



**Hope Foundation's
International Institute of Information Technology,
Hinjawadi, Pune – 411057**

Activity Report

Guest Lecture

Academic Year: 2020 - 2021

Name of Event:A Guest Lecture

Topic:“Applications of Graph theory to Network Analysis”

Date & Time of Conduction:24/12/2020, 2.00PM to 3.00PM

Venue:International Institute of Information Technology, Pune

Coordinator:Prof.Mandar V. Datar

Number of Participants:66

Activity Description in Nutshell:The department of Information Technology has organized a guest lecture on 24thDecember 2020 at 2.00 pm. The subject for lecture is “Applications of Graph theory to Network Analysis”, in the context of the course Discrete Mathematics.

The objective of this session is to aware the students about the practical importance of graph theory, and applications of graph theory in the network analysis specifically in the social networks.

Due to the Covid-19 pandemic situation, the Guest Lecture was arranged in online mode (by using google meet platform). The link was shared with all the students through e-mail and whatsapp.

The resource person for this lecture was Mr. Tushar Kate, who is working in Dell Technologies. Prof. Manadr Datar has introduced the guest. Mr. Kate is having mathematics background and has experience in R& D department. His areas of interest are optimization, distributed systems, etc.

During his lecture he explained various concepts of graph theory with practical examples. He emphasizes that how the social media giants like facebook, twitter etc. are using graphs for data analysis, how Netflix analyse data and recommend the films to user.

The question – answer session was kept at the end of lecture. Students have asked doubts and Mr. Kate has answered all of them in detail. Prof. Mandar Datar proposed a vote of thanks at the end.

Event Photos:

The image displays two screenshots from a Google Meet session. The top screenshot shows the 'Agenda' slide, which lists the following topics:

- Graph and its type
- Tree Data structure
- Graph Vs Tree
- Graph Traversal
- Applications of Graph
- Q & A


The bottom screenshot shows the 'What is Graph' slide. It defines a graph as an order pair $G = (V, E)$, where V is the set of vertices (Nodes or Points) and E is the set of edges (links or lines). The slide also provides the following sets:

- $V = \{1, 2, 3, 4\}$
- $E = \{\{1,2\}, \{1,3\}, \{2,3\}, \{1,4\}\}$

A diagram of a graph is shown with four vertices labeled 1, 2, 3, and 4. Vertex 1 is at the top left, 2 at the top right, 3 at the bottom right, and 4 at the bottom left. Edges connect vertices (1,2), (1,3), (2,3), and (1,4).

meet.google.com/vao-ymwb-gwg?authuser=1

REC tushar kate is presenting radhika patil and 37 more 14:13



facebook

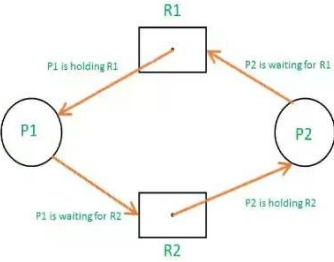
Low Disk Space
You are running out of disk space on HP_RECOVERY (D:).
Click here to see if you can free space on this drive.

14:13 24-12-2020

meet.google.com/vao-ymwb-gwg?authuser=1

REC tushar kate is presenting Purva Jadhav and 41 more 14:23

Operating System usage



SINGLE INSTANCE RESOURCE TYPE WITH DEADLOCK

ashutosh jadhav Yashashree Mahale
pratik mandore Mandar Deshmukh
damayanti chavan tushar kate
wasim patwari shrutijadhav

