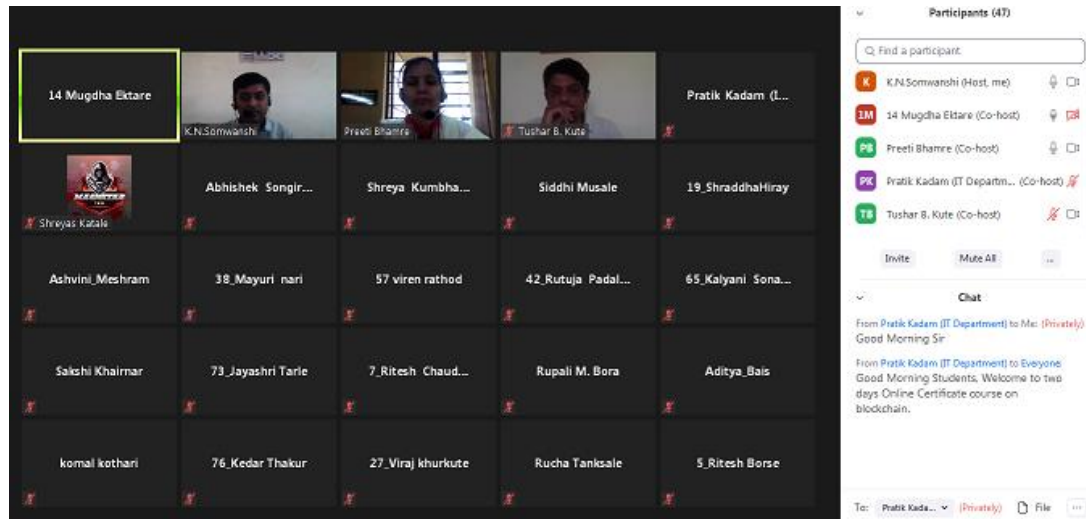


Activity Report (news bulletin) of IT Dept. for December 2020

1. Expert Lecture/Seminar/Courses Organized by Department during December 2020:

The Dept. of Information Technology has taken up an initiative for Open Source Software awareness. To expand awareness about GitHub usage a video is prepared which explains various features of GitHub. It is uploaded on <https://opensourceinitiativeitkwwieer.wordpress.com/december-2020/> as well.

Dept. of Information Technology had organized an online Certificate Course on “Block-Chain” by Mr.Tushar Kute, Data Scientist and Researcher in MITU Research, Pune. Students of TE IT attended the course on 23rd & 24th Dec 2020.



Online Certificate Course on “Block-Chain”

2. Papers Presented by Students during December 2020:

Title of Paper: Low Light Image Enhancement for Dark Images

Name of Journal: International Journal of Data Science and Analysis

Volume and issue No: Vol. 6, No. 4, 2020

ISSN: 2575-1883

Names of Authors: Akshay Patil BE(IT), Tejas Chaudhari, Ketan Deo BE(IT), Kalpesh Sonawane BE(IT), Rupali Bora

Abstract-

Image plays an important role in this present technological world and leads to progress in multimedia communication, various research fields related to image processing, etc. Low-light image enhancement specifically addresses images captured in low-light conditions such as nighttime, where the common goal is to brighten and improve the contrast of the image for better visual quality and show details that are hidden in darkness. Research fields that may assist us in lowlight environments, such as object detection, has glossed over this aspect even though breakthroughs-after breakthroughs had been achieved in recent years, most noticeably from the lack of low-light data (less than 2% of the total images) in successful public benchmark datasets such as PASCAL VOC, ImageNet, and Microsoft COCO. To improve image quality, these low-light images are needed to be enhanced. For this purpose, an exclusively dark dataset comprising of images captured in visible light only is proposed. Further, dehazing technique is used for haze removal, histogram equalization (HE) technique is used for contrast enhancement and denoising technique is used for noise removal. Experimental results demonstrate that the proposed method achieves a good performance in low light image enhancement and outperforms state-of-the-art ones in terms of contrast enhancement and noise reduction.

Keywords: Dataset, Dehazing, Denoising, Enhancement, Histogram Equalization, Low-light

3. Industrial Training/Workshop done by Staff during December 2020:

Prof. Pratik R. Kadam completed the four Coursera Certifications on “Google Cloud Platform Fundamentals: Core Infrastructure”, “Essential Google Cloud Infrastructure: Foudation”, “Elastic Google Cloud Infrastructure: Scaling and Automation” and “Essential Google Cloud Infrastructure:Core Services” offered by Google Cloud in December 2020.

4. Training and Placement Cell during December 2020:

Sr. No	Name of the Company	Name of Students
1	Infosys Limited, Pune	Gaurav Katkar
2	Tata Consultancy Services(TCS), Pune	Dhanashree Bharuka
3		Guarav Katkar
4		Gayatri Sagar
5		Hetvi Somaiya
6		Kapil Asodekar
7		Nikhil Paturkar
8		Pranav Bakare
9		Sahaj Chaudhary
10		Saloni Wani
11		Shreya Singh
12		Vaibhav Shah
13		Abdulhussain Kanchwala

H.O.D., IT