Cyber Security India: A Skills & Opportunity Roundup

India's internet penetration and digital growth story is all set to go into cyber history as one of the biggest and fastest growth stories of the decade. India ranks 3rd in terms of Internet user count, only after USA and China and interesting to note that in the 2012-2017 period the CAGR is at a remarkable 44%. Stepping into 2020 we look forward to hit the 800Mn internet users count as a nation wherein 75% of the new users added will demographically Rural and an equivalent number of new users will consume content in vernacular languages. With mobile video content growth on steroids at 83% CAGR and an estimated 70% of ecommerce transactions going mobile, the cyber space is all set to get busier and complex. Needless to mention the quantum of digital and cyber data assets that this growth throws into the cloud and hardware infrastructure, the need for monitoring and securing has multiplied over the decade.

While the domestic growth story forms a major dimension of the Cyber Security need and growth, the other prominent and equal, if not bigger, dimension is that of the growing beeline of digital backoffices and GICs being set up by large MNCs. Talent, infra, regulatory and cost factors remain lucrative for these establishments to set foot in India. The tight digital regulations these enterprises operate under and sensitivity of data that they build and work with has added more thrust to Cyber Security growth and prominence. Their security needs span across all aspects of network, infrastructure, application, data and information.

Add to the above 2 dimensions, the 3rd and one that adds an equal thrust to Cyber Security is that of eGovernance, Centralization and Digitisation projects at the national level. Large scale rollouts like the national GSTN eInvoice expected to gain momentum in 2020, BharatNet, DigiLocker, eSign Framework and state-level BlockChain Districts will all add up more to the Cyber Security needs and demands in 2020 and the next few years to come.

And needless to say Cyber Security is not a one-time implementation or fixed term project. It's a practice and a vertical that would only get bigger as technology moves further ahead.

Top Cyber Security Skills & Job Opportunities

The top and thriving skills in gaming development to watch for in 2020 both from a demand and supply point of view are:

- **Application Security**
- **Threat Management**
- **VAPT**
- **Cloud Security**
- **Information Security**
- **Network Security**
- **Compliance Security**

While these are among the top skills in demand and ones with some of the brightest current openings, there are more skills in the line-up in Cyber Security horizontals like mobility, infrastructure, compliance and threat assessment. The skill demands vary based on the nature of industry and product or service that an enterprise deals with. While Internet and eCommerce players focus on application security and VAPT, the GICs tend to have higher demand for Threat Management, Information Security and Cloud Security and the BIG4 Consulting & BFSI players focus on Compliance Security and have higher demands on this niche skillset.

Skills	Up to 3 years	3-6 years	6-9 years	10-12 years
Application Security	4-6 Lacs	6-9 Lacs	9-18 Lacs	22-35 Lacs
Threat Management	6-9 Lacs	9-15 Lacs	15-25 Lacs	26-40 Lacs
VAPT	6-9 Lacs	9-15 Lacs	15-25 Lacs	26-40 Lacs
Cloud Security	6-9 Lacs	9-15 Lacs	15-25 Lacs	26-40 Lacs
Information Security	6-9 Lacs	9-15 Lacs	15-25 Lacs	26-40 Lacs
Network Security	Up to 6 Lacs	6-9 Lacs	9-15 Lacs	15-20 Lacs
Compliance Security	3-6 Lacs	6-9 Lacs	9-15 Lacs	18-22 Lacs

Application Security roles start low and on the base salary scale and catchup a bit later with other high remunerations skills like Threat Management, CloudSec and VAPT as the experience level of the candidate increases. Network Security roles are highest in volume of openings due to sheer nature of the role however these roles are on the comparatively lower end of the salary range.

Job openings across these top skillsets are found to be lucrative for talent across experience levels and some of these also accommodate even young tech talent with compensations figures equivalent to those of experienced talent in traditional tech functions like software development and network management.

Skills	Job Openings (Bangalore)	Across India
Application Security	3250	13000
Threat Management	570	1800
VAPT	2950	10500
Cloud Security	2650	7000
Information Security	3600	14000
Network Security	4500	16000
Compliance Security	1300	5000
	18820	67300

Typical employment change in this domain is seen to bring a salary movement anywhere between 30% to 45% over last drawn salary. Candidates with Certificates and Professional Endorsements command a premium. Some of the Certifications that fetch a premium of 10% to 15% over the others are CISA, CISSP, CEH, CRISC, HIPPA, CCSP.

Top Cyber Security Employers

Some of the high stake Cyber Security openings and marquee positions are with enterprises like Deloitte, KPMG, EY, PwC, Shell, Amazon, Wells Fargo, Paytm, Walmart, CISCO, Accenture, Capgemini, Ericsson, Yokohama, Palladian Networks, Aujas Networks, Adobe, Infosys and MBRDI.