



Sandip Foundation's
Sandip Institute of Technology & Research Centre, Nashik
Department of Computer Engineering

Industry-Academia Innovative Practice

Activity Report

On

“Bigdata Analytics”

(24th July – 30th July 2014)

Organized by

Sandip Foundation's
Sandip Institute of Technology and Research Centre

Department of Computer
Engineering



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Sandip Institute of Technology & Research Centre, Nashik
Department of Computer Engineering

Activity Report on “Bigdata Analytics”

Name of Resource Person : Mr. Anand Shirsath

Address: Arete Technology

Duration : 35 hrs.

Date: 24th July – 30th July 2014

Class : BE

Venue: Hardware Lab, Computer
Department, SITRC

Name of Coordinator : Prof. Leena Deshmukh, SITRC, Nashik.

Aim: To motivate students to use modern tools for handling huge amount of data.

Objectives:

- 1) It support running of applications on BIG DATA.
- 2) It possess a unique skill set vital for programming and coding *Hadoop* applications.
- 3) An effective resume objective encourages prospective employers to continue reading a resume, so it is important to develop a clear and concise statement.

Outcomes:

Participants learned:

- 1) To understand basics of Hadoop and Big Data.
- 2) To Install and use Hadoop to manage bigdata.
- 3) Hadoop Map Reduce, HDFS, Apache Sqoop,
- 4) Write Java program of pig and sqoop

Total No. Participants: 50

Course Structure:

Sr. No.	Topics	Duration
1	Introduction to Big Data	5 hrs
1.1	What is Big Data and where it is produced?	

1.2	Rise of Big Data	
1.3	Compare Hadoop vs traditional systems	
1.4	Limitations and Solutions of existing Data Analytics Architecture	
1.5	Attributes of Big Data	
1.6	Types of data	
2	Hadoop Architecture and HDFS	7 hrs
2.1	What is Hadoop	
2.2	Hadoop History	
2.3	Distributing Processing System	
2.4	Core Components of Hadoop	
2.5	HDFS Architecture	
2.6	Hadoop Master – Slave Architecture	
2.7	Daemon types - Learn Name node	
2.8	Data node, Secondary Name node	
3	Hadoop Clusters and the Hadoop Ecosystem	4 hrs
3.1	What is Hadoop Cluster	
3.2	Pseudo Distributed mode	
3.3	Type of clusters	
3.4	Hadoop Ecosystem	
3.5	Pig, Hive, Oozie, Flume, SQOOP	
4	Hadoop MapReduce Framework	5 hrs
4.1	Overview of MapReduce Framework	
4.2	MapReduce Architecture	
4.3	Learn about Job tracker and Task tracker	
4.4	Use cases of MapReduce	
4.4	Anatomy of MapReduce Program	
5	PIG	8 hrs
5.1	PIG vs MapReduce	
5.2	PIG Architecture & Data types	
5.3	Shell and Utility components	
5.4	PIG Latin Relational Operators	
5.5	PIG Latin: File Loaders and UDF	
5.6	Programming structure in UDF	
5.7	PIG Jars Import	
5.8	limitations of PIG	
6	Apache SQOOP, Flume	6 hrs
6.1	Why and what is SQOOP	

6.2	SQOOP Architecture	
6.3	Benefits of SQOOP	
6.4	Importing Data Using SQOOP	
6.5	Apache Flume Introduction	
6.6	Flume Model and Goals	
6.7	Features of Flume	
6.8	Flume Use Case	

List of Participants:

Sr. No.	Name of Students
1	SHINGADE MAHENDRA CHINTAMAN
2	KADAM NINAD SUBHASH
3	UPADHAYAY SAMARTH KAUSHIKKUMAR
4	BISHT TWINKLE DAYALSINGH
5	MORE HARSHAL BABURAO
6	DONDE PANKAJ UTTAM
7	AHER PRASAD SANJAY
8	RAUT AMIT BALASAHEB
9	SHARMA AJAY PANNALAL
10	WANI DHIRAJ RAGHUNATH
11	SHAIKH YUNUS SADIQUE
12	BARAD SUSHANT SHIRISH
13	KURUP ANURAJ RAJASEKHARA
14	PATTA RAJENDRA ADIKAND

15	PANSARE PRATIBHA ASHOK
16	AHER AMRUTA SURESH
17	BHANGALE NEHA SHAMKANT
18	RADE POOJA VILAS
19	KHUBANI TUSHAR JAIKISHAN
20	DEORE YOGITA ASHOK
21	KALE MANOJ ANIL
22	TAMBE GAYATRI UDAY
23	MEMANE MEGHANA MANIK
24	KOTHAWADE SACHIN PRAKASH
25	MAHALE VIRESHKUMAR SUBHASH
26	KASAR DHANSHREE SHARAD
27	PATEL RAJKANNYA RAVINDRA
28	TAORI GAURAV PRADEEP
29	MANGELA DEEPAK V
30	SHAH BHAVIKA PARESH
31	GAIKWAD LALITA SUBHASH
32	THAKARE AARTI RATNAKAR
33	KHARJUL RUPESH ASHOK
34	MANDLEKAR VIRAJ GIRISH
35	DAS GAUTAMI BRAJABANDHU
36	GHOTANE SHWETA RAVINDRA

37	JONDDHALE ASMITA RAMESH
38	JADHAV JYOTI RANGANATH
39	SHIRSATH PRATIBHA DAYANAND
40	DEORE CHANCHAL DAMODAR
41	TUNGAR VINIT KESHAV
42	TALOLE AKASH DILEEP
43	WAGH MONIKA VINAYAK
44	AHIRE NEHA SHIVAJI
45	SANCHETI SANKET SATISH
46	PATIL VISHAL PUNDALIK
47	MAHALE DEVYANI SURESH
48	WADHWA APEKSHA ANILKUMAR
49	AGRAWAL SHEFALI GOPAL
50	VINCHURKAR SHANTANU SATISH

Photographs:



Prof. Leena Deshmukh

Coordinator

Prof. A. D. Potgantwar

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