

Cybersecurity Career Professional Paper

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In the Cybersecurity field, there are a lot of different job opportunities that are offered. A job that stuck out to me the most was the role of a penetration tester. Penetration testers help businesses see where there are weak issues in their systems and what can make them vulnerable to being hacked. So their job is to try and breach the company's computer network. People in this career depend on social science research by having to really understand human behavior and how people would think if they were trying to hack a company's software. Knowing how to do that makes it easier for penetration testers. With social science research being required for this career, it also helps penetration testers identify phishing which is really popular today. There are constantly emails that are sent to me and they make it seem to where the email is really important. I have always known when it is a hacker, but sometimes others do not and end up clicking on this link which results to them getting hacked. So penetration testers being able to identify phishing is huge for companies. Along with knowing social science research with this career knowing and understanding the social science principles is important as well. The social science principles are economics, psychology, sociology, political science, and economic justice.

Understanding the economics principle is great for penetration hackers because they can maybe bring up an idea about doing an awareness program for security breaches. They can also offer to pay people for going to it as well so it is a win win for everyone. Knowing the psychology aspect is great for penetration hackers too because they can use it to figure out things about people that would be beneficial to their goal. They can figure out how to manipulate people so they can no longer hack things anymore. Sociology is huge for penetration testers because being able to observe the relations between the employees can really positively or negatively affect the business. If a penetration tester is able to recognize an employee who hates working there and hates their coworkers, that could be a possible suspect for hacking if that

business is experiencing any. They also can see how the business or companies dynamic is with how they make decisions which can be huge. Penetration hackers can help in areas where they see that decision making is not being done right and offer ideas to help clean it up. Political science is also used in this career because they will be able to see the companies procedures that they go by so they can help make the procedures more beneficial to the company. They can also see how involved the government is involved in the business as well. Being aware of the political science principle can also help decrease the amount of attacks from foreign countries as well.

The five most common social science research methods is surveys, archival research, experiments, field research and case studies. Penetration testers use case studies by setting up real world examples of how a breach would actually work and be able to identify the weaknesses from there. As all of the things are required and critical for penetration testers, it is also required for them to have great communication skills so they can communicate areas that need to be fixed to the company and to inform them of things that can make them vulnerable to attacks. They also have to be very educated in all of the technical skills that go into the job as well. Such as being able to work the system, find areas that need to be worked on, and then being able to build a protection so that it doesn't happen again.

In conclusion, all cybersecurity jobs require and depend on social science research and social science principles. Some careers might emphasize different ones then others but they all fall under the same umbrella. Researching the penetration tester career was really interesting and it is something that I may heavily consider after I graduate!