



Hope Foundation's  
**International Institute of Information Technology (I²IT)**  
Hinjawadi, Pune- 411057

**Department of Information Technology**

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**Activity Report**

**Guest Lecture**

**Academic Year:**2020-21

**Semester:** I

**Name of Event:** Guest Lecture

**Date of Conduction:** 20<sup>th</sup>October 2020

**Time:** 9:00 AM to 10:30 AM

**Targeted Audience:** SE IT

**Number of Participants:** 54

**Venue:** Online mode

**Topic:** “Computer Network Fundamentals”

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

**Coordinator:** Prof.Ravindra Joshi

**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 get latest knowledge in the networking field as required by industry. They will have understanding as to how network packets can be captured and analyzed using various modern tools. Packet header information can be obtained and analyzed to troubleshoot network problems such as congestion, security threats, cyber-attacks etc.

**Activity Description:**

Computer networks are very much essential these days as every organization and their computers are connected by 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 basics of computer networks such as OSI and TCP/IP architecture, IP addressing, routing and various protocols used in networking.

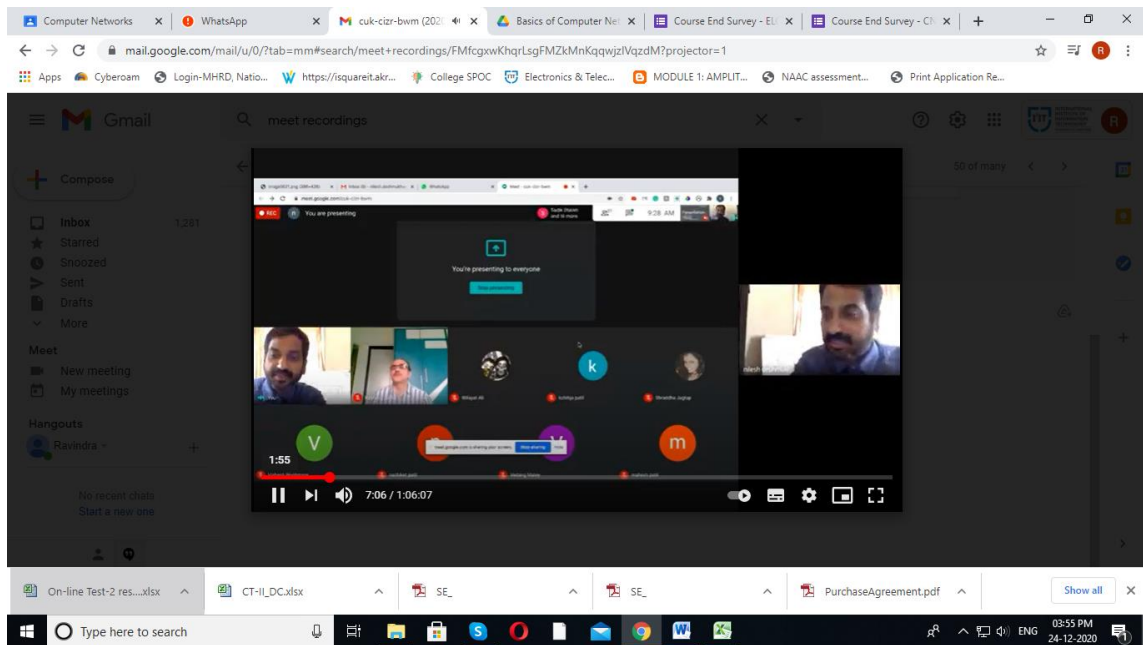
Since all the information is readily available in the Internet, there is a threat of cyber-attacks, hacking of data which the students should be aware of. Students should know about the protection mechanisms such as firewalls and security protocols which block the attackers.

Mr. NileshDeshmukh 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.

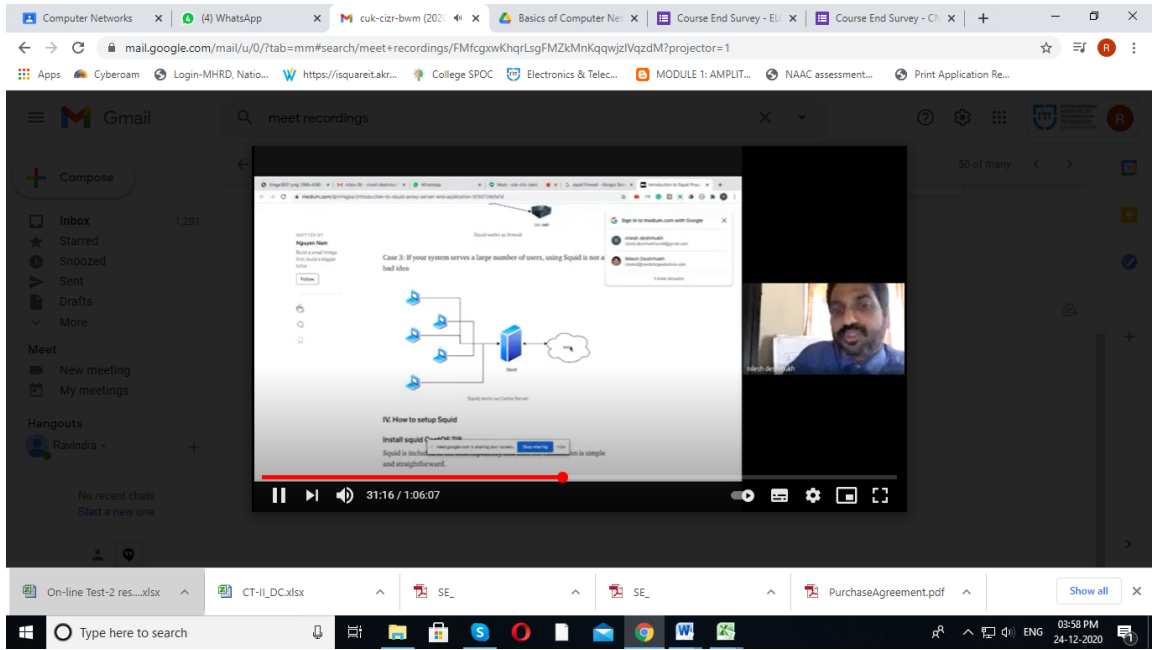
Mr. NileshDeshmukh also explained about security related challenges in networking and demonstrated how to configure firewalls to block or allow certain

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.

### Activity Photos:



Mr. NileshDeshmukhexplaining about network fundamentals



Mr.NileshDeshmukh explaining various network firewall architectures