



सत्यमेव जयते

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

(An Institute of National Importance)

Under Ministry of Education, Govt. of India

G.E Road, Raipur – 492010 (C.G.)



DEPARTMENT OF COMPUTER APPLICATION, NATIONAL INSTITUTE OF TECHNOLOGY NIT RAIPUR

Title: Report on Expert Talk Event Organized by the Department of Computer Application under Industry Institute Collaboration Cell

Date: September 01, 2025

Venue: S-14 and Data Science Lab for participants, National Institute of Technology Raipur

The Department of Computer Application has organized an expert talk event under IICC on the topic "*Current Trends and Opportunities in IT Industry*" on September 01, 2025. The event featured industry professional Mr. Manish Kumar Pandey, who shared valuable insights and experiences, highlighting the rapid evolution of technology such as AI/ML and cybersecurity, along with their impact on various sectors. Attendees were encouraged to engage in discussions and ask questions, fostering a collaborative environment for learning and networking. The guest speaker for the event was Mr. Manish Kumar Pandey, Head of Cyber Security Delivery for the Europe, ANZ, APAC regions at Infosys. Mr. Manish is an alumnus of the Master's in Computer Applications program at NIT Raipur.

Details of the Event: The event began at 11:00 AM with an introductory speech delivered by Dr. Tripti Swarnakar, Professor and Head of the Computer Application Department. She discussed the objectives of the IICC and its benefits for students, emphasizing the department's achievements in relation to the rapidly evolving technologies in the industry and welcoming the expert.

Mr. Manish began his talk online by discussing the role of AI/ML technologies in the IT industry and explained how these advanced techniques are enhancing precision and improving solution quality. He emphasized the importance and potential of these technologies, particularly in the industry, highlighting how AI/ML are utilized in the IT sector to automate repetitive tasks. He discussed their role in enhancing operational efficiency through predictive analytics for system outages, enhancing cybersecurity through threat detection, personalizing customer experiences with chatbots, and accelerating data analysis to uncover valuable insights for improved decision-making.

The event concluded by vote of thanks given to Honourable Director Dr. N. V. Ramana Rao, IICC Chairman Dr. Shubhashis Sanyal, Dr. Tripti Swarnakar Professor & Head, and IICC Co-ordinator Dr. Naeem Ahmad, for their visionary leadership and continuing support. Prof. Priyanka Tripathi, Dr. Dibakar Saha, Dr. Tanmoy Kanti Das, Dr. Mou Das Gupta, all the staff members, research scholars and approximately 100 students from Department of Computer Application were present to make the event successful.

meet.google.com/vqx-ansz-ck?authuser=3

Marish Pandey (Presenting)

CYBERSECURITY IS NOW A KEY BUSINESS PROBLEM

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- 200: Average time (in days) to detect a data breach
- \$48b: Online payment fraud estimation in a year
- 16: Average time (in days) to apply, test and deploy patches to endpoints
- 24,000: Malicious mobile apps blocked on internet per day
- \$1.79m: Cybercrime cost to organizations per minute
- \$265b: Damage caused by ransomware attacks by 2031
- \$266.2b: Global cybersecurity market by 2027
- \$4.35m: Average cost of data breach worldwide
- \$23b: Estimated value of cyber insurance premiums worldwide in 2025
- 560,000: New malware samples produced everyday
- 15.4m: Number of DDoS attacks in a year
- 15m: Number of records exposed due to breaches in first half of 2022

Expert Talk on Current Trends and Opportunities in ...

MCA, NITRR' 2025

Participants: HT, HT, Marish Pandey, Mou Dasgupta, Tanmay Kanti Das, ICC - MCA NIT Raipur

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Marish Pandey (Presenting)

CYBERSECURITY KEY MACRO TRENDS

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Zero Trust Framework Zero trust framework is in mainstream now. Verify identities in applications, devices with no trust model.	SB2B and API Security Intelligent devices data, communication security & APIs, platforms secure integrations	Digital Accelerations Adoption of hybrid work, return to office requiring security and resilience for modern workplaces and digital transformation	Board Engagement & Assurance Cyber security initiatives to protect enterprise wide data are supported by board and CXOs	Cyber Security becoming Mainstream Secure by Design, Secure by Scale and Secure the Future are being embedded in digital transformation
Cloud Security Compliance Cloud native security controls need to be embedded during cloud foundation build programs	Privacy Data Security & Privacy is driven by domestic and international regulators	Advance Threats Ransomware, cyber extortion, industry specific attacks are rising and driving security initiatives	Geopolitical Tensions Increased state sponsored targeted cyber attacks on critical infrastructure are in rise due to geopolitical tensions	Cyber Skills Demand & Gap Huge cyber skills demand to protect information and systems and gaps in trained skills
Managed Protection, Detection & Response Increase in managed threat hunting, intel, data lake, patch & vulnerability management as a service	Borderless Security Borderless security is replacing traditional network perimeter security through protecting assets, data and application remotely	Future Threats Future threats like Deep fakes and in quantum and HPC, autonomous vehicles, drones, digital twins' technologies are rising	Cloud Adoption at Governments Government agencies and defense are adopting private clouds and requires embedded security	Supply Chain Security Supply chain security initiatives like third party vendor management, isolated networks
Shift Left - DevSecOps Shift left using DevSecOps, Container Security, open-source technologies are gaining wider adoption	Hyper Automation Automation in SOAR, BOTS, AI ML, Applications/algorithms and security in it	Cyber Crime & Fraud Management Governments and corporates are seeking more help to control and manage cyber crimes and frauds	Legal & Regulatory Organizations are adhering to domestic and international regulations and laws for data and information systems security	Securing AI Services Securing Artificial Intelligence services adapted in various digital transformation initiatives
Cyber Security Mesh Architecture An architectural approach that promotes interoperability between distinct security products to achieve a more consolidated security posture	Cyber Vendor Consolidation Strategy adopted by enterprises to amalgamate and choose its vendors based on a thoughtful analysis of their packaging needs, process and requirements	Return to Office Provides viability not only into when the intruder entered, but also what they did inside as well as potential risks	Platform Led Services Offered through integrated platform to increase the cohesiveness and context sharing across various technologies through APIs	IT OT Convergence Bridge gaps between IT and OT environments, enabling security decisions across critical infrastructure and manage threats

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