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Hacking Humans: Cybercriminals and our DNA

Due to the age we are in, specifically focused around technology, everything we own is at the peak of vulnerability, and with discoveries like in this article, even our genetic information is now also vulnerable. With the rise of having the ability to use DNA testing services, many people have given up their genetic information for different reasons like health, ancestry, and even curiosity.

DNA and Identification

Genetic information is becoming a very personal way of identification that is available now. Even with things such as social security numbers and names, those are given to us and are not with us when we are born, rather given right after. DNA, however, is permanent and not changeable in any way. In the article, Rizkallah took note on the point that the more we use different versions of DNA testing, there are more privacy concerns brought out. Since our DNA is taken during these different tests and saved and even digitized, there are databases that could be breached that are holding many people's information. With that now available, there is the possibility that they could be breached and that data gets released.

Ethical Implications of Cybersecurity and biology

Not only does the article talk about the danger and security of having digitized DNA, it also relates to the ethical implications and issues. There are questions raised, such as "Should

companies be able to keep DNA stored indefinitely?" and other examples similar to it. The author focuses heavily on the importance of transparency and awareness of consumers. They give warnings that even though it is used for good, the frameworks based on ethical conclusions and different security protections are attempting to keep pace but struggling.

Conclusion

All in all, the more that we digitize our environment, there are so many threats that are created. From things such as ethical issues to cyber criminals attacking society's structures, there is a new landscape built on things such as DNA through things such as the dark web. The organizations that host DNA collection for things such as health or ancestry situations need to be more accountable and transparent to their consumers, which is stressed by the author. We must also take our time to understand how our data, even DNA, is being used or protected. Without doing that, we could possibly find ourselves in much larger and worse situations.

References

Rizkallah, J. (2018). *Hacking Humans: Protecting Our DNA From Cybercriminals*. Forbes Technology Council.

 $\underline{https://www.forbes.com/sites/forbestechcouncil/2018/11/29/hacking-humans-protecting-our-dna-from-cybercriminals/?sh=31cfac3a5287}$