

### Other Programmes Scheduled in October 2017

S. No.	Programme	Date	Coordinator
1.	Building Digital Payment Interfaces through UPI	03 – 04	Dr. N. V. Narendra Kumar
2.	Social Media Analytics for Banks	09 – 11	Prof. V. Ravi
3.	Technologies for Financial Inclusion	09 – 11	Dr. M. V. N. K. Prasad
4.	Network Security	23 – 27	Dr. V. Radha
5.	Vulnerability Analysis and Penetration Testing for Cyber Defence	Oct 30 – Nov 03	Prof. B. M. Mehtre
6.	Mobile Application Development for Banks	Oct 30 – Nov 03	Dr. N. P. Dhavale

Please visit our website for more details on programmes at : [www.idrbt.ac.in/upcoming.html](http://www.idrbt.ac.in/upcoming.html)

### Programme Office

Please contact our Programme Office for organizing Customized Programmes and/or any other queries related to programmes:

**Dr. M. V. Sivakumaran**  
Faculty and Coordinator - EEDP

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# Database Systems Performance Tuning in Big Data Era

Coordinator: **Dr. S. Nagesh Bhattu**

**OCTOBER 30 – NOVEMBER 01, 2017**



# Database Systems Performance Tuning in Big Data Era

October 30 – November 01, 2017

Coordinator: **Dr. S. Nagesh Bhattu**, Assistant Professor, IDRBT

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## Introduction

Database Systems are core components of system Software maintained by Banks and large financial institutions. The functionality supported by database systems has been undergoing various changes due to the technological upgradations taking place in various parts of software/hardware. Storage solutions have seen tremendous advancement in the form FLASH based persistent stores, requiring the existing Database tools to re-tune the way they work. Drastic Reduction in Memory Costs have also resulted in in-memory query processing that was not seriously thought of before. Big-Data tools using commodity hardware enable analytical algorithms to be run on datasets much bigger than it was possible with conventional SQL.

Of late design of decision support systems around these operational stores has become necessary for business intelligence and regulatory compliance. In view of the above technological changes, database components of these decision support systems are to be revisited. Understanding of XML Databases, NoSQL databases, Data Migration applications for Big Data based integration tools and experience of performance tuning and benchmarking for conventional database applications play a key role in fulfilling the responsibilities of a data scientist.

## Objective

To train bankers on various technological issues surrounding data such as storing and retrieving data, modeling the schema. The participants will learn more about performance tuning, Query Optimization and advanced SQL Querying through hands-on. The sessions on emerging technologies such as NoSQL, XML and Big Data in the context of Database Systems will empower the participants with ability to apply these solutions in the places where real-time response to be improved.

## Contents

- \* Intro to Relational Database Systems
- \* Design & SQL, In-Memory Vertical Databases
- \* Database Systems for Data Warehouse
- \* Advanced SQL (Hands-on)
- \* No SQL Databases
- \* Database Systems in Big Data Era
- \* Query Optimization (Hands-On)
- \* XML Databases, Materialized Views
- \* Data Migration using Sqoop, Flume
- \* Hive Querying (Hands-on)
- \* Data Integration using Talend

## Faculty

Faculty of IDRBT, Guest Speakers from the Industry & Practitioners.

## Who Can Participate?

Data Scientists and Business Intelligence/Analytics Executives from Banks and Financial Institutions, whose responsibilities include design of models for various business scenarios such as operational data warehouse, and emerging technologies such as NoSQL, Big Data/Hadoop/Spark based architectures for storing, retrieving and recovering data from Scale I to IV.

## End Use

This programme will help in addressing the various operational challenges involved in handling large-scale, multiple variety data through traditional and emerging database methods. It provides training in tools that leverage the integration of traditional database systems with hadoop based big data technologies for application of scalable data mining algorithms.

## Fee Details

### Domestic Participants from

- \* **RRBs & Coop Banks:** **Rs. 21,240/- (Rs. 18,000 + 18% GST)**
- \* All other Banks & FIs: **Rs. 28,320/- (Rs. 24,000 + 18% GST)**

### Foreign Participants from

- \* **SAARC Countries :** **US \$ 708 (US \$ 600 + 18% GST)**
- \* Other Countries : **US \$ 1062 (US \$ 900 + 18% GST)**

- \* The fees for our programmes can be remitted through NEFT and the bank account details for fee payment available at: <http://bit.ly/PAYFEES>.

## Nominations

Nominations should be sent to us latest by **October 14, 2017** by email to [program@idrbt.ac.in](mailto:program@idrbt.ac.in)

## Venue & Timings of Programme

**Venue:** IDRBT

**Timings:** 9.30 AM to 5.30 PM

## How to Reach IDRBT

A major landmark near Masab Tank flyover is NMDC. IDRBT is located just behind NMDC. Google Pin: <http://bit.ly/IDRBT>

## Accommodation and Travel Plans

The boarding & lodging arrangements will be made at IDRBT, Hyderabad. The participants will be provided single occupancy a/c rooms.

**Check-in :** From 3.00 PM on Sunday, October 29, 2017.

**Check-out :** 7.00 AM on Thursday, November 02, 2017.