

POLICE



DEPARTMENT

No. 01-14484/2023/SCRB

State Crime Records Bureau,

Thiruvananthapuram

✉ adgpscrb.pol@kerala.gov.in

☎ 04712317620

Dated. 03-01-2024

From

Additional Director General of Police (i/c Inspector General of Police)
Cyber Operations

To

Dr. M. V. Judy
Professor and Head
Department of Computer Applications
Cochin University of Science and Technology
Kochi, Kerala
(E-mail ID : dcahod@cusat.ac.in)

Sir,

Sub : Proposal for 6 days workshop at Cochin University of Science and Technology -
Reg.

Ref : E-mail received from that office on 29/12/2023

Please refer to the above.

It is informed that the proposal for the Workshop for law enforcement officers on the topic "Basic Guardians for Cyber Vigilance" for Kerala Police at Cochin University of Science and Technology submitted vide reference cited is hereby accepted. The nominal roll for the workshop is enclosed herewith. It is requested to take necessary arrangements to conduct the Workshop from 08/01/2024 to 13/01/2024.

Yours faithfully

HARISANKAR IPS

Superintendent of Police - Cyber Operations

For Additional Director General of Police (i/c

Inspector General of Police)

Copy To : Sub Inspector of Police, Cyber Security for information and necessary action.



*The staff and students of the Department of Computer Applications,
Cochin University of Science and Technology cordially invite you to the Inaugural
function of the Workshop for law enforcement officers on the topic
"Basic Guardians for Cyber Vigilance" for Kerala Police
on Monday 8th 2024, 10:00 AM in the Department Auditorium*

Programme Schedule

Welcome Address	Dr.Sabu M.K., Professor, Department of Computer Applications, Cochin University of Science and Technology.
Presidential Address	Dr. M.V. Judy, Professor and Head, Department of Computer Applications, Cochin University of Science and Technology.
Inauguration & Inaugural Address	Dr. Sanjay Madria, Curators' Distinguished Professor of Computer Science, Missouri University of Science and Technology, USA
Guest of Honor Address	Smt. G. Poonguzhali IPS, AIG(Assistant Inspector General), Coastal Police, Kerala Police, Government of Kerala.
Felicitation	Dr. M. Kailasnath, Dean, Faculty of Technology, Professor, International School of Photonics, Cochin University of Science and Technology.
Vote of Thanks	Dr. Rafidha Rehiman K. A., Assistant Professor, Department of Computer Applications, Cochin University of Science and Technology.

**Cyber Security Research LAB, Department of Computer Applications
Cochin University of Science and Technology**

Basic Guardians for Cyber Vigilance (Workshop for law enforcement officers)

8-1-2024	<p>Session 1: (2 hours) Introduction to Malware - What is malware?, malware propagation, Infection Mechanism.Malware Analysis-Overview of malware analysis,Types and characteristics of malware,Goals and benefits of malware analysis,Legal and ethical considerations</p>	<p>Sri.Shyam Sundar Ramaswami, Sr. Staff Cyber Security Architect Cyber Labs, GE HealthCare.</p>
	<p>Session 2(3 Hours) : Static Analysis Techniques, Hands-on exercises using static analysis tools - File format analysis (PE & ELF),Strings and text analysis.Disassembling and decompiling,Identifying and interpreting indicators of compromise (IOCs)</p>	
9-1-2024	<p>Session 3: (2 hours) Malware Reverse Engineering - Introduction to Packers, Obfuscator and Packing tools, Analyzing packers and obfuscation techniques. Identifying and understanding anti-analysis mechanisms - Extracting and analyzing malicious code- Hands-on exercises in reverse engineering</p>	<p>Sri.Shyam Sundar Ramaswami, Sr. Staff Cyber Security Architect Cyber Labs, GE HealthCare.</p>
	<p>Session 4: (3 hours) Document malware analysis - hands on</p>	
10-1-2024	<p>Session 5: (2 hours) Introduction to Network Traffic Analysis,Overview of network traffic analysis, Importance of network traffic analysis in cybersecurity. Zeek tool and its features - Setting up the lab environment</p>	<p>Sri. Swapneel Patnekar. Founder & CEO of Shreshta IT, Bangalore</p>
	<p>Session 6: (3 hours) (Prerequisite Basics of Network Protocols - TCP/IP, HTTP, DNS, etc.) Analyzing packet headers and payloads, Identifying normal and abnormal network behavior, Capturing and analyzing network traffic using Zeek</p>	
11-1-2024	<p>Session 7: (2 hours) Analyzing Network Traffic Patterns using Seek - Identifying patterns and anomalies in network traffic,Analyzing traffic volume, bandwidth, and latency, Detecting network scanning and reconnaissance activities</p>	<p>Sri. Swapneel Patnekar Founder & CEO of Shreshta IT, Bangalore</p>
	<p>Session 8: (3 hours) Analyzing network traffic for signs of intrusions, Setting up and analyzing traffic for intrusion detection, Analyzing network traffic for malware activity ,Extracting and analyzing malicious payloads, Identifying and analyzing malware in network traffic using Seek Extracting intelligence from Darknet, Darkweb, Hacker Forum,</p>	

12-1-2024	Session 9: (2 hours) Cuckoo Sandbox - Overview , Key features and capabilities Use cases for malware and traffic analysis, Virtualization technologies (e.g., VirtualBox, VMware) Setting up the Cuckoo Sandbox Environment , Hands-on exercise: Setting up a basic Cuckoo Sandbox environment. Malware scanning through VirusTotal and AVClass-2.	Ms.Asmitha and Ms.Dincy Department of Computer Applications, CUSAT
	Session 10: (4 hours) Malware Analysis with Cuckoo Sandbox, workflow with Cuckoo Sandbox, Submitting samples for analysis, Analyzing behavioral reports and indicators of compromise (IOCs) Extracting and analyzing malicious artifacts, Network monitoring and analysis in Cuckoo Sandbox, Identifying malicious network behavior and communication patterns	Dr.Vinod P, Professor, Department of Computer Applications, CUSAT
13-1-2024	Session 11: (2 hours) Memory analysis, overview,memory acquisition techniques,memory dump analysis	Dr. Parag Rughani, Associate Professor, National Forensics Science University, Gujarat.
	Session 12: (3 hours) Live memory acquisition, Analysis of memory dump using volatility,Analysis of memory artifacts.quick analysis	Dr. Parag Rughani, Associate Professor, National Forensics Science University, Gujarat.

Budget

Resource person	50,000
Travel	34,,000
Accomodation	24,000
Local hospitality (Resource Person)	5,000
Food(Tea, Lunch) for 6 days -	30,000
LAB, Machine charges	25,000
Cleaning staff and waste disposal	3,000
Technical Staff- 1 Nos X 6 days	7,200
Total	1,78,200

Event Details

Workshop for law enforcement officers on the topic “**Basic Guardians for Cyber Vigilance**” for Kerala Police organized by Cyber Intelligence Research Laboratory of Department of Computer Applications of Cochin University of Science and Technology. The digital landscape has experienced remarkable growth, Cybersecurity skills are now highly sought-after and well-compensated, especially as society shifts towards a digital operational framework. With this evolution, individuals involved in general public safety, including law enforcement officers, play a crucial role. The increased risk of cyber violations and cyberattacks poses a significant threat to public safety, making proficiency in cybersecurity an essential skill in safeguarding communities and organizational assets.

The main motive of this police personnel training course is to encounter the participants with a well-balanced curriculum that seamlessly combines malware analysis, network traffic analysis and Memory forensics with hands-on experience facilitated through various tools. This initiative, tailored for the police department, aims to enhance their cyber awareness and preparedness.

This was inaugurated by **Dr. Sanjay Madria, Curators' Distinguished Professor of Computer Science, Missouri University of Science and Technology, USA**, who emphasized the importance of the program and welcomed the officials enthusiastically. These programs help in spreading the knowledge to the police officials from across the state and thus to reflect in their job. During the felicitation speech **Dr. M. Kailasnath, Dean, Faculty of Technology, Professor, International School of Photonics, CUSAT** said that, During the presidential address **head of the department (Prof) Dr. M. V. Judy** conveyed that. **Smt. G. Poonguzhali IPS, AIG(Assistant Inspector General), Coastal Police, Kerala Police, Government of Kerala**, who was the guest of honour.

In the Vote of thanks **Dr. Rafidha Rehiman K. A, Assistant Professor ,Department of Computer Applications, CUSAT** coordinator of the workshop thanked all the staff , students, research scholars of the department as well as P.R.O of the university.

Meeting - 6 Days Workshop at Cochin University of Science and Technology.

External Inbox x



Web administrator Kerala Police <webadminsrb.pol@kerala.gov.in>

Sat, Jan 6, 6:35 PM



to dcachod, me, sabumk, pvinod21, vinod.p, vks, Hari, Dara

Sir,

Sub: Meeting - 6 Days Workshop at Cochin University of Science and Technology.

Ref: No. 01-14484/2023/SCRB, Dated 03/01/2024 of ADGP Cyber Operations.

Based on the reference cited, an online meeting has been scheduled on 07/01/2024 at 02:30 PM to discuss the coordination and arrangements for the upcoming workshop on "Basic Guardians for Cyber Vigilance" at Cochin University of Science and Technology, scheduled from 08/01/2024 to 13/01/2024.

Agenda:

1. Overview of the Cyber Security Workshop
 - a) Purpose and Objectives.
 - b) Expected Outcomes.
2. Workshop Schedule and Agenda
 - a) Detailed discussion on the Daily schedule
 - b) Review of workshop agenda.
3. Open floor for additional points or concerns.

Nominated Officers:

1. Shri. Harisankar IPS
Superintendent of Police, Cyber Operations.
2. Dr.M. V. Judy,
Professor and Head, Department of Computer Applications - CUSAT
3. Dr. Sabu M.K., Professor - CUSAT
4. Dr.Vinod P., Professor- CUSAT
5. Dr. Vishnukumar S, Associate Professor - CUSAT
6. Dr.Rafidha Rehiman K.A., Assistant Professor - CUSAT
7. Shri. Ramu A.K, Section Officer - CUSAT
8. All trainees for the scheduled workshop.

Meeting Link: <https://meet.google.com/pvn-amvp-ega>

Date and time: 07/01/2024 at 02:30 PM

Your active participation in the meeting is crucial to ensure a smooth and successful coordination of the workshop. Please come prepared to discuss and make decisions on the outlined agenda items.

If you have any additional points to include in the agenda, kindly inform me before the meeting. Your cooperation is highly appreciated.

Thank you and I look forward to our collaborative efforts in making this workshop a success.

With Regards

Web Administrator, [CYBER OPERATIONS HQ](#)

9895258496



Judy Nair <judy.nair@gmail.com>

to Web, dcahod, me, SABU, Vinod, P, Vishnukumar, Hari, Dara ▾

Jan 6, 2024, 11:40 PM



Sir,

Thank you accepting the proposal and for the invitation for tomorrow's meeting.

I am writing this mail to inform you the following matters regarding the workshop to be conducted.

Due to a prior medical appointment, I will not be able to attend the meeting tomorrow. However, as decided by the department council at the meeting conducted and recorded, Dr. Rafidha Rehiman, Assistant Professor, Department of Computer Applications, is appointed as the coordinator of the workshop and she is entrusted the responsibility for the smooth conductance of the workshop.

Few clarifications are required regarding the financial implications from the university side and Shri. Ramu A.K, Section Officer will discuss these matters during the meeting tomorrow.

Also requesting your high office to kindly record the minutes of the meeting conducted tomorrow and send us an official communication of the same to be documented and submitted to the higher officials of the university.

Hoping to have a fruitful collaboration and an effective knowledge sharing during the workshop.

Best Regards,

Dr. M. V. Judy,
Professor and Head,
Department of Computer Applications,
Cochin University of Science and Technology (CUSAT),
Cochin - 682022.

Event Photographs



