Programme on

AI/ML STRATEGIES FOR NEXT-GEN CYBER SECURITY

Programme Coordinator: Dr. Mridula Verma

SEPTEMBER 15 - 19, 2025

Institute for Development and Research in Banking Technology, Hyderabad (Established by Reserve Bank of India)

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INSTITUTE FOR DEVELOPMENT AND RESEARCH IN BANKING TECHNOLOGY ★ Estd. by Reserve Bank of India ★

Introduction

With the increasing sophistication of cyber threats in the banking and Financial sector, traditional security frameworks are no longer sufficient. Artificial Intelligence (AI) and Machine Learning (ML) offer powerful tools to proactively detect, analyze, and mitigate cyber risks. This programme equips banking professionals with a strategic understanding of how AI/ML technologies can be leveraged to strengthen cybersecurity postures, enabling more intelligent, automated, and adaptive defenses.

Objectives

* Understand the fundamentals of AI/ML and their role in cybersecurity
* Explore AI-powered threat detection, prediction, and response mechanisms
* Learn to assess cyber risks using data-driven approaches
* Analyze real-world use cases in banking cybersecurity
* Evaluate ethical, legal, and operational considerations in AI-based security systems

Contents

* **Foundations of AI/ML in Cybersecurity:** Basics of AI/ML and Cybersecurity, Cyber threat landscape in BFSI, Role of AI in modern cybersecurity
* **AI/ML for Cyber Threat Detection and Response:** Anomaly and intrusion detection, AI-driven incident response, AI in identifying phishing, ransomware, and malware patterns, Behavioral analytics to detect credential theft and lateral movement
* **AI-Powered Fraud Analytics and Insider Threat Management:** Real-time transaction fraud detection using ML, detecting insider threats through activity and sentiment analysis, integrating biometric and behavioral authentication using AI
* **AI in SIEM, SOAR, and Automated Response:** Augmenting SIEM with AI for smarter alert correlation, AI-driven SOAR for faster remediation, Use of NLP and GenAI for automated playbook generation and threat report summarization, reducing alert fatigue and false positives using ML models
* **Adversarial AI and Secure Model Design:** Evasion and poisoning attacks, Robust and explainable AI in cybersecurity, Secure model lifecycle management
* **Strategic Implementation and Emerging Cybersecurity Trends:** AI-driven Security Operations Centers (SOCs), Future trends: GenAI in cybersecurity, quantum-safe AI defenses.

Who can Participate?

Senior Executives (up to AGM level) and Junior Officers from IT and other Divisions of Banks / Financial Institutions involved in technology, risk, customer experience, and strategic planning.

End Use

Participants will gain actionable insights to implement AI/ML-based cybersecurity frameworks in banking environments—enabling proactive threat detection, faster incident response, and enhanced resilience against modern cyber threats.

Programme Coordinator

Dr. Mridula Verma, Asst. Professor. e-mail: vmridula@idrbt.ac.in.

Accommodation

Participants will be provided Air Conditioned Single Occupancy accommodation in IDRBT, Hyderabad, with all cafeteria facilities. The Participants can check-in on the evening of the day before the commencement of the programme and can check-out after completion of the programme on the same day (or) in the morning of the next day of the programme.

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Fee Details

Domestic Participants from

* RRBs & Coop. Banks : Rs. 59, 000/- (Rs. 50, 000/- + 18% GST)
* All other Banks & FIs : Rs. 76, 700/- (Rs. 65, 000/- + 18% GST)

The fees for our programmes can be remitted through NEFT and the bank account details for fee payment are here under:

Account Name : IDRBT
Bank : Axis Bank Limited
Branch : Humayun Nagar (Mehdipatnam Ring Road) Branch, Hyderabad
Account Number : 426010100018823
IFSC Code : UTIB0000426
GSTIN : 36AAAAI0204K1Z4.

Nominations

Nominations should be sent to us latest by **AUGUST 29, 2025** by email to **hunar@idrbt.ac.in.** Please note that no nominations will be accepted after this date. This measure is envisaged to further improve the quality and learning outcomes of the programmes based on participants' profile and requirements.

While nominating, please provide the details of the participants (Name, Designation, Bank, Mobile No / Phone No., email address) along with the nominating authority details (Name, Designation, Bank, Mobile No / Phone No., email address, Fee billing address, GST No. of the bank).

Contact Us

Please contact our Programme Office for organizing Customized Programmes and/or any other queries related to programmes at **hunar@idrbt.ac.in** or call us on +914023294121/24/25.