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Career Research Essay: Information Security Analyst

My name is Noemi, and after years of struggling to find a career path I could be passionate about, I have decided to pursue a career in cyber security as an information security analyst. I wanted a career that would provide job security, pay me a salary that could afford the lifestyle I dream of having, and provide a challenging work environment. The demanding field of cyber security can do all of this for me and more. I became interested in cyber security after watching a documentary about the use of cyber warfare. The threat of a cyber attack is no longer limited to the individual, it has become a global issue. Cyber security is becoming the next big thing in national security. I want to be on the front lines of protecting our country from this kind of attack. To achieve this career goal, I will be majoring in information systems and working on the necessary skills needed to excel in this field.

According to the assessments we have taken in class, I already possess many qualities that will be beneficial to me in working toward my long-term career goals. I have strong logical and mathematical intelligence (Multiple Intelligence Inventory), which are important skills to have in any computer science field. As a kinesthetic learner (VARK), I would prefer a career that allows a hands-on approach. As an information security analyst, I would be working hands-on to solve problems within the network. My investigative, trait (HCC-Career Coach) is essential in performing in this field. Curiosity is an important first step in learning how a security system works and discovering new methods of improving that systems. The ability to investigate a security breach and stop it, is one of the most important aspects of the job.

In May 2019, the median annual salary for an information security analyst in the US was $99,730, with those working in the financial industry earing a median salary of over $103,000 (U.S. Bureau of Labor Statistics). Not only is this a well-paying position across all industries, but it is also one of the fastest growing jobs on the market. Employment in this field is projected to grow 31 percent by 2029. The average growth for all jobs is only 4% (U.S. Bureau of Labor Statistics). Information security analysts are responsible for protecting an organization’s computer network and systems. They must monitor networks, install protective software programs, conduct testing, and look for vulnerabilities in the system (U.S. Bureau of Labor Statistics). Most employers require at least a bachelor’s degree in a computer related field such as computer science, information systems, or programming (U.S. Bureau of Labor Statistics). I have chosen to pursue a bachelor’s in information systems and someday work on obtaining a Master of Science Degree in Information Technology. Besides the required educational background, information security analysts are also required to have certain skills to be successful at their job. It is important to be very detail oriented since cyber-attacks are not always easy to detect. Having excellent problem-solving skills is also highly recommended because it is the responsibility of the analyst is to fix problems within the organization’s networking system. Information security analysts must stay one step ahead of hackers, so it helps to possess some level of ingenuity when creating new methods of protecting valuable information from prying eyes (U.S. Bureau of Labor Statistics). I plan on using financial aid to help pay for school. I also plan on working throughout school, not only to help pay for my education, but to also gain valuable work experience.

In Houston, the median salary for an information security analyst is $105,000 (HCC-Career Coach). Seventy-five percent of security analysts have achieved at least a bachelor’s degree in a computer-related field (HCC-Career Coach). In the last year, 1332 jobs in Houston have posted cyber security as a required skill. In 2018 there were 1,792 security analysts employed in the Houston area and that number is projected to increase to 2,735 by the year 2030 (HCC-Career Coach).

I dream of someday having a comfortable life. I am not interested in luxury or living beyond my means, I simply want to afford a comfortable 2-bedroom apartment, basic utilities, and the occasional vacation. I do not plan on having kids, but I do plan on saving at least 10% of my income. According to the Texas Reality check, I would need to make an annual salary of about $67,000. An entry level security analyst makes around $64,000 a year on average (Texas Workforce Commission). This means that for the first few years, I will not be able to afford the lifestyle that I want. I will lower my overall expenses for the first few years by living in a smaller apartment, spending less money on clothing, dining out less, and taking fewer vacations. Once I have gained some work experience and I begin earning closer to the average salary of around $100,000 (Texas Workforce Commission), I will be making more than enough to sustain the lifestyle I dream of having. With the extra income I am earning, I plan on investing most of it so I can begin earning a passive income as well.

It is important to compare the cost of living among various cities to determine if the career I have chosen would allow me the flexibility of moving if needed. In Houston, the average salary for a security analyst is just over $100,000 (Texas Workforce Commission). In New York City, a comparable salary would be just over $265,000 (CNNMoney) yet the average salary for a security analyst in New York is only $124,000 (CareerOneStop). Even more shocking is the fact that the cost of housing in NYC is 523% more than the cost of living in Houston! I do not think it would be a smart idea to move to New York, without considering different career options or making some serious changes to my lifestyle. Colorado Springs however, seems like a better option. The average salary for an information security analyst in Colorado Springs is $107,000 (CareerOneStop). This is good news since a comparable salary in Colorado Springs is about $105,000 (CNNMoney). Furthermore, the cost of living in Colorado Springs is not drastically different than the cost of living in Houston. Housing is only 14% more and utilities are 8% less (CNNMoney). I do not plan on leaving Houston anytime soon, but if I ever change my mind, I think Colorado Springs would be a nice place to go.

As I study and work towards my career goals, I also hope to gain some valuable “soft skills” in the process. Some examples are leadership skills, teamwork, and critical thinking. These important skills will come in handy for any work I do, including various volunteer opportunities. Every year, I have volunteered with the Houston Pride Parade. I have worked with them as both a team leader and as a team member. The time I have worked with them has helped me improve both my leadership skills and my teamworking skills.

In 5 years, I hope to be employed by the U.S. Cybersecurity and Infrastructure Security Agency as an information security analyst. Three major steps I must take to achieve this goal are, 1) finish the Computer Networking Systems program at HCC, 2) transfer to a 4-year university and obtain a bachelor’s degree in information systems, and 3) gain relevant work experience via internships and volunteer work. I will surely face many obstacles on my way to achieving my goal. For example, it will be difficult to work full time, go to school, and find time to focus on the volunteer work needed to gain the relevant work experience. It will also be challenging to learn a completely new set of skills needed for this career. In 10 years, I hope to be working towards a master’s degree and on the path to becoming Chief of Strategy at the U. S. Cybersecurity and Infrastructure Agency.

Works Cited

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