

# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## COURSE REPORT

Event Name	Workshop on Enterprise Mobile Technology
Name & Organization of the Resource Person	Mr.P.Arun Kumar, Zebra Technologies, Bengaluru.
Date and Duration of the Programme	24 - 25 July 2015 & 2 - Days Programme.
Objective of the Course	This Course will provide an up-to-date view on enterprise mobile application development. Emphasis will be given for developing mobile apps using mobile application development framework (MADP/MEAP) - RhoMobileSuite (RMS) and also to give exposure on app development with necessary components used by the enterprise applications such as Scanner, RFID reader, Camera, Accelerometer, Magnetometer etc. compatible with all mobile OS.
Contents covered in Day 1	<b>Mobile AppFramework:</b> Definitions – Types – Native App development – Hybrid App development – Major components – Challenges <b>RhoMobileSuite (RMS):</b> Suite -Rho framework,RhoStudio, RhoHub, RhoConnect, RhoGallery – Installation & Configuration <b>RhoMobile APIs:</b> User Interface – Database
Contents covered in Day 2	<b>RhoMobile APIs:</b> Bar code scanning – Signature capture – Printing – File transfer - Locationing <b>Enterprise App Development:</b> Native/ Hybrid App development using RhoStudio– Build the App using RhoHub – usage of Camera, Scanner – Testing - Case study/ Demo.
Outcomes of the Course	Students able to, <ul style="list-style-type: none"><li>• Develop Mini Projects, experiments in mobile devices</li><li>• Explain the various APIs for mobile app development</li><li>• Explore the technologies that will support mobile app development</li></ul>

# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## COURSE REPORT

1	Subject Code	T2A
2	Subject Name	Malware Analysis
3	No. of Students Participated	62 Nos.
4.	Name & Organization of the Resource Person	Mr. J. Reegun Richard, Symantec Corporation
5.	Date and Duration of the Programme	25th July, 26th July, 1st August & 2nd August, 2015 & 4 - Days Programme.
6.	Objective of the Course	This course provides a introduction to the tools and methodologies used to perform malware analysis on executables found on Windows / Linux systems using a practical, hands-on approach. Students will be able to learn how to extract host and network-based indicators from a malicious program using dynamic and static analysis techniques.
6.	Contents covered in Day 1	<b>Introduction</b> Malware – Definition, Types, Goals. Malware Analysis – Definition, Requirements, Essentials, Goals and Objectives. <b>Dynamic Analysis</b> PE structure, Tools for malware analysis, Procedure to protect the host, Procedure to analyze a file and giving reputation, Analyze DLL files, Network traffic analysis, Creating YARA rules. <b>Analyzing Non-PE files</b> File structures of non-PE file, Importance of non-PE files
7.	Contents covered in Day 2	<b>Analyzing Non-PE files</b> Tools to analyse non-PE files, Analysis of Microsoft document file, PDF files, Flash files. <b>Static Analysis</b> Importance of PE structures, Packers, Compilers, Crypters, Tools for static analysis, Debuggers, Disassemblers, packing and unpacking a malware.

# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## COURSE REPORT

8.	Contents covered in Day 3	<b>Static Analysis</b> Introduction to virustotal, Hashing, Need of Antivirus, Working principle of Antivirus, Create signature for a malware to support antivirus. <b>Web Exploits analysis</b> Severity of web exploits, Why & How web exploits carried on, Tools to analyse web exploits, Environment setup, Exploit kit analysis, Vulnerabilities used in Exploit kits, Vulnerabilities used to create exploit kits.
9.	Contents covered in Day 4	<b>Hands-On Practice</b> FakeAV malware, ZeroAccess Rootkit, Ransomware for trainees, DLL malware samples, Trojan.RATdll file for trainees, Microsoft document file embedded with malware, PDF file embedded with malware, Static analysis of a malware sample ( PlugX rat), Web exploits, and YARA rules creation.
10.	Outcomes of the Course	Students able to, <ul style="list-style-type: none"><li>• Explain the characteristics of Malware and its effects on Computing systems .</li><li>• Demonstrate the procedure of Malware analysis performed against the given scenario.</li><li>• Practice the given system scenario using the appropriate tools to Identify the vulnerabilities and to perform Malware analysis.</li></ul>

**Forwarded to the Dean (TL &FD)**

**Signature of the Coordinator**

**Prof. & Head, Dept. of IT**

# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## WORKSHOP REPORT

1	Workshop Title	"Cloud Computing Tools"
2	No. of External Participants	23 Faculties & 15 Research Scholars / PG Students
3	No. of Internal Participants	12 Nos (4 UG/PG Students, 8 Faculties)
4	Co-ordinators	Ms. K. Indira, Assistant Professor, IT Dept, TCE. Mr. M. Thangavel, Assistant Professor, IT Dept., TCE.
5.	Name & Organization of the Resource Person	Dr. S. Padmavathi, Associate Professor, CSE Dept., TCE. Mr. E. Mahendran, CDAC. Mr. M. Thangavel, Assistant Professor, IT Dept., TCE. Ms. K. Indira, Assistant Professor, IT Dept, TCE.
6.	Date and Duration of the Programme	15 - 18, October, 2015 & 4 - Days Programme (9.30 AM to 5.30 PM).
7.	Objective of the Workshop	Cloud Computing Tools Workshop will make participants adept at various cloud computing architectures. Live hands-on will help participants keep up with Cloud technologies, tools and methodologies required to understand and work on cloud computing principles used in the IT industry. The objective of this workshop is to give a practical exposure in the domain of Cloud to the research community.
8.	Contents covered in Day 1	<b>FN:</b> Virtualization & Cloud Computing - Introduction Problem Solving in Cloud Sim <b>By</b> Dr. S. Padmavathi, Associate Professor, CSE Dept., TCE. <b>AN:</b> Installation and Configuration on HADOOP <ul style="list-style-type: none"><li>• Pseudo Distributed Mode</li></ul> <b>By</b> Mr. M. Thangavel, Assistant Professor, IT Dept., TCE.

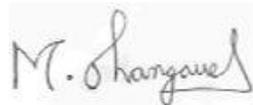
# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## WORKSHOP REPORT

9.	Contents covered in Day 2	<p><b>FN:</b> Problem Solving in OpenMP</p> <p><b>By</b> Ms. K. Indira, Assistant Professor, IT Dept, TCE.</p> <p>Research Issues in Cloud Resource Scheduling and Cloud Security</p> <p><b>By</b> Mr. M. Thangavel, Assistant Professor, IT Dept., TCE.</p> <p><b>AN:</b> Installation and Configuration on HADOOP Fully Distributed Mode &amp; Problem Solving in HADOOP</p> <p><b>By</b> Mr. M. Thangavel, Assistant Professor, IT Dept., TCE.</p>
10.	Contents covered in Day 3	<p><b>FN &amp; AN:</b> Virtualization - KVM &amp; XEN Installation and VM Configuration of</p> <ul style="list-style-type: none"><li>• OpenStack</li></ul> <p><b>By</b> Mr. E. Mahendran, CDAC.</p>
11.	Contents covered in Day 4	<p><b>FN &amp; AN:</b> Installation and Configuration of Open Nebula Installation and VM (VmWare) Configuration of</p> <ul style="list-style-type: none"><li>• Eucalyptus - Faststart</li></ul> <p><b>By</b> Mr. M. Thangavel, Assistant Professor, IT Dept., TCE.</p>

Forwarded to the Dean (TL &FD)



Signature of the Coordinator

Prof. & Head, Dept. of IT

# THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

## COURSE REPORT

1.	Workshop Title	One Day ACM Eminent Speaker Programme On IT OPERATIONAL ANALYTICS
2.	Resource Person	Dr.Animesh Nandi ,Researcher ,IBM Research India.
3.	No. of Participants	35
4.	No. of Internal Faculty Participants	5
5.	Date and Duration of the Programme	28-November 2015,1 day
6.	Objective of the Course	This course Provides a platform to gain insights from the domain of operational analytics methods, tools and applications.
7.	Contents covered	Automated Root-Cause Diagnosis in a Datacenter <ul style="list-style-type: none"><li>• Time-travel queries on the historic state of the datacenter,</li><li>• Analyzing execution logs of distributed applications</li></ul>
8.	Outcomes of the Course	Participants will be able to analyze large volumes of machine data collected from a datacenter in order to enable problem diagnosis of faults.
9.	Financial Support Aailed	SF account

**Forwarded to the Dean (TL &FD)**

**Signature of the Coordinator**

**HOD IT**

**THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15**

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

**Two days Workshop on Exploratory and Statistical Analysis using R Programming” from 06.11.2015 to 07.11.2015**

1.	Workshop Name	<b>Two days Workshop on Exploratory and Statistical Analysis using R Programming” from 06.11.2015 to 07.11.2015</b>
2.	No. of Persons Participated	17 Nos ( External) 19 Nos (Internal)
3.	Name & Organization of the Resource Person	Mr. Ramanathan ,CTS ,Chennai Mr.Reynld Devaraj, Latent View Analytics, Times,Chennai
4.	Date and Duration of the Programme	06.11.2015 to 07.11.2015 &2 - Days Programme.
5.	Objective of the Course	To provide a platform for interaction and to discuss recent advances, new paradigms, technological trends, applications and challenges in analysing the data using R programming. It is more specific to the applicability of Exploratory and statistical analysis of Data engineering applications.
6.	Contents covered in Day 1	<b>Basics of R</b> , Base Graphics-dplyr ggplot2, <b>Classification- Logistic Regression, Decision Trees, Naive Bayes.</b>
7.	Contents covered in Day 2	<b>Association Rule Mining-Apriori, Clustering -K-means, Hierarchical, Principal component Analysis , Statistical &amp; Business Analytics Packages</b>
8.	Outcomes of the Course	Participants will be able to 1. Understand the basic statistical packages and its installation. 2. understand the graphical packages and its installation. 3. Model a classifier and implement for different data sets. 4. Generate the graphs and reports for clustered data
9.	Financial Support Availed	Yes, Rs. 33,700 /-

**Forwarded to the Dean (TL &FD)**



**Signature of the Coordinator**



**HOD IT**