak to you. It is the summation of all the work you have done, and it potentially includes more than just that document you're going to send along with your application. When you think about your resume as a portfolio rather than simply a document, it leads you down a creative path. Being creative in your resume allows you to express yourself which conveys your authenticity. That is what ultimately will make you stand out as an applicant.

6.1.1 One document is not enough

I have talked to many aspiring security professionals who tell me how they have sent their resume to large numbers of potential employers. It is the same story every time. They spent a bunch of time creating the perfect resume, following all the advice they could dig up. They worded, re-worded, revised, edited, and tweaked it until they had the perfectly formatted and articulated document. Then they sent it out to lots of employers who had jobs they were interested in and wondered why they get so few calls back.

Their mistakes begin with that one document. For as long as I can remember, I have read advice on how to write a resume. Almost without fail, each article, blog, column, whatever has made the assumption that job seekers create a singular one-size fits all resume. I guess it makes sense, right? You are talking about yourself, so of course you want to do that in the perfect way. But that could not be more wrong. You should have multiple versions of your resume. Let's look at why and how do need to do this.

Your resume does indeed introduce you. But it is not an autobiography. As I mentioned previously, your resume is the first impression that an employer will get of you when you apply to a job. However, they are not looking to hear interesting stories about a person and all the wonderful things that person has done. When prospective employers are looking at resumes, they are trying to understand how the person they are reading about is going to bring value to their company. So, your resume is your first chance to tell the story of how you are going to bring value to them in the role that you are applying for.

On an episode of my podcast, my co-hosts and I had the honor of talking with Jake Williams, a well-respected member of the security community. One of the things that Jake shared with us is a strategy he uses when coaching folks on how to build their resume. It goes something like this. He starts off by having them share their *elevator pitch*. They get one to two minutes to convince him why they are the right fit and how they are going to bring value to his team in the role that they are applying for. At the end of the two minutes, he asks them to point out where in their resume he can find the topics that they just shared. Anything that is not there is something that needs to be added. Anything that is in the resume that they did not include in their pitch is something they might think about removing.

I really like this exercise because it stresses the idea of your resume being that first elevator pitch. It is your opportunity, in a very brief window, to win over the person who

might consider you to fill their open position. However, there is one aspect that's missing that is critical here: that the best elevator pitch is always tailored to the audience you are speaking to. Your resume needs to do the same.

Each job you are applying to is unique. Even if they have the same title, call for the same skills, and require the same level of experience, they are still different. Each company and even each team has their own challenges they are looking to solve by hiring a new person. Your focus as a job applicant needs to be on understanding what those challenges are and crafting your resume to show how you are the right person to help address them.

It may sound crazy, but you should have a separate version of your resume for every single job you apply for. On the surface that seems like a lot of work. But often, you may find that you have a couple versions of your resume based on the kind of role you might apply to and then only minor tweaks are needed to tailor it for the job at hand. You can keep each version and as you find similar openings elsewhere, just work from what you did previously. With that in mind, let's analyze key facets you need to consider.

6.1.2 Format

Job applicants do, to some extent, understand that their resume is their first chance to shine, their first chance to stand out. Certain "experts" offer advice that you want to have a resume format that is fresh and different, something that is pleasing to the eyes. This can be good advice for the humans that are going to read your resume. Adding in a light dose of graphics, some color, multiple columns, maybe even a good headshot of yourself can personalize your resume. That is all great, except it misses one key aspect of the modern job hunt: *Applicant Tracking Systems* or ATS.

Many organizations today use these automated ATS to post and receive applications for their open jobs. You can easily recognize them because many times they are the job sites that ask you to upload a resume and then attempt to parse it and fill in all your details (with varying success). But this step is crucial because those systems are filling in all the data that will initially be used to understand who you are and how you are qualified. The better job the ATS does in processing your resume, the better results you can expect.

For this reason, when you think about format, you need to think about simplicity. How can you make your resume easy for the ATS to read it and properly process it? There are a few factors to think about here:

- Overall format: stick to a single column, do not try to get fancy with multiple columns.
- Skip the graphics: they will add nothing for the ATS and only make the document harder for the automated parser to understand.
- Fonts: use a font that is easy to read and common such as Arial, Times New Roman, or Calibri.
- Simple Header: include a simple header with your basic personal contact information.
- Section Headings: use clearly worded and obviously formatted section headings.
- Include the standard sections: Education, Skills, Work Experience, and Certifications.

This is great, but do you still want to have a creative resume to provide to humans? That is fine. Keep two copies, one with all the fun, individualized formatting that you can send in

advance of each interview, and one that you will use whenever the application is being entered into an ATS.

One last word about format. It is very common for people to ask how long their resume should be. This is a matter of opinion and I have seen a wide range of answers to this. As a hiring manager, I will share my view. Anything longer than a two-page resume, for me, becomes onerous and boring to read. Chances are, if you are including so much employment history or other background information that you need more than two pages, there is probably a lot of irrelevant information in there. Think again about that!

6.1.3 Check the boxes

One of the biggest challenges when applying to any job posting is getting your resume past the ATS to be seen by the recruiter and hopefully the hiring manager. In the previous section, I shared some simple strategies for how you use formatting to help the ATS understand and process your information accurately. However, I also shared how important it is that you tailor your resume to the position you are applying to. This is probably one of the most effective tools to pushing past the ATS and even the recruiter and ensuring that the hiring manager gets your resume in their inbox.

I mentioned earlier that the ATS is responsible for parsing the information on your resume and filling in those important details in your job application. However, there is another even more crucial function you need to be aware of when dealing with an ATS. Each application that is processed by the ATS is given a score. The ATS compares your resume information with the requirements listed for the job you have applied to. From this information, it will assign a score to your application. When recruiters in turn look at the applications they have received, they will more than likely start with those that scored highest in the ATS. So, it is crucial that you know how to elevate that score.

We will talk in section 3.2 about how to choose the right job opportunities to apply to, but for now we will assume you have found that perfect role. The one you are an ideal fit for, and you really want to land. You know that you have the skills and experience necessary for the job but now you need to make sure that the ATS is able to tell both the recruiter and the hiring manager the story you want told. That's why you are going to tailor your resume for the job posting and you are going to do that by methodically walking through the requirements listed on the job posting and matching your resume to those requirements.

When you read through a job posting and specifically the list of requirements, you should be able to pretty easily pull-out key words from those requirements. These are what you need to focus on. The key words might be the name of a specific technology or skill. They might be a specific certification, degree, or other important facet. When you're tailoring your resume, you want to be looking for those key words and making sure that a match for them is found somewhere in your resume. Therefore, let's talk about a simple process you can use to make sure you maximize on these key words.

INVENTORY THE KEY TERMS

Your first step needs to be building a simple inventory of the key terms included in the job listing. Look at each requirement in the list, these are usually presented as a simple bullet list so this should not be too hard to locate. For each item, what is the primary thing they are

looking for; the main idea of that requirement, if you will? Many times, it will be easy to look at a bulleted item in the list and pick out the key terms. Is it a technology like firewalls, containers, or Cloud Access Security Broker (CASB)? Maybe it is even a very specific product name like Splunk, Kubernetes, or Burp Suite. Start making a list of these. For bullets that have a single key term (Burp Suite, for instance, being two words in the name of a single product), put that key term on their own line in your inventory.

In some cases, a single requirement will include multiple key terms. It might be a list of two or three similar products or a list of related technologies. When there is more than one key term in the bullet, add each key term to your list as a separate line. While they may be included together on the job description for a reason, that does not mean you need to show them together in your resume. The goal of this is to make it easier for you to demonstrate that you have the key qualifications that the organization is looking for.

The following table shows a few examples of requirements taken from real-life job descriptions and the resulting key terms that would be added to the inventory.

Requirement from Job Description	Key Term(s)
"Strong working knowledge of vulnerability management practices and tools"	"Vulnerability Management"
"Knowledge of provisioning, designing, constructing and maintaining basic Azure compute instances."	"Azure"
"Experience with regulatory compliance mandates such as ITAR, PCI, or HIPAA"	"ITAR" "PCI" "HIPAA"
"Experience with working with a SOAR management tool, for example, Demisto, Splunk, or Swimlane"	SOAR Demisto Splunk Swimlane

Table 5.1: Example job requirements and key words

As you work through this process, you may encounter situations where you are not sure what the key terms are in a particular requirement. To help you narrow it down, start by removing ancillary words that qualify but do not describe any particular skill, technology, or tangible quality. Consider the first item in Table 5.1. Straight away we see the phrase "Strong working knowledge of". This phrase specifies the level of skill/experience needed but it does not describe a skill itself. Therefore, you can eliminate those words right away. We also see practices and tools mentioned. Those words provide additional detail but do not, in and of themselves, describe a skill, technology, or quality. Once you eliminate those, you're left with the term *vulnerability management*, which is the key term in that requirement.

NOTE THE FREQUENCY OF KEY TERMS

When you complete this inventory, you will often find that some key terms are repeated more than once. This is a powerful indicator to you of what skills or experience the hiring manager values most in prospective candidates. You can either list the duplicates while you are building your inventory and then match them up as a second step, or if you like to be more efficient, as you are building the inventory, add tick marks for each duplicate of a term that shows up. Either way you want to understand what those most crucial requirements are if they exist. These are elements you will want to prioritize in the next step where you start matching your resume to the key terms.

START MATCHING

Now it is time to compare your resume to your requirements inventory. Look at the knowledge, skills, and experience that you have included. Circle any key words on the inventory that appear somewhere on your resume. These are cases where you have "checked the box". When the ATS scores your resume, it will recognize these key words and that will result in a higher score for your application.

Once you have circled all the key terms that match between your resume and that inventory, now take a look at those that do not match. Are there key terms on the inventory that fit your knowledge, skills, or experience but perhaps are discussed differently on your resume? Reword wherever you can to ensure that the key words from the posting also appear in your resume.

Hopefully this is obvious, but you need to be honest with yourself and your prospective employer as you do this. Do not simply fill your resume with key words where you don't have actual capabilities. All you are trying to do here is optimize the wording of your resume to match up to what the employer is looking for. If you try to game the system by adding key terms that do not actually describe your capabilities, that will be easy for the recruiter to sniff out and you can rest assured you won't be progressing in the hiring process.

As you re-word your capabilities to match the key terms in the inventory, be sure to circle those that you have added. Now take a final look at the inventory and those key terms that you have not circled yet. Are any of them describing a capability from the capabilities inventory you made in Chapter 3? Look for ways that you can include those in your resume. Again, any that you are able to honestly add, either as knowledge, skill, or experience, be sure to circle those on the requirements inventory.

ADD KEY TERM VARIATIONS

Finally, take a look at your resume and the key terms inventory. Are there key terms that you can list more than once? Perhaps you have experience with that skill at multiple previous roles. Look for ways to include that information, but also do so using words that are variations of the key term where possible. Most ATS are smart systems. They understand and will rank you higher if a key term shows up in multiple ways. It is crucial to have the direct match first, but if you have related terminology as well, that shows greater overall capability and the ATS will note that.

So, go through that inventory one more time. Maximize the mention of any of the key terms that you can on your resume. What you'll end up with at the end of this is a resume that is tailored to the job description and makes it easy for the ATS and the recruiter to quickly identify that you have the requirements they are looking for.

6.1.4 Proof Reading

The last step before you submit your tailored resume needs to be proof reading it. Grammar and spelling errors not only look unprofessional to anyone reviewing your resume, they can also confuse the ATS and cause a lower score. The ideal approach is to ask someone else that you trust to review your resume. This is a pretty standard writing tactic to ensure your internal voice does not gloss over and fail to pick up on mistakes in your writing. This process can be more effective if you ask someone to review your resume who does not have skills in Security or even IT. They will be more likely to pick out words and phrases that might be confusing to a recruiter who very possibly may not have Security expertise either.

If you cannot have someone else review your resume, take a break after you are done revising it. Give it a few hours to sit (or overnight, if at all possible) and then come back to read it word-for-word from start to finish. It might feel awkward but reading it out loud can be particularly useful in this situation. Since you probably were not speaking your thoughts as you were typing, doing so now will cause you to reprocess your words and make it less likely that you will miss an obvious error.

6.2 Choosing and Applying to Job Openings

It seems like it should be the easiest part of a job search in a market that claims to have millions of job openings that will go unfilled. However, failing to find and apply to appropriate job postings is a common problem among entry level applicants. Sometimes it is applying to jobs that they are not properly qualified for, but many times it's failing to understand when a job posting is worth applying to. But the struggles do not stop there. Once deciding to apply for a role, applicants will often make crucial mistakes that result in their applications never making it past the ATS. Even if they do make it that far, believe it or not, there are still common mistakes that applicants make that result in a failure to get an interview. So let's examine some of the strategies for how to address these issues.

6.2.1 Tools your job search

What do you do if you want to find a job in security? Most people will typically begin looking through various jobs websites. It is convenient, you can usually find a large number of open positions aggregated in a single searchable database. Maybe you try out two or three different job sites. If you do, something you will notice is that you will see a lot of the same jobs posted in multiple places. However, you also notice that some jobs posted on one are not on another. What you will not discover that way, of course, is that some jobs will not be listed on any of them.

So let us take a step back and consider the moment before you even start searching for job listings on any site. You are about to take on a major challenge, finding a job in security as an entry level candidate. Rushing in without a plan does not work well when you are getting ready to tackle any major hurdle in your career path. You have seen so far in this book that there is always a methodical process that can help you organize and be more effective in your efforts. When it comes to job searches, it is no different. How you go about searching for a job will be the foundation for a successful job hunt. I mentioned previously job search websites. These can be very powerful tools in your toolbox for searching for a open role that fits your skills. They aggregate open job listings from various organizations in a single, searchable database. Some of these sites are specialized to specific industries or even specific types of jobs within that industry. You can find job sites that focus on Information Technology jobs which would include security roles. You can also find job sites that help you find positions in government jobs exclusively. Each of these sites has its own database of jobs and its own way of matching candidates to job opportunities. An effective strategy therefore is to plan to use a variety of sources in your job search.

While these sites are great and bring together long lists of job openings from multiple companies, not all organizations will use such job listing sites. They may not use them at all, may only use a small subset of them or they may only list certain jobs. So how do you find other openings they have? Well almost every organization has some form of careers or jobs page on their website. While it is more time consuming, it is helpful to your job search to put together a list of companies you know that are local to you or that you would like to work for whose sites you can go to specifically to see if they have open positions available. Some organizations will even provide you the ability to apply to their company without applying to a specific job. While this is not a highly successful strategy, it is a good way to at least get your name and resume in their database and potentially get matched with future openings.

There are other resources available to you beyond just job search and corporate websites. If you are a recent or soon to be graduate, the chances are high that your school probably has resources to assist you in finding a job. Many universities have job boards, career placement services, and some even have relationships with local companies to help you find an internship to get you started in the field. These resources can be very helpful in finding entry level roles in particular. Since their focus is on recent graduates, they often times have better access or awareness of where entry-level roles can be found. Of course, if you're looking to pivot from another career path and are not a recent or soon-to-be graduate, you may not have access to these sources. Still, it cannot hurt to at least check with local universities to see if they have any publicly available services like this. Some schools do indeed offer at lease some level of assistance.

Within the industry itself there are also recruiters who can work on your behalf to help you find a job. These recruiters work on fees that are paid by the prospective employers. These types of recruiter services can be helpful in that they can expose you to a large number of open roles and they do much of the work in assisting you with finding roles you are qualified for. Unfortunately, the flip side is working with these recruiters can introduce an additional layer of scrutiny on your skillset that you may have to work to win over. Recruiters that work with these services typically make a commission when a candidate is successfully placed. Therefore, while they do work as your advocate and want to place you in a job, they sometimes are less likely to take a chance on roles. They often will look to submit you to job openings where there is a high likelihood that you will succeed in getting the job. That is great unless you are an entry level person looking for scarce entry level jobs. Sometimes it can be more effective to take a chance on a role and try to earn the opportunity to make your case. Finally, let's not forget about social media. There are often hashtags, such as #infosecjobs, that can be helpful in locating posts or tweets about available jobs. Within the security community itself you can often times find advocates who will start threads asking their followers to post open job opportunities. If you have started to build a social network, you can even reach out to some of these advocates who might gladly share your information and your needs for a job with their followers to help amplify your reach. While I wouldn't consider these methods to be primary in your job search, you should at least be plugged in and paying attention.

Taking this all into account, it will help your search to have a plan for which methods of searching you want to start with. Ultimately your success will depend in part on how much you leverage the various tools at your disposal. Have a plan for which resources you will start with. Make sure it is a strategy that leverages a diverse set of these resources to maximize the chances of your success. Now that we know where you are going to look, let's talk more about how you can find the right jobs.

6.2.2 Finding the right roles

In Chapter 3, you did a lot of work to identify your interests and the types of security roles you might enjoy. That information is a great place to begin. If you are going to go searching for jobs, you definitely want to know what you are looking for and how to find it easily. The simple fact is there are no real standard terms for how companies title their security jobs (or any other for that matter). For instance, you may see a penetration tester role listed as a penetration tester, security analyst, ethical hacker, security tester, etc. Many of the big job sites will attempt to varying degrees to help match your keyword searches to related key words like that, but they tend to be inconsistent.

Trying to use search tools on job websites can be very frustrating as a result. So, the key here is to understand and accept that there is no perfect search, and you will need to conduct multiple searches to ensure you get as many of the right roles as possible. Searching for multiple possible titles is one way to get a comprehensive list. However, make sure your searches extend beyond just job titles. Look at your capabilities inventory from Chapter 4 and setup searches that look for key skills or experience that you have. This will also help you build up a longer list of potential strong fits and can actually be more effective than searching for a specific job title.

LOCATION, LOCATION, LOCATION Location searches on job sites can be particularly erratic, so it is important to understand a few concepts here. Many sites force employers to list a location on their job openings. Some only allow for one location while others allow for multiple. Some sites allow for job postings to be listed as remote (i.e., work from home) while other sites do not. Some sites will allow job seekers to search for remote jobs, others do not. Some force you to include a search location while others do not. Remote roles have become very common in the security industry. While they are less common for entry-level positions, they do still exist, and you may be interested in searching for these kinds of roles. To get past the limitations of some of these job sites, companies may list the same job in multiple locations, this could be an indicator that they are open to hiring the role in any of multiple offices they have, or it can even be a sign that the position is open for remote work. When you are searching, keep this in mind as well. Vary, as much as the site will allow, what locations you use to search. Perhaps just use just your state. If you live close to a state line, maybe include the nearby state. If you can search without a location, try that too but remember to be more specific then in your other search terms to ensure you don't end up with an unwieldy list of potential openings.

As with just about every topic we will discuss, I suggest you use a methodical approach. Create a list for yourself of what job titles you will search for. Also, go through your capabilities list and pick the ones that you feel are strongest or most suited to the kind of role you would like to land. Start with any experience level capabilities you have, then fall back to skills, and if necessary, pull in some from your knowledge list. This gives you a great way to plan your searches and make sure your searches return roles that will be a good fit for your desires and capabilities.

6.2.3 Matching requirements

As you do your searches, you will start reading through the lists of results and picking the opportunities that sound interesting. Maybe you are drawn to some that are in your area or with a company you have heard of, or maybe just the title suggests it would be a good entry level opportunity. Now you start opening them up and you are bombarded with a list of requirements and your task becomes more daunting. You may get frustrated as it begins to feel like you are not qualified for any of the jobs you are finding. A common response to feeling overwhelmed in a situation like this is to shut down and not bother applying to any. You might try applying to a few that seem closest to your skills but don't really feel like a fit. Or maybe you are the type to just apply to everything and hope for the best knowing the worst they can tell you is no. However, all of this seems rather random and lacking in any form of methodology or structured approach. There has got to be a better way, right? Well of course there is and let us look at how.

Remember that capabilities inventory you created in Chapter 4? Well, that is about to come in handy again. Not just your completed inventory, but the methods that you used to create it. Job descriptions can be complex and that is when they cause problems for candidates applying to them. Therefore, when evaluating a job listing to determine if you are qualified, you will need to be able to break down the list of requirements and determine which requirements are actually the most crucial for the role.

You have conducted your search, you have found a few job listings that you feel would be interesting to you and at a high level match up to your capabilities. Now it is important to understand the structure of a job description. Typically, job descriptions will have a few common sections. Of course, there are the basics like title, location, etc. Often there will also be a high-level description of the role. A lot of times this will be accompanied by a responsibilities section which is usually a bulleted list of the day-to-day duties that the role is expected to fulfill. However, it is the next two sections that we want to focus on here. They are the requirements and the additional qualifications sections. The requirements section should list the minimum qualifications that a candidate must meet to be considered for the role. This section might be labeled "Requirements", "Minimum Qualifications", or another similar title. The additional qualifications section lists other capabilities that would be helpful in making a candidate successful in the position. These are items that the candidate is not expected to have but candidates who do demonstrate them will be considered more qualified. This section is also sometimes labeled as "Preferred Experience", "Additional Skills" or something similar.

Those are the ideal scenarios, but job descriptions often do not meet those ideals. You may come across job descriptions where the requirements section is very long and intimidating. This is usually a sign of a company that is including more than just minimum requirements in the that section. You may also see requirements that list a specific qualification but then include the notorious phrase "or equivalent". For instance, you may notice things like "Bachelor's degree or equivalent work experience" or "CISSP or equivalent security certification". The goal when considering these requirements is to figure out which of them are actually the most important, and there are a few clues you can use to make that determination.

First, consider the order. While it is not always an indicator, think about how a hiring manager or human resources team might put this job description together. Generally, they are going to sit down, think about the role, and attempt to identify a list of requirements. The first ones they think of will come to mind for one of two reasons. Either they are easy general elements, like degrees and certifications, or they are the first skills that come to mind when someone thinks of that specific role. So, if you encounter a long list of requirements, give priority to the first ones in the list.

Another clue in determining which requirements are most crucial is to examine how they link back to the description and responsibilities listed in the job description. Look for themes in the terms being used. If necessary, write down each requirement and then note how many times something related to it appears in the description or responsibilities section. The more specific the requirement is, the more narrowly worded it is, the less likely it is to be significant in the decision-making process.

Finally, look for relationships between the requirements list and the additional or preferred qualifications list. Many times, you will notice a high-level concept in the requirements that is backed up by the mention of specific technologies or skill sets in the additional qualifications section. For instance, you might see a requirement that says, "knowledge of cloud security best practices". Then in the additional qualifications section you might see something to the effect of "Experience with Google Cloud or Microsoft Azure cloud

architecture". That is a good indicator that capability with cloud technology is particularly important for this role.

One last word about job requirements. While you want to check off the boxes for as many of the requirements as possible, avoid feeling like you need to check of every single item in order to be qualified to apply. Remember, first and foremost, the worst they can tell you is no. Now I am not suggesting you should just apply to every job you see, you do still need to be tactical about which jobs you apply to. However, it is unfortunately very common for job applications to self-eliminate themselves from jobs they were qualified for simply because they failed to meet every single requirement list. The more requirements there are on a job description, the less likely it is that a candidate will come in that matches all of them. So do not fall into the trap of assuming that there is someone out there that will match all of them and therefore feel like you should not even try.

6.3 Crushing the Job Interviews

You made it, well at least to this point. You have learned about the roles in cyber security. You have picked an area or two of security that you want to focus on. You have completed your personal capabilities inventory and self-analysis. You have applied to a few jobs. And now you got that email from one of the recruiters saying they are interested and would like schedule an initial interview with you! All the work you have put in so far as led to this point, your opportunity to show them why you are the person they want to hire, the person that they must hire, for this job. However, it is also important to remember that you are interviewing the organization as well. This is your opportunity to figure out if the job, the company culture, and the compensation offered are a good fit for you. Unfortunately, it can be easy to become so focused on trying to impress that you forget that they need to impress you too.

At this point you are probably feeling a mix of excitement and anxiety. This is a highpressure process; you want to say and do all the right things to make sure that you win the job. You are getting ready to learn about a company you could be spending the next 2, 4, 10, or more years at. It is a big moment in your life, no doubt. So, let us spend some time talking about the interview process.

Every organization has their own approach to interviewing potential candidates. Some may have just a few informal conversations while others might require a marathon of interviews and even possibly some technical skills evaluations. However, while every one of them is different, there are some common practices in the interview process that you can prepare for. The overwhelming majority of organizations will start off the process with the human resources screen. It is then usually followed by an interview with the hiring manager. From there, you may run into a mix of technical interviews, group interviews, and possibly even requirements for you to demonstrate practical application of key job skills. You might meet with team members who would be your peers on the team, potential peers from other parts of the organization, and even possibly different levels of management. To be successful, understanding the format, goals, and ways to prepare for each is crucial.

6.3.1 The Recruiter or HR Screen

Almost invariably, the very first conversation you will have once your application is accepted is with the recruiter. They serve as a first line of screening for potential applicants. At the point the recruiter is reaching out to you for an initial screen, it means that they, and likely the hiring manager as well, have reviewed your resume and decided to explore your fit for the role. The job of the recruiter at this point is to look for any administrative issues or deficiencies in your skills and experience that would disqualify you for the position.

The recruiter screen is typically a fairly short conversation, usually 30 minutes or less. They are almost always conducted by phone. You can expect the interviewer to spend some time telling you about the organization, the position you applied for, and offering to answer any initial questions you have. They will likely ask you some very administrative questions about your availability to work, your job history, and possibly salary requirements. Depending on the organization, they may ask you more detailed information about your skills, but usually that is something left to the hiring manager and other subsequent interviews. They should share with you some information about benefits and other forms of compensation that would be a part of the job. Finally, they should share with you a summary of the interview process from start to finish. They may or may not tell you if they plan to move you on to the next step of the process; however, it is pretty common for interviewers to avoid making any commitment about next steps. Usually there is some form of review they will do internally with other people in the organization before they commit to that.

Based on this, you should come to the recruiter screen ready to discuss your employment history, your skills, and reasons why you are applying to this job. It is not uncommon to be asked why you are looking to change jobs, so have a good, honest answer prepared for that question. This should be a relaxed interview with most organizations. The recruiter is just trying to figure out if you have enough of the skills to meet the minimum needs of the job. They are likely comparing you to a number of other applicants and will pass along those that are qualified, for the hiring manager to make a decision as far as subsequent interviews. You should also come prepared with your questions about the organization, high-level questions about benefits, and even questions about the role itself. The interviewer may defer some of those questions to the hiring manager, but it is always better to ask and be redirected than to hold back and not get important information. Also, if the recruiter does not share information about the interview process or what to expect, make sure you ask. That is not something that should be a secret.

As I said earlier, this is also your opportunity to interview the organization. Just as they are trying to determine if you are a fit for their job, you should also be trying to determine if the organization is a fit for your needs. So, pay attention to what the recruiter tells you about the company. Why are they hiring for this position? Is it a new role that came about because they are expanding a team? Did someone in the role move up into a higher-level role? These are indicators that can tell you a lot about the organization. Also, notice how structured or casual the conversation feels--that can give you some sense of the corporate culture within the company.

To prepare for the interview, make sure you have researched the organization and understand their business. Know what products or services they offer. If you can, learn about the team that you will be joining and how it fits into their overall business. It is a good idea to look at websites that provide employer reviews as well. See what comments current and former employees are posting about the company. This might lead to some questions you want to ask in the interview. If you have the time, it can even be a good idea to search social media (e.g., LinkedIn) for other people that work at the organization to identify key players in the leadership team. Showing familiarity with the organization from the initial screen and throughout the process can make you stand out as a candidate. It shows not only are you passionate about the job, but that you are organized and prepared.

Make sure at the end of the interview that you know what to expect next. Chances are they will tell you that they are going to discuss internally, and they will contact you regarding the next steps. They should provide you with an approximate timeframe for when you should hear back. If they do not, certainly make sure you ask. You should expect to get an answer either way and you should know when the right time to follow-up would be if you have not gotten an answer from them.

THE SALARY QUESTION It is common, especially in the initial recruiter screen and possibly in subsequent interviews, to be asked about your salary requirements for the job. What they are asking is what you expect to make in this job. What they should not ask you is what you are making now. While this used to be a common question, it is a practice that is losing favor among recruiters and, in many locations, it is illegal for prospective employers to ask about salary history at all. You should make yourself familiar with the local laws governing this and if you are asked about your salary history, politely redirect the conversation to talking about what you expect to make in the role you have applied to.

Regarding salary expectations, you should go into the interview with a clear idea of what salary you expect to receive. Unfortunately, while there is pressure for organizations to be open about their salary ranges for jobs, few organizations freely offer this information. You can do some research on your own. Job sites sometimes will post salary ranges based for jobs of a type similar to what you are applying to. Sometimes these are based on general salary surveys, but on some sites the information actually comes from people who have worked for the specific organization. Use that salary range information in conjunction with an objective look at your own qualifications for the job to pick a realistic number for what you will ask for. Remember, this is a number that will turn into a negotiating point if you do get offered the job, so the trick is to ask for an amount that is realistic for them based both on the salary range and your qualifications, but also maximizes your potential earning if you do land the role.

6.3.2 The Hiring Manager Interview

In many organizations, the next interview after the recruiter screen will be with the hiring manager. This is your opportunity to really shine; after all, this is the person that will ultimately make the decision of whether to hire you. It is also your chance to get to know and evaluate the person that will be your manager if you are hired. So, while you want to be focused on presenting a confident and professional demeanor, you also want to interact fairly casually to get a feel for how day-to-day interactions may be handled.

The hiring manager will almost assuredly dig deeper into your job history, your skills as they relate to the job, and your overall approach to the job. They will likely tell you more of the details about expectations for the role, their approach to managing the team, and what skillsets are most important in the job. You should expect a healthy dose of questions about your skills and work experience, but you should also have time to ask your questions. This interview is when you will want to ask specific questions about responsibilities within the role that were unclear from the job description. You may also want to ask about the inner relations of peers within the team and how the team fits into the overall organization.

Preparing for this interview is very important. As soon as you have been scheduled for an interview with the hiring manager, look them up on social media. Use LinkedIn, in particular, to find out more about them, their background, and their views on security-related topics if they post about them. Look for commonalities you have or areas you can ask more about. If they have videos of public speaking engagements, articles, or blog posts, check those out as well to get to know your (hopefully) future manager. This information can help you understand the motivations they may have behind certain questions they ask. It can also help you better craft your answers to speak more specifically to their beliefs. A word of caution, however: I am not suggesting you placate or answer questions dishonestly to try to match with their beliefs. Be careful about referencing their materials in your discussion. Once or twice in appropriate topics is good, but if you try to force it or do it too much, you may come off more like a stalker than an organized and informed candidate.

By the end of this interview, you should have a good feel for what the job will entail on a daily basis and how you and your potential boss will mesh from an interpersonal perspective. Before ending the interview, make sure that, again, you get information on what the next steps are, when you should expect to hear back from them, and who the appropriate person is to follow-up with (more than likely it will be the recruiter, not the hiring manager).

STRATEGIC QUESTIONING Come to every job interview prepared to ask questions. Asking the right questions can sometimes be even more effective than showing off your skills and experience. Asking questions that demonstrate you understand their business and/or the role you are interviewing for can make you stand out. Asking good questions shows that you are already thinking proactively about the job and potential issues or challenges that may surface once you have begun working for them.

For instance, if there are specific technologies in the job description that you have experience with, you could ask about specific features the organization is using or if they are experiencing any challenges with the tools. If the job requirements mention any specific security frameworks or regulatory concerns they have, you could dig further into how well they have been able to meet those requirements.

Again, this is a great way to stand out among candidates and exhibit both your understanding of the job as well as your passion and excitement. In my experience as a hiring manager, I have always paid particular attention to the questions my candidates ask. It gives me visibility into how dedicated they are, how organized they are, and how they think about given situations.

6.3.3 The Technical Interview

After making it past the recruiter screen and the hiring manager interview, you will likely at some point be asked to go through a technical interview. Sometimes these can even occur before the hiring manager interview. Technical interviews cause some of the highest levels of

anxiety among job candidates. You know that your skills will be put to the test and you will more than likely be talking to someone or multiple people who have a higher degree of experience and skill than you. That can be daunting but do not let it scare you off. Remember, you got this far because of the things you have done and the skills you have developed that you shared on your resume.

In a technical interview, as I mentioned you may meet with one or more members of the organization. They might be members of the team that you are looking to join but there could also be interviewers that come from other areas of the organization. Technical interviews, as the name implies, are meant to measure your technical aptitude for the job. If it is a group interview, they may also be looking to assess your fit with the team. The key, no matter what, is to stay relaxed, keep it as casual as you can, and try to enjoy the experience. The nature of the interview will vary based on the organization. Some have a very structured feel. The interviewers might be working from a list of questions and taking notes, potentially even scoring you on your responses. In other cases, it may be more casual, the questions may be more about hypothetical situations than direct quiz style questions. How you respond will depend on the type of questions they ask.

If you find yourself in a technical interview where they are asking very direct test type questions, you will want to craft your answers to be very succinct and direct. Be sure to provide enough detail to effectively answer their questions, but do not go off on a tangent or try to fill time on questions that you feel you are not fully equipped to answer. Provide as much of an answer as you can while being honest about your limitations.

If you instead find yourself in a technical interview where the questions are more hypothetical, sometimes beginning with "Tell me about a time" or "How would you handle this situation", this is when you'll want a more detailed answer. These are often what they call behavioral-based questions. The interviewers are looking for you to demonstrate your skill while also sharing more about your personal behaviors. One method for answering these types of questions is the STAR method.



Figure 6.1 The STAR method for answering behavioral-based questions.

The STAR method provides a simple framework for constructing your answer to these types of questions. It is most effective when you are drawing off of a past experience, but you can also use it when answering a hypothetical situation. The goal is to draw a mental picture for the interviewer of how you approached a past situation or would approach a situation if it occurs. The process includes:

- Situation Quickly provide context for the situation you are going to use.
- Task Describe the problem or expectations.
- Action Provide details on what you did or would do.
- Results Share the outcomes or the expected outcomes.

Preparing for a technical interview can be very daunting. To help make it easier, when you get scheduled for the technical interview, ask the recruiter if they can share suggestions for how you can prepare or what kinds of questions you should expect. I did this once while interviewing for a position and the recruiter ended up scheduling a 30-minute prep call with me that armed me with a lot of information on what to expect and how I could prepare. Asking for this type of information again shows that you care about the job, that you are approaching the process in an organized and detail-oriented fashion, and of course it can also help you better prepare for the interview. You should also spend some time researching the people that you will be interviewing with. Again, use social media and other searches to

find out their backgrounds, what topics or technologies they have interest in, and how they approach different technical problems. Knowing the background of your interviewers can help you prepare for the kinds of questions they're going to likely ask as well as help you avoid getting into a topic where you may end up in over your head.

Technical interviews can be particularly exhausting. Sometimes they can last more than an hour. You will want to approach these interviews like you would a big final exam. Get plenty of sleep, setup your day so that you can avoid outside stress factors and do your best to come in relaxed and focused. Even though the interview is focused on measuring your skills in some objective fashion, you will likely have the opportunity to again ask questions. This is a good time to get more information about your potential manager if you are speaking to peers on the team. Ask questions about a day-in-the-life of someone in the role you're interviewing for. Ask direct questions about how the team works together, how the manager interacts with the team, and even what challenges or frustrations they experience. This is one of the best times to get a clear view of the culture within the organization and the team.

Before leaving the interview, you should again be given details on the next steps and when you may expect to hear back. If the interviewers don't have this information, you may need to follow-up with the recruiter. Either way be sure you know when to expect an answer so you know when it would be appropriate to follow-up.

WHEN YOU JUST DON'T KNOW Honesty is not just an ethical imperative for the interview process, it can actually be an effective tool in making you stand out. In a technical interview, for instance, when you don't know the answer to a question, being honest that you do not have a good answer is actually preferable to trying to fake your way through it. Good interviewers can pick up on that type of behavior pretty quickly and will know that you are trying to talk around the subject. So instead, if you are unsure of the answer, be up front about it. However, then you can take that opportunity to expand and try to use the knowledge you do have to figure out what the answer is logically.

For example, I was once in a technical interview where I was asked about a certain type of software attack called Prototype Pollution. I had never heard of it before. So, to answer his question I started off by admitting right away that I did not know for sure what that was. I then explained that I know that in software development, a prototype is the definition of an object or a method. I continued to explain that the word pollution suggests that someone is maliciously modifying the prototype or injecting malicious content into the prototype. This proved to be a very effective answer as it showed that while I didn't know the exact details of that type of attack, I had enough background knowledge to learn about it. Also, I was able to demonstrate the capability to think about a problem logically and come to a reasonable resolution. After I ultimately was hired for the job, the person who asked that question told me how impressed he had been with the answer.

6.4 The Job Offer

It happened. After all that work, surviving round after round of interviews, you were successful, and you got the phone call telling you they want to hire you. Perhaps they have already sent you an email with a formal job offer. Your work is not over yet, as you may still need to negotiate to make sure that you get the best possible deal you deserve.

6.4.1 Don't rush things

First things first, when you get that phone call telling you that they would like to move ahead with hiring you, there is no reason you have to say yes. If you came this far and have reservations about the job, the people, the culture, whatever, there is no reason you should feel that you are now committed to accepting the position. When the call comes, it may be the recruiter, the hiring manager or both that will contact you. They will likely describe the offer in terms of salary, any form of bonus program, the benefits like vacation and sick days, etc. Most companies will also send you a formal offer letter with all the details as well.

When you do get that call, be gracious and thank them for the offer and the opportunity. However, I strongly suggest you ask them for some time to consider their offer. You should not feel like asking for time to consider the offer makes you seem ungrateful or uninterested. You can even tell them that you are very excited but just want a day or two to read through the offer (if they will be supplying a written offer) or to consider the details and get your thoughts in order before you officially accept.

If you have reservations about the job or the offer they have made, this gives you time to organize your thoughts and decide if you want to try to negotiate a better deal or if you want to outright decline their offer. If you are totally happy with their offer, it is still good practice to take time to relax and fully consider their offer. Your emotions will be likely running high and taking a step back can help make sure you do not run full speed ahead into a situation that was not what you were expecting.

If they send you an offer letter, take the time to read it through in its entirety. Understand the salary, other compensation (including any bonus package or signing bonus), benefits and other matters. During this time, if you have specific questions about their benefits package, this is the time to get those answered. Take at least a few hours or even a day or two to consider the offer and make sure it is the one you want. Set the expectation for how much time you need but remember that they may have other candidates for the job that they haven't provided an answer to yet because they are waiting for you to accept or decline. Generally, one to two business days is acceptable for considering an offer before providing a response.

6.4.2 Negotiating for Something Better

A job offer is not a final offer. I spoke to a recruiter, Kersten Renner, whose focus is on hiring for cyber security roles. As she put it to me, "Everything is negotiable". If you are not happy with the salary they have offered, you can ask for more. If the number of vacation days they are offering is too few, ask for a better package. Ultimately you want to make sure you get an offer that you are comfortable with, not settle for something that does not meet your needs.

When negotiating, keep in mind however that it is a give and take process. Sometimes there are things that they cannot change but they can offer you a concession in other ways. For instance, perhaps the salary they are offering you is closer to the top of their salary range for that job and they are reluctant to go any higher. In this case, perhaps a signing bonus or additional vacation days or a higher bonus payout percentage can be setup instead to make up the difference. If you decide you want to negotiate for a better deal, make sure you know what is most important to you going in. Be realistic and understand you may not get everything you are looking for. However, on the flip side, do not be afraid to at least ask. The worst thing you can do is to accept an offer you are not happy with because you are afraid they will rescind the offer and hire someone else. That is a situation that very rarely happens, and when it does, it is usually the sign of a toxic culture you probably would not want to work in anyway.

The negotiating process needs to begin with you making it clear what parts of the offer you are unhappy with and providing a reasonable proposal. Do not attempt to start negotiating your offer by rejecting the offer. Once you have declined their offer, they have no commitment to you and most companies will walk away at that point. You might get lucky and they will inquire as to why you rejected it, but that is a big risk to take. Instead, your response should be gracious, thanking them for their offer and then explaining what it is that you have reservations with and how you would like to see that remedied.

The key to a successful pre-employment negotiation is being reasonable and cooperative. Be confident in your worth and make sure you get paid for it, but avoid coming off as arrogant or unrealistic. That will shut down the negotiations quickly. Remember, if you are successful, these are people you will be working with every day. So, be firm but polite and professional.

6.4.3 Employment Agreements

One last thing to be aware of in your offer, or to ask about if it is not mentioned, is whether or not the company requires any form of employment agreement. Many organizations require their employees to sign an employment agreement that might contain clauses for *non-compete* and *non-solicitation*. Non-compete clauses typically state that for a period of time after you leave the organization, you are not allowed to work for any competitors of the organization. Non-solicitation clauses typically state that for a period of time after you leave the organization, you are not allowed to attempt to influence their employees to leave the organization. There may also be clauses about the nature in which you may or may not interact with the company's customers for a set period of time as well. Be aware of these restrictions as they can be very limiting if, and when, you decide to leave the company down the road.

Terms of an employment agreement are typically not negotiable as everyone within the company is usually required to sign them. You can try, if there is something specific you are not comfortable with, but it is rare for an employer to make an exception like that. Also be aware of local laws. Some locations do not allow such non-compete clauses and so that portion of the agreement may not be enforceable. It is ultimately a contract you are signing; so, if you are concerned, it is prudent to have legal counsel review the agreement and provide guidance before you sign.

6.5 Summary

- When building your resume, you should ensure that it is formatted in a way that an ATS can easily parse it and includes key words that can easily be matched by the automated system to the requirements of the job description.
- Choosing the right jobs to apply to requires you to evaluate your personal objectives and match your skills to the job requirements. Additionally, analyze job requirements and identify the ones that the hiring manager sees as most important.
- Core skills should be represented on your resume in a way that truthfully links them to the job requirements. Show how skills from a non-security job fit the requirements for specific skills in the job description.
- Candidates should prepare for each interview based on the type of interview being conducted. Proactive research and preparation are crucial.
- Avoid pitfalls such as self-elimination from potential jobs, being dishonest, or attempting to cover up gaps in technical knowledge.