	MALLA REDDY COLLEGE OF ENGINEERING (Approved by AICTE-New Delhi, Affiliated to JNTUH-Hyderabad) Recognised under Section 2(f) & 12(B) of the UGC Act 1956, An ISO 9001:2015 Certified Institution. Maisammaguda, Dhulapally, post via Kompally, Secunderabad - 500100	

Details of the Event

Name of the Program	:	From Zero to Cyber Hero, Hands-on-Training in Modern Cybersecurity
Name of the Convenor	:	Dr. M. Ashok, Principal, MRCE
Name of the Co-Convenor	:	Dr. J. Vignesh, HoD, AIML
Name of the Coordinator		Ms.Kanakaprabha.S, AP/AIML
Resource Name	:	Mr. Mandava Charan Teja Mr. B. Stanes Lovelene,
Date & Time of Event	:	30/09/2024 to 03/10/2024 & 9:00 AM to 4:00 PM
Venue of the Event	:	CSE AI& ML Lab

Overview of the Event

The recent cybersecurity training program, held from **September 30 to October 3, 2024**, aimed to bolster participants' awareness and practical skills in cybersecurity. The training covered essential topics crucial for understanding the fundamental principles of cybersecurity, focusing on basic Linux systems and tools such as **Wireshark, DOS, TCP,** and **ARP**. Participants engaged in hands-on experience with **Ubuntu** and **Kali Linux**, gaining insights into vulnerabilities and effective cybersecurity practices. The training provided a comprehensive introduction to the installation and operation of these systems, along with an in-depth analysis of network packet capture and analysis using Wireshark.

Day-by-Day Breakdown
Day 1: Introduction to Basic Linux Systems
- **Installation of Ubuntu and Kali Linux:**
  - Overview of Linux distributions and their significance in cybersecurity.
  - Step-by-step guidance on installing Ubuntu and Kali Linux.
  - Introduction to the user interface and basic commands.
- **Linux Command Line Basics:**
  - Familiarization with the Linux command line.
  - Essential commands for navigating the file system.
  - Understanding file permissions and user management.
Day 2: Networking Fundamentals and Tools
- **Understanding Networking Concepts:**
  - Introduction to basic networking concepts: DOS, TCP, and ARP.
  - Overview of how networks communicate and the role of protocols.
- **Wireshark Packet Analysis:**

- o   Hands-on session on installing and configuring Wireshark.
- o   Techniques for capturing packets and analyzing traffic between two networks.
- o   Discussion on interpreting captured data and identifying vulnerabilities.

Day 3: Practical Applications and Vulnerability Assessment
- **Vulnerability Analysis with Kali Linux:**
  - o   Overview of penetration testing tools available in Kali Linux.
  - o   Hands-on exercises in vulnerability scanning and assessment.
- **Real-world Scenarios and Best Practices:**
  - o   Discussion on real-world cybersecurity threats and case studies.
  - o   Best practices for securing networks and systems.
  - o   Final Q&A session to clarify concepts and share experiences.

Conclusion

The training concluded with participants expressing a heightened awareness of cybersecurity challenges and the skills necessary to navigate them. The hands-on experience with Ubuntu and Kali Linux, combined with practical exercises in packet analysis using Wireshark, equipped attendees with foundational knowledge and practical skills that are essential in today's cybersecurity landscape. Overall, the event fostered a collaborative learning environment, enabling participants to share insights and strategies for improving their cybersecurity posture.

SAMPLE PHOTOS DURING THE SESSION
SESSION HANDLED PHOTOS BY RESOURCE PERSON

On Day One of the cybersecurity training, the resource person provides an engaging explanation of basic Linux systems and their importance in cybersecurity. Participants attentively absorb the foundational knowledge, setting the stage for hands-on learning throughout the program.

A resource person demonstrates cybersecurity code on a mobile device, highlighting the practical applications of secure coding practices. Participants engage actively, gaining insights into protecting their systems from vulnerabilities.

Participants receive their certificates during the *From Zero to Cyber Hero: Hands-on Training in Modern Cybersecurity* event, marking their successful completion of a comprehensive training program. The session provided valuable insights into the latest cybersecurity techniques, helping participants enhance their skills in protecting digital infrastructures. The certificate distribution ceremony recognized their dedication to mastering crucial cybersecurity concepts, empowering them to contribute effectively to securing modern systems and networks.

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