



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

March 01 – 04, 2022

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 case 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

Fees:

For Indian Participants

- RRBs & Coop Banks: Rs. 11,800/- (Rs. 10,000/- + 18% GST)
- All Other Banks & Financial Institutions: Rs. 14,750/- (Rs. 12,500/- + 18% GST)

For International participants

- US \$ 220 (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 **February 28, 2022**.

How to Register

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

e-Programmes in March 2022

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Workshop on Registration Authority Operations	01 – 04	Dr. N. P. Dhavale	Feb 28, 2022
2	AI/ML and Data Science for Banks	01 – 04	Dr. V. Ravi	Feb 28, 2022
3	Proactive Cyber Defence Strategies	07 – 10	Dr. Dipanjan Roy	Mar 04, 2022
4	Introduction to Authentication Techniques	08 – 11	Dr. M. V. N. K. Prasad & Dr. N. P. Dhavale	Mar 07, 2022
5	Recent Cyber Crimes and Defences	08 – 11	Dr. Rajarshi Pal	Mar 07, 2022
6	Data Centre Management	14 – 17	Dr. P. Syam Kumar	Mar 11, 2022
7	Emerging AI/ML Technologies	14 – 17	Dr. Mridula Verma	Mar 11, 2022
8	Big Data Analytics through Elastic Map Reducer for Banks	21 – 24	Dr. V. Ravi	Mar 11, 2022
9	Mobile Banking, Social Media Banking and Mobile Security Testing	21 – 25	Dr. V. N. Sastry	Mar 18, 2022
10	Targeted Attacks - Detecting in Early Stages	22 – 25	Dr. B. M. Mehtre	Mar 21, 2022
11	Secure Coding Practices	22 – 25	Dr. V. Radha	Mar 21, 2022
12	Re-envisioning Digital Banking Systems	28 – 31	Dr. Susmita Mandal	Mar 25, 2022

e-Programmes in April 2022

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Distributed Ledger Technology and Banking Applications	04 – 07	Dr. N. V. Narendra Kumar	Apr 01, 2022
2	Technologies for Financial Inclusion	04 – 07	Dr. M.V.N.K. Prasad	Apr 01, 2022
3	Workshop on Registration Authority Operations	05 – 08	Dr. N. P. Dhavale	Apr 04, 2022
4	AI/ML for Cyber Security	05 – 08	Dr. Rajarshi Pal	Apr 04, 2022
5	Adversarial ML for Banks	18 – 21	Dr. V. Ravi	Apr 13, 2022

6	Smart Banking using AI and ML	18 – 21	Dr. Mridula Verma	Apr 13, 2022
7	Cyber Forensics for Cyber Defence - A Proactive Approach	19 – 22	Dr. B. M. Mehtre	Apr 18, 2022
8	API Development	19 – 22	Dr. V. Radha	Apr 18, 2022
9	Future of Innovative Smart Banking	25 – 28	Dr. Susmita Mandal	Apr 22, 2022
10	Security in Cloud Computing	26 – 29	Dr. P. Syam Kumar	Apr 25, 2022
11	Introduction to Hardware Security	26 – 29	Dr. Dipanjan Roy	Apr 25, 2022

e-Programmes in May 2022

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Re-imagining customer engagement with conversational Chatbots	09 – 12	Dr. Mridula Verma	May 06, 2022
2	Introduction to Governance, Risks and Compliance	10 – 13	Dr. Abhishek Kumar Thakur	May 09, 2022
3	Continuous Security Validation	10 – 13	Dr. V. Radha	May 09, 2022
4	Secure Financial Infrastructure	10 – 13	Dr. Susmita Mandal	May 09, 2022
5	Cyber Security for Remote Working Scenario	17 – 20	Dr. Rajarshi Pal	May 16, 2022
6	Proactive Cyber Defence Strategies	17 – 20	Dr. Dipanjan Roy	May 16, 2022
7	Dark Web Monitoring for Threat Intelligence	17 – 20	Dr. B. M. Mehtre	May 16, 2022
8	Introduction to Authentication Techniques	23 – 26	Dr. M.V.N.K. Prasad Dr. N.P.Dhavale	May 20, 2022
9	Explainable AI for Banks	24 – 27	Dr. V. Ravi	May 23, 2022
10	Big Data and Cloud	24 – 27	Dr. P. Syam Kumar	May 23, 2022

e-Programmes in June 2022

S. No.	Name of the e-Programme	Date	e-Programme Coordinator	Last Date for Nomination
1	Privacy Preserving Machine Learning for Banks	06 – 09	Dr. V. Ravi	June 03, 2022
2	Distributed Ledger Technology and Banking Applications	06 – 09	Dr. N. V. Narendra Kumar	June 03, 2022
3	5G Use Cases and IoT Applications for Banks	06 – 10	Dr. V. N. Sastry	June 03, 2022
4	Threats to Digital Payment Ecosystem	07 – 10	Dr. Susmita Mandal	June 06, 2022
5	Technologies for Financial Inclusion	07 – 10	Dr. M.V.N.K. Prasad	June 06, 2022
6	Emerging AI/ML Technologies	13 – 16	Dr. Mridula Verma	June 10, 2022
7	Workshop on Registration Authority Operations	14 – 17	Dr. N. P. Dhavale	June 13, 2022

8	Privacy and Security Risks in Machine Learning	14 – 17	Dr. Rajarshi Pal	June 13, 2022
9	RBI Guidelines on Cyber Security	20 – 23	Dr. Dipanjan Roy	June 17, 2022
10	Introduction to Containers	21 – 24	Dr. P. Syam Kumar	June 20, 2022
11	Targeted Attacks - Detecting in Early Stages	21 – 24	Dr. B. M. Mehtre	June 20, 2022
12	API Development	Jun 28 – Jul 01	Dr. V. Radha	June 27, 2022