



# Hope Foundation's International Institute of Information Technology, Pune

## Department of Computer Engineering

22<sup>nd</sup> October 2020

**Name of the Event:** Guest Lecture on "Fundamental Concepts of Computer Network"

**Name of Event Coordinator:** Prof. Ravindra P. Joshi

**Date of the Event:** 19<sup>th</sup> October 2020

**Resource Person:** Mr. Nilesh Deshmukh, Tech lead NextBridge Solutions

**Number of Participants** - 52

**Topic** - Fundamental Concepts of Computer Network

**Objectives:**

1. To provide latest knowledge in networking as required by industries.
2. To demonstrate latest packet capturing tools used in networking
3. To analyze packet captured information for troubleshooting and attacks

**Outcomes:** Students will be able to:

1. Get latest knowledge in the networking field as required by industry.
2. Understand as to how network packets can be captured and analyzed using various modern tools.

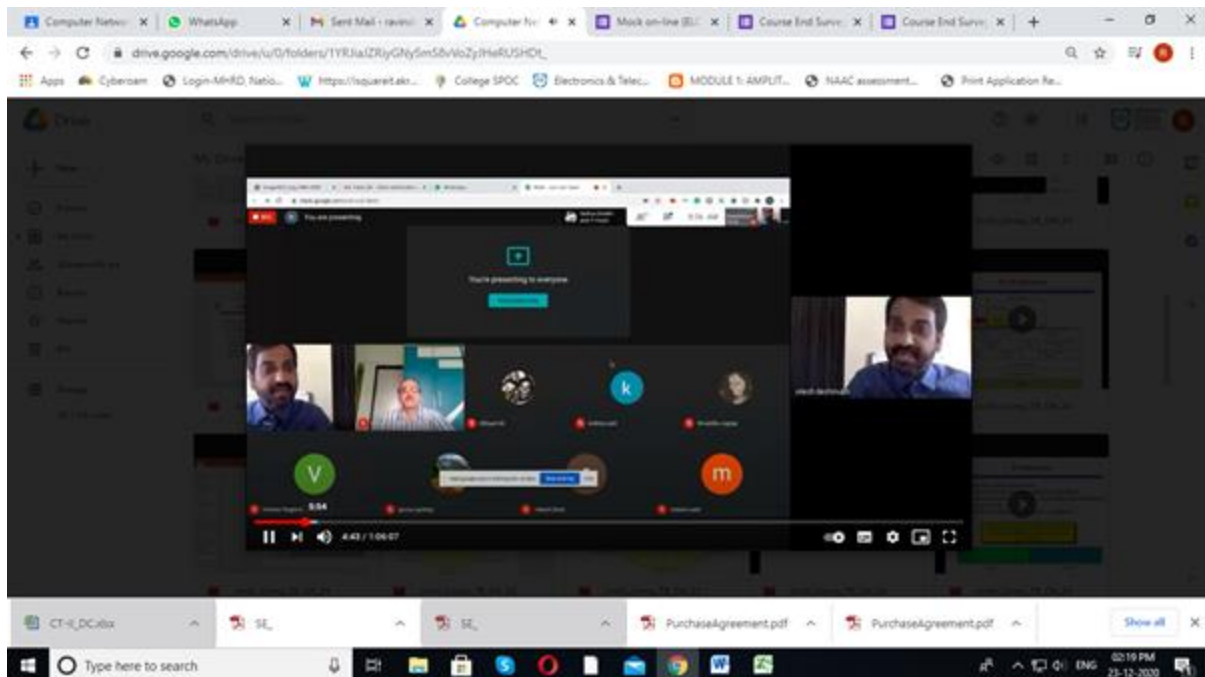
3. Analyze packet header information and troubleshoot network problems such as congestion, security threats, cyber-attacks etc.

### Summary of the Event:

Computer networks are very much essential these days as every organization and their computers are connected by the Internet. Even millions of users use computers/ laptops from their home to send emails, access world wide web to search information, use mobiles for uploading/downloading data, on-line learning etc. Hence it is necessary that students should know the basics of computer networks such as OSI and TCP/IP architecture, IP addressing, routing and various protocols used in networking.

Since all the information is readily available on the Internet, there is a threat of cyber-attacks, hacking of data which the students should be aware of. Students should know about the protection mechanisms such as firewalls and security protocols which block the attackers.

### Photo graphs of the event:



Mr. Nilesh Deshmukh who is Tech lead at NextBridge Solutions is expert in this field. He has experience of more than 15 years in the field of IP networking, network security, Linux server administration and e-commerce. He explained the students fundamentals of computer organization, operating system architecture and its application to TCP/IP networking, concepts of file handling, socket programming etc. in networking.

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Mr. Nilesh Deshmukh also explained security related challenges in networking and demonstrated how to configure firewalls to block or allow certain traffic selectively in an organization based on the security policies. Features of Access Control List (ACL) and extended Access Control List were also demonstrated. Overall, students liked the Guest lecture and asked questions freely to the expert. It was beneficial to the students to gain additional knowledge of networking which is not covered in the regular syllabus.

Prepared By: Prof. Ravindra Joshi

Date: 22<sup>nd</sup> October 2020