

TWO DAYS WORKSHOP
on
NETWORK SECURITY

November 14th and 15th, 2019

Organised by

Dept. of Computer Science & Engineering



ICFAI University, Tripura

Kamalghat, Agartala-Sinna Road, Pin 799210, Tripura(W), India
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Pro- Vice Chancellor

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Dr. Priyangshu Rana Borthakur
Dean, FST
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Principal, ITS

Convenor

Prof. Abhijit Biswas
HOD, CSE

Resource Person:

Industry Expert from
Tech Savvy Eduventures Pvt. Ltd, Guwahati

Venue

The ICFAI University, Tripura
P.O. – Kamalghat, Sadar
Agartala, Tripura
Pin: 799210

ABOUT THE UNIVERSITY:

The ICAFI University, Tripura (referred to hereafter as the University) was established in 2004 through an Act of State Legislature (Tripura Act 8 of 2004). The University has been approved by the University Grants Commission, under Section 2(f) of the UGC Act, 1956 and the University is empowered to award degrees under Section 22 of UGC Act, 1956.

THE UNIVERSITY IS MEMBER OF THE FOLLOWING:

- Association of Indian Universities, New Delhi, India.
- Association of Commonwealth Universities, London, UK.
- Institution of Engineers (India).
- Association of Management Development Institutions in South Asia (AMDISA).
- Department of Scientific and Industrial Research, Ministry of Science and Technology, Govt. of India
- Confederation of Indian Industry (CII).
- Vijnana Bharati.
- Academy of Hospital Administration, Govt. of India.

ACCREDITATIONS:

The University has the following accreditations of the regulatory authorities:

- University is NAAC Accredited
- University Grant Commission (UGC)
- National Council for Teacher Education (NCTE)
- Bar Council of India (BCI)
- Distance Education Bureau (DEB)
- Rehabilitation Council of India (RCI)

The University, with its motto “Meritum Ethicus” strives to develop a new cadre of professionals with high level of competence and deep sense of moral principles and commitment to the code of professional conduct. The University believes in creating and disseminating knowledge in core and frontier areas through innovative educational programs, research, consulting and publishing, and developing a new cadre of citizens with a high level of competence and a deep sense of ethics and commitment to the code of professional conduct.

REGISTRATION:

Total no. of Seat-100

There is no registration fees, but seat will be booked on first cum first serve basis.

CONTACT DETAILS :

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DAY-1

EMAIL SECURITY

Phishing Attacks — Desktop Phishing, Spear Phishing
IDN Homograph Attack
Social Engineering
Fake Emails
Identify Fake Emails
Key Loggers
Email Encryption
Security Counter Measures

GOOGLE HACKING DATABASE

Use Google to craft attacks
Advanced operators of Google Find Vulnerabilities
using Google Security Countermeasures

IIDS, FIREWALLS & HONEY POTS

Introduction to Firewalls
Network Firewalls
Web Application Firewalls
Weakness in Firewalls
Intrusion Detection Systems and weakness
Intrusion Prevention Systems and weakness
Honey Pots and Security Misconfiguration

LINUX BASICS

Install and setup
Introduction to Linux based Pentesting OS
System Architecture
Network Configuration
Essential Commands

NETWORK ATTACKS

Introduction to Network Attacks
Man in the Middle Attack
ARP Poisoning
SSL Stripping

WIRELESS SECURITY

Introduction to Wireless Technology
MAC Filtering
Packet Encryption
Packet Sniffing
Types of Authentication
Types of Attacks
ARP Replay Attack
Fake Authentication Attack
De-Authentication Attack
Security Countermeasures

MOBILE SECURITY

Introduction to Mobile Platforms
Security Architecture of Mobile Platforms
Introduction to VoIP
VoIP Calls from any number to any number - Fake Calls
Android Exploitation Framework

TENTATIVE SCHEDULE

WEB APPLICATION VULNERABILITY ASSESSMENT & PENETRATION TESTING

Introduction to Web Architecture
Web Security
Generic Misconceptions
Introduction to DBMS - MySQL, MS SQL, Oracle, DB2
Introduction to SQL
OWASP Top 10 Attacks

- o Sensitive Data Exposure
- o Insecure Direct Object References
- o SQL Injections
 - Authentication Bypass Injection
 - Blind Injections
 - Error Based Injection
 - Union Based Injection
- o Cross Site Scripting (XSS)
- o Broken Authentication and Session Management
- o CSRF
- o Missing Function Level Access Control
- o Invalidated Redirects and Forwards
- o Security Misconfiguration
- o Using Components with Known Vulnerabilities
- Brute Forcing Attack
- Heartbleed Attack
- Shell Shock
- Bashbug
- HTTP Response Splitting
- Denial Of Service Attacks
- Vulnerability Analysis using Burpsuite
- Arbitrary File Upload
- Applications to Automate VAPT

SYSTEM HACKING

OS Login Bypass

- Introduction to Authentication Mechanisms
- Tools to Defeat Authentication

Malware Illustration - Virus, Worms, Trojans
Create Virus
Create Trojans
Evade Antivirus & Firewalls
Scan System for Malicious Applications
At the end of the session 1 hour will be given for student's query solutions

DAY-2

ORGANIZING COMMITTEE

Prof. Saroj Kumar Nanda
Member

Dr. Partha Sarkar
Member

Dr. Dushyant Dutta
Member

Prof. Debjani Bhowmik
Member

Prof. Durgabati Podder
Member

Prof. Dipjyoti Deka
Member

Prof. Paromita Goswami
Member

Prof. Sayantan Singha Roy
Member



LAKSHYA J BORA

Co-Founder at Cognitive Technologies

PROFESSIONAL SKILLS

Network & System Security Penetration Testing Risk Management Mobile Application Security Vulnerability Assessment Cryptography & Malware Analysis Security Audit & Infosec Mgmt. Web Development

PERSONAL SKILLS

Creative spirit Reliable and professional Organized Time management Team player Fast learner Motivated

ABOUT SPEAKER

Lakshya J Bora is a Cyber Security Expert from North East, India. He is a B. Tech in Computer Science & Engineering. He is the Co-founder of a Indian IT startup company known as Cognitive Technooogies and the company is currently working on the domain of cyber security consultancy, enterprise application development & security & IP base telecom integration and services for government & private organizations. Taking cyber security as a passion, he has been invited to many talks about Cyber Security Awareness in many national level workshops on Ethical Hacking & Information Security like IIT GUWAHATI, IIT BOMBAY from 2009 onwards. His solemn view is for the development of IT security and has provided security solutions to many prestigious institutes, organizations and IT projects. He has also done penetration testing on various web & mobile apps. He has experience in delivering various IT Governance project for Govt. of Assam. He is the trainer and project consultant to Cyberdome which is a digital crime investigation platform established at Assam Police special branch headquarter.