



# Institute for Development and Research in Banking Technology

(Established by Reserve Bank of India)

Castle Hills, Road No. 1, Masab Tank, Hyderabad-57, India.

---

e-Programme on

## AI/ML AND DATA SCIENCE IN BANKING

October 04 – 07, 2021

---

### Introduction

AI/ML has caught the imagination of researchers and practitioners in all disciplines, banking being no exception. This field has revolutionized the way business is done in retail marketing and changed the face of all service industries. Banking being a very important segment in that family of service industries has witnessed irreversible changes in the way customer relationships are managed, operations are conducted and risks are mitigated. This has successfully augmented the phenomenal impact analytics already had on the banking. Data science subsuming big data analytics and social media analytics has solved important use cases in banking viz., customer acquisition, customer churn prediction, fraud detection, credit scoring, loan default prediction, sentiment analysis etc. While making significant inroads into these use cases AI/ML has brought in mind boggling transformational changes in the way operations conducted directly with customer, spreading business outlets (branches, ATMs) to newer regions, ATM Cash replenishment, etc. Robotic process automation, chatbots are prime examples of the application of AI apart from the myriad of applications of ML as mentioned above. Network and information security also witnessed high impact implementation of AI/ML. Successful implementation of AI/ML and data science makes the digital journey of a bank complete, profitable, sustainable, safe and rewarding.

### Objectives

- To make the participants aware of the new developments in this field and influence them to join the bandwagon for overall growth of the banking industry
- To convince the with use cases, case of studies, best practices in Indian banks and PoCs conducted at the Centre of Excellence in Analytics, IDRBT

### Contents

- Introduction to AI/ML
- Introduction to Data Science (subsuming big data and social media analytics)
- Case studies of AI/ML in banking on the important problems of CRM, Fraud Risk prediction, Security and Operations.
- Best practices, critical success factors, framework for AI/ML implementation in banks

### Mode of Teaching

Online teaching plus learning inputs through reading material, videos, webinars, assignments, quizzes, online interactions and clarifications. Each e-Programme will have four live webinars and course material will be made available in advance for study.

## Who Can Participate?

Officers and executives up to and including GM level from digital banking, transaction banking, planning, marketing, IT, Security, SOC.

## End Use:

- Participants shall be on boarded to this exciting field, several concepts will be demystified.
- Participants can help write the RFP in the respective areas using AI/ML & Data Science
- They will be ready for a full-fledged, rigorous hands-on training on these subjects.
- They can ask the vendors pertinent and pointed questions

## Programme Coordinator:

**Dr. V. Ravi**, Professor, IDRBT; e-mail: [vravi@idrbt.ac.in](mailto:vravi@idrbt.ac.in)

## Fees:

### **For Indian Participants**

- RRBs & Coop Banks: Rs. 8,850/- (Rs. 7,500/- + 18% GST)
- All Other Banks & FI's: Rs. 11,800/- (Rs. 10,000/- + 18% GST)

### **For International participants**

- US \$ 175 (per participant, All inclusive)

## Bank Account Details for Remittance of Fees

The fees for this e-programme can be remitted to the following accounts:

### **For Indian Participants**

Account Name : IDRBT  
Bank & Branch : Axis Bank Limited, Humayun Nagar, Mehdiapatnam, Hyderabad  
Account No. : 426010100018823  
MICR Code : 500211012  
IFSC Code : UTIB0000426

### **For International participants**

Receiver's Correspondent Bank : JP Morgan Chase, New York, USA  
Swift Code : CHASUS33XXX  
Fed Wire Routing Number : ABA 021000021  
Beneficiary Bank & Branch : Axis Bank Ltd., Mumbai, India  
Account Number : 0011407376  
Beneficiary Bank Swift Code : AXISINBB

### **Ultimate Beneficiary**

Account Name : IDRBT  
Customer ID : 030021632  
Account No. : 426010100018823  
Bank & Branch : Axis Bank Ltd., Jubilee Hills, Hyderabad, India. (AXISINBB030)

## Nominations

Banks may nominate any number of participants to these e-Programmes, which may be accepted on a first-cum-first-served basis. While nominating, please provide the details of the participants (Name, Designation, Bank, Mobile No/Phone No, email address, fees billing address, GST No. of the Bank).

Apart from nominations by banks, staff members of banks can self-nominate themselves for these e-Programmes by providing their employee credentials and paying the programme fee latest by **October 01, 2021**.

## How to Register

The nominations for these e-Programmes, and queries if any, may please be sent to [eprogram@idrbt.ac.in](mailto:eprogram@idrbt.ac.in). Please visit <https://www.idrbt.ac.in/eprogrammes> for more details about these programmes.

\*\*\*\*\*

### e-Programmes in October 2021

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Awareness on Payment Systems Vision 2021	04 – 07	Dr. N. V. Narendra Kumar	<b>Oct 01, 2021</b>
2	Fundamentals of Open Source Technologies	04 – 07	Dr. Mridula Verma	<b>Oct 01, 2021</b>
3	AI/ML and Data Science for Banking	04 – 07	Dr. V. Ravi	<b>Oct 01, 2021</b>
4	Secure Coding Practices	05 – 08	Dr. V. Radha	<b>Oct 04, 2021</b>
5	Technologies for Financial Inclusion	05 – 08	Dr. M. V. N. K. Prasad	<b>Oct 04, 2021</b>
6	Threats to Digital Payment Ecosystem	11 – 14	Dr. Susmita Mandal	<b>Oct 08, 2021</b>
7	Workshop on Registration Authority Operations	11 – 14	Dr. N. P. Dhavale	<b>Oct 08, 2021</b>
8	Virtualization and Cloud Computing	25 – 28	Dr. P. Syam Kumar	<b>Oct 22, 2021</b>
9	Introduction to Governance, Risks and Compliance	25 – 28	Dr. Abhishek Kumar	<b>Oct 22, 2021</b>
10	AI/ML for Cyber Security	26 – 29	Dr. Rajarshi Pal	<b>Oct 25, 2021</b>
11	Insider Threats - Monitoring, Analysis and Detection	26 – 29	Dr. B. M. Mehtre	<b>Oct 25, 2021</b>

### e-Programmes in November 2021

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Blockchain and Distributed Ledger Technology	08 – 11	Dr. N. V. Narendra Kumar	<b>Nov 05, 2021</b>
2	Introduction to Authentication Techniques	09 – 12	Dr. M.V.N.K. Prasad & Dr. N.P. Dhavale	<b>Nov 08, 2021</b>
3	Secure Financial Infrastructure	09 – 12	Dr. Susmita Mandal	<b>Nov 08, 2021</b>
4	5G & Internet of Things (IoT) for Banks	15 – 18	Dr. V. N. Sastry	<b>Nov 12, 2021</b>
5	Introduction to Technologies for Customer Lifecycle Management	15 – 18	Dr. V. Ravi	<b>Nov 12, 2021</b>
6	Proactive Cyber Defence Strategies	16 – 19	Dr. Dipanjan Roy	<b>Nov 15, 2021</b>
7	Data Centre Management	22 – 25	Dr. P. Syam Kumar	<b>Nov 19, 2021</b>
8	Cyber Security for Remote Working Scenario	23 – 26	Dr. Rajarshi Pal	<b>Nov 22, 2021</b>
9	Dark Web Monitoring for Threat Intelligence	23 – 26	Dr. B. M. Mehtre	<b>Nov 22, 2021</b>
10	Emerging AI/ML Technologies	Nov 30 – Dec 03	Dr. Mridula Verma	<b>Nov 29, 2021</b>
11	Security Operations Centre	Nov 30 – Dec 03	Dr. V. Radha	<b>Nov 29, 2021</b>

### e-Programmes in December 2021

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Re-imagining Customer Engagement with Conversational Chatbots	06 – 09	Dr. Mridula Verma	<b>Dec 03, 2021</b>
2	Awareness on Payment Systems Vision 2021	06 – 09	Dr. N.V.Narendra Kumar	<b>Dec 03, 2021</b>
3	Explainable AI/ML for Banking	06 – 09	Dr. V. Ravi	<b>Dec 03, 2021</b>
4	Introduction to Hardware Security for Banks	07 – 10	Dr. Dipanjan Roy	<b>Dec 06, 2021</b>
5	Technologies for Financial Inclusion	14 – 17	Dr. M. V. N. K. Prasad	<b>Dec 13, 2021</b>
6	Security in Cloud Computing	14 – 17	Dr. P. Syam Kumar	<b>Dec 13, 2021</b>
7	Workshop on Registration Authority Operations	20 – 23	Dr. N. P. Dhavale	<b>Dec 17, 2021</b>
8	Privacy and Security Risks in Machine Learning	21 – 24	Dr. Rajarshi Pal	<b>Dec 20, 2021</b>
9	Targeted Attacks - Detecting in early stages	21 – 24	Dr. B. M. Mehtre	<b>Dec 20, 2021</b>
10	API Development	27 – 30	Dr. V. Radha	<b>Dec 24, 2021</b>
11	Basics of IT Vendor Management	28 – 31	Dr. Abhishek Thakur	<b>Dec 27, 2021</b>