VAAHINI X FUTURE TECH: CYBERSECURITY

VIDEO TRANSCRIPT

This video will look at how careers in this space are growing, any gaps when it comes to women, and what are the opportunities to *look out for.*

Stock Images/Videos: Footage and news clippings of cyberattacks of hacks. Distorted/pixelated image with alarm sound

Voice over: Wait! What's happening? Is this a cyberattack? This is why you need to change your passwords often. But that's not enough, is it?

Presenter talking to the camera: (shakes her head)

Are you aware that there's a cyber-attack every 39 seconds? As digital continues inundating our lives each day, we are becoming more vulnerable to cyberattacks. Hackers can exploit our personal, financial, health or intellectual property data across a multitude of IT touchpoints. So, it becomes crucial for the organizations to counter the attacks on their networks, systems, infrastructure, and electronic devices. Thereby, resulting in an exponential increase in the need for cybersecurity.

Voice over: Okay! So how does cybersecurity help organizations?

Presenter talking to the camera: Cybersecurity protects data from all sorts of thefts and attacks. Categorized into a series of sub-domains, Application Security aims at defending organization's software and services against digital attacks via secure codes, data validation etc. Similarly, cloud security focuses on providing secured cloud architectures and applications for companies leveraging cloud service providers like Amazon webservices, google etc. Authenticating and authorizing legitimate individuals for accessing organization's information systems is accomplished via Identity Management and Information security. Further, mobile security is another sub-domain aimed at protecting information stored on mobile devices like tablets, cell phones, and laptops. Summarizing, cybersecurity helps businesses prevent losses due to theft of money or resources and retain customer trust.

Voice over: What is the market outlook for the cybersecurity industry?

Presenter talking to the camera: As cybercrimes continue to evolve, cybersecurity has become top concern for the C-suite. To protect their data from being compromised, organizations are embedding cybersecurity into their culture, programmes, and services. Further, the demand for cybersecurity professionals is on the rise. ISC2 Cybersecurity Workforce Study (2019) reports that 65% of the organizations have a shortage of cybersecurity staff. India alone accounts for 1.5 million unfilled vacancies by 2025. Since countries like India and China are rapidly moving towards digitisation, cybersecurity vendors can witness huge growth. It is expected that cybersecurity market shall exceed US $ 300 billion by 2027.

![accenture logo]

Voice over: What are the different job roles available?

Presenter talking to the camera: Since the field is expanding and evolving continuously, new roles continue to being carved out.

For a cybersecurity professional, security analyst, security administration, security engineer, or security architect are some of the prominent roles available. Each role has some distinctive responsibilities to execute. For example, a security analyst analyses the systems and patch the loopholes. As a security architect, you would be engaged in designing the security structure. A security administrator would be responsible for setting up proper security guidelines for data flow and installing firewalls and malware blockers.

Voice over: What about the gender diversity in this industry?

Presenter talking to the camera: Like the overall tech landscape, the cybersecurity industry also lacks women professionals. Only 24% of the global cybersecurity workforce are women. Despite the numbers, women have played the role of code girls and cryptographers in World War II, as well as at NASA in the 1950's. They have held many influential positions in cybersecurity. Theresa Payton, the first female Chief Information Officer in the White House under President George W. Bush is one such example.

Employers should prioritize recruiting, retaining and empowering talented female cybersecurity professionals to bridge this workforce gap.

Voice over: Can anyone begin a career in cybersecurity?

•**Presenter talking to the camera**: Absolutely! All you need is a bachelor's degree in technology. However, even if you don't have a degree, you can begin your journey by pursuing relevant cybersecurity certifications and courses. Key IT skills that you need to possess as a cybersecurity expert includes:
   - Proficiency in programming languages like Java, python, HTML, PHP etc.
   - Understanding of Database Management systems, firewalls, web proxy, IDS/IPS and identity and access management
   - Clarity on networking concepts, routing, and encryption
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As a new joinee, you could pick entry-level roles like cybersecurity technician, network engineer, IT auditor or incident responder. Mid-level roles include cybersecurity consultant and penetration tester. With some experience and expertise, you can advance to managerial roles as Cyber security engineer.

Stock Images/Videos: *different courses available online*

You can explore platforms like coursera, udacity, EdX etc. offering several courses ranging from beginner to advanced level to become a cybersecurity professional. Further, if you are already an IT professional, these courses or certifications would add wings to your career as a cybersecurity expert.

Presenter **talking to the camera**: So, what are you waiting for? Leap into the field of cybersecurity and create an impact on individual, corporate, and social security.

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