

Report
Faculty Development Program
Department of Information, Communication & Technology

Title : AI,ML and Network security
Date : 03-07 May 2022
No. of Participants : 40
Convener : Ms. Shimpy Goyal
Mode : ONLINE

OBJECTIVES :

The objective of program is to recognize

- important application of AI in different sector.
- Machine learning techniques for detection and prevention of security attacks.
- Deep learning methods for fraud detections.
- various free /open-source tool in AI & cyber security for research in computer.

The one-week Faculty Development Programme on artificial intelligence, machine learning and network security was organised by Tecnia Institute of Advance Studies. The session was started with an opening remark by Dr. Deepak Sonker HOD of BCA Department followed by the welcome speech by Ms. Shimpy Goyal (events' convenor).

DAY 1

The faculty development programme started on 04th May 2022 at 04:00pm with introduction speech. There were 30 external participants from different colleges and institutes and around 10 participants from TIAS, Rohini.

Opening remarks for the FDP were given by Dr. Deepak Sonker(HOD of BCA Department), which was followed by an introduction to the programme by the convener of the event Ms. Shimpy Goyal. She also gave a glimpse of the activities going-on in the college premises.

TECNIA
INSTITUTE OF ADVANCED STUDIES
NAAC ACCREDITED GRADE "A" INSTITUTE
DELHI INDIA

Department of Computer Applications

Faculty Development Program(FDP)
ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, AND NETWORK SECURITY
RESOURCE PERSONS

Dr. Ajay Kumar
Director
TIAS, New Delhi

Dr. Manjiri A. Rajanikar
Asst. Professor, Dept. of Comp. Engg.
PCCE
Pune, India

Dr. Jaishri M Waghmare,
Assoc. Professor & head, Dept. of CSE,
SGGS INST E&T
Nanded

Dr. Preety Singh
Assoc. Professor
ADGITM
New Delhi, India

Er. Aman Dureja
Asst. Professor, Department of IT
BPT
New Delhi, India

Dr. M.N. Jha
Dean, Academics
TIAS, New Delhi

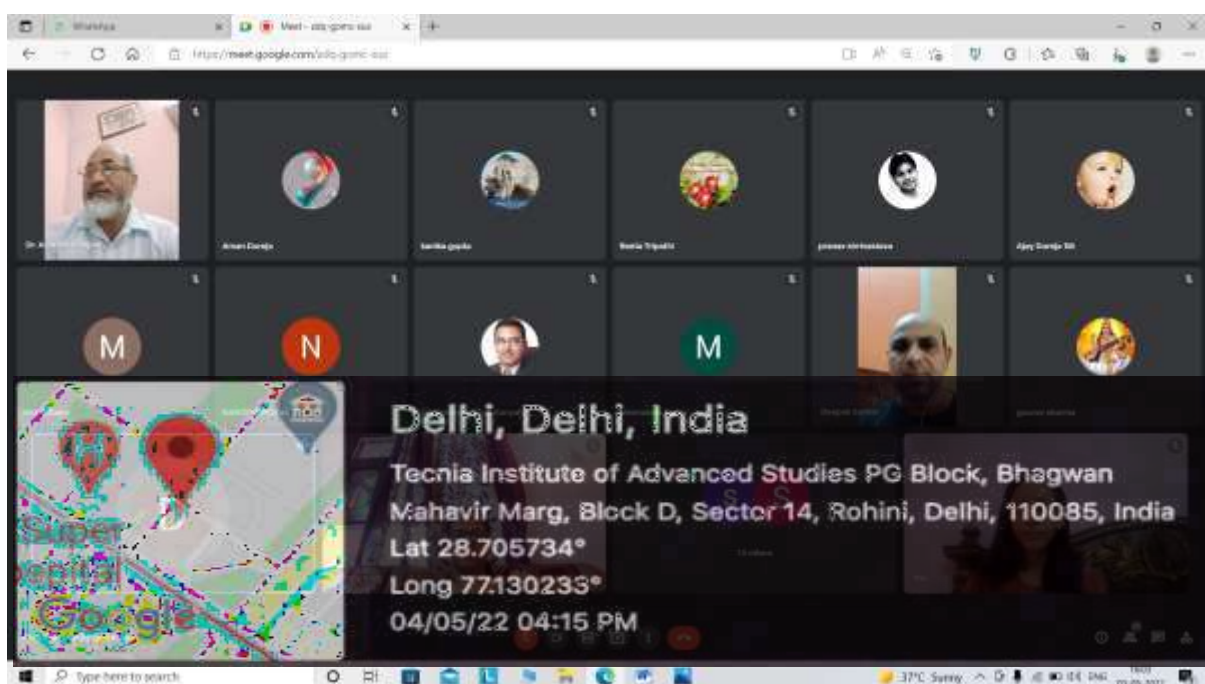
Dr. Deepak Sonkar
HOD/BCA
TIAS, New Delhi

Ms. Shimpy Goyal
Convener, Assistant Professor,
TIAS, New Delhi

Date: 3rd May 2022 to 7th May 2022.
Timing: IST 04:00 PM Onwards

Join Us: <https://bit.ly/38Gx510>

The programme progressed with the inaugural lecture at 04:130 pm by Dr. Preety Singh in which she mainly focussed on the importance of Machine learning in healthcare sector. She introduced the benefits with the help of the mechanism used and an example. She explained briefly what all machine learning can do for providing a better health care structure. She told about various approaches to identify and predict chronic diseasing using machine learning and also told this steps that helps in identifying the diseases. She then explained the performance evaluation with the help of few formulas. The session ended with a question answer round and a thank you note by the convener of the event.



Windows | Meet - [meet.google.com/siq-gzmc-eat](#)

[https://meet.google.com/siq-gzmc-eat](#)

Dr. Priya Dhanraj is presenting

Machine Learning for the Healthcare

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 Lat 28.705734°
 Long 77.130233°
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Dr. Priya Dhanraj, Dr. Anil Kumar, Reshma, Cassy Jadhav, Anshu Sharma, Rishi Sharma, Divya Choudhary, Anshu Sharma, Dr. Anshu Sharma, Dr. Anshu Sharma, Dr. Anshu Sharma, Dr. Anshu Sharma

37°C Sunny 04:15 04/05/22

Windows | Meet - [meet.google.com/siq-gzmc-eat](#)

[https://meet.google.com/siq-gzmc-eat](#)

Dr. Priya Dhanraj is presenting

Applying Machine Learning to Healthcare

- Healthcare sector is being transformed by the ability to connect streams of information
- Machine learning provides a way to automatically find patterns in data
- Enables healthcare professionals to move to personalized care and precision medicine

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Dr. Priyanka Sharma is presenting

Improve accuracy of diagnosis, prognosis, and risk prediction.

Optimize hospital processes such as resource allocation and patient flow.

Identify patient subgroups for personalized and precision medicine.

Reduce medication errors and adverse events.

Discover new medical knowledge (clinical guidelines, best practices).

What can machine learning

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Dr. Priyanka Sharma | Anil Kumar | Resonance Class of Year... | Shashi Chaudhary | Karika Gupta | Anurag Singh | Priyanka Sharma | Anurag Singh | Dr. Manoj Kumar | Anurag Singh | Anurag Singh | Dr. Manoj Kumar

type here to search | 36°C 401341 | 04/05/2022 04:30 PM

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Dr. Priyanka Sharma is presenting

Graph showing a linear relationship between two variables.

Text: The relationship between two variables is described by the equation $y = 2x + 1$. The graph shows a straight line passing through the origin (0,0) and the point (1,2).

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Dr. Priyanka Sharma | Anurag Singh | Resonance Class of Year... | Anurag Singh | Karika Gupta | Anurag Singh | Priyanka Sharma | Anurag Singh | Dr. Manoj Kumar | Anurag Singh | Anurag Singh | Dr. Manoj Kumar

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Meeting interface showing a presentation slide titled "How Many Farmers Use IoT?". The slide content includes:

- Smart farming with IoT is a growing business nowadays.
- The number of farmers using IoT is increasing and it is projected by the agriculture market in the US that annual growth rate of 10.5% is expected from 2019 to 2025.

Below the slide, a map shows the location: **Delhi, Deih, India**. The address is: **Tecnia Institute of Advanced Studies PG Block, Bhagwan Mahavir Marg, Block D, Sector 14, Rohini, Delhi, 110085, India**. The coordinates are: **Lat 28.705734°** and **Long 77.130233°**. The date and time are **05/05/22 02:45 PM**.

The meeting interface also displays a grid of participants on the right side, including:

- Shravya Parag
- App Dandia 94
- Dr. Priyanka Sharma
- Shravya Parag
- Priyanka Sharma
- Ashwini Kumar
- Shravya Parag
- Dr. Ashwini Kumar
- Sara Sharma
- Shravya Parag
- Lakshya Sharma
- Shravya Parag
- Shravya Parag
- Shravya Parag

The bottom status bar shows the system tray with the temperature at 37°C, battery level, and the date 05/05/2022.

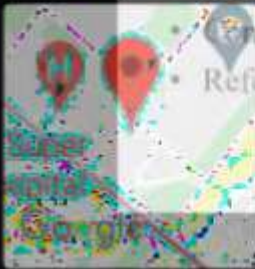
Day 3

The day 3 of faculty development program started with a warm welcome of all the participants by the student coordinator and the convener of the event. The session started with a brief introduction of face classification and recognition using ml by Dr. Manjiri A. Ranjanikar .

She gave the overview of Facebook nation system and its literature survey. She briefly explains about biometrics and how law enforcement is used for facial recognition. She gave an example of us airports using facial recognition and what all challenges are faced during the process. She then explains the principal component analysis and linear discriminant analysis. She also gave an explanation of classification of plastic surgery, its types and displayed its statistics report. At the end of the session she told the steps to design a face image descriptive and explain its future use. The programme ended a thankyou speech by Ms. Shimpy Goyal.

Contents,

- Introduction
- Background,
- Motivation:
- Overview of Face Recognition systems
- Problem Definition
- Literature Survey



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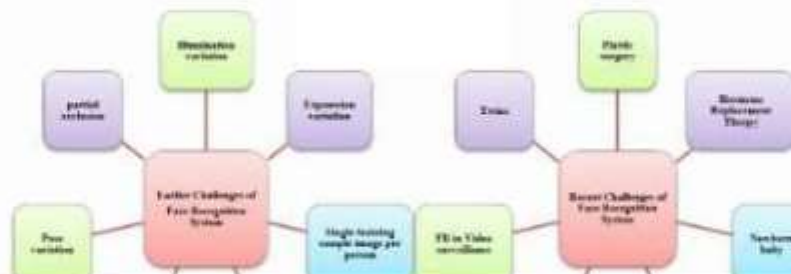
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Challenges



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Day 4

The day 4 session started with introduction by student coordinator followed by a short welcome speech by the head of department Dr. Deepak Sonkar. The session started with brief introduction on network security and various type of package by the resource person, Mr Aman Dureja. He explained the pros and cons of network security with the help of demonstration. He then explained the transfer of package through one IP address to another in a logical form. He briefly described and showcase the various IP numbers as well as the coding used behind transferring of packets. Later in the session Mr. Aman Dureja cleared few doubts of the participants and the session ended with a thank you note by Ms. Shimpy Goyal.

Network 3

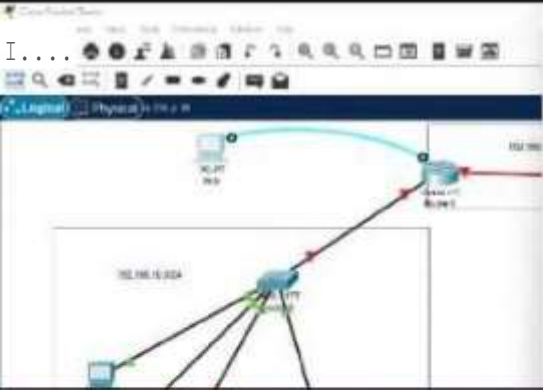
DNS settings

DNS server addresses Automatic (DHCP)

Live local IPv4 address: 192.168.1.101
Live local IPv6 address: fe80::208:16ff:fe01:1010
IPv4 address: 192.168.1.101
IPv6 address: fe80::208:16ff:fe01:1010



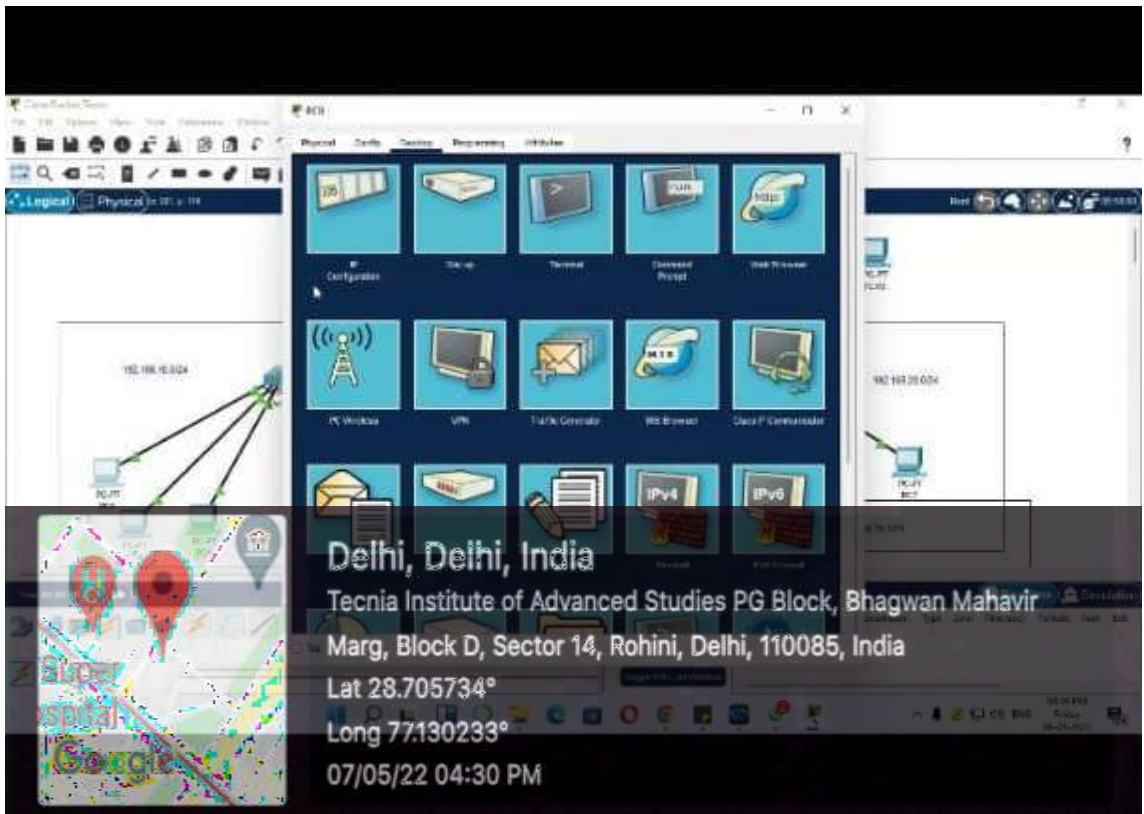
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IP: 192.168.1.101  
IP: 192.168.1.102  
IP: 192.168.1.103  
IP: 192.168.1.104  
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IP: 192.168.1.107  
IP: 192.168.1.108  
IP: 192.168.1.109  
IP: 192.168.1.110  
IP: 192.168.1.111  
IP: 192.168.1.112  
IP: 192.168.1.113  
IP: 192.168.1.114  
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Day 5

The events started with a welcoming speech by the student coordinator followed by the introduction on the topic by Dr. Jaishri Mahesh Waghmare. She introduced about fuzzy min max neural network. She explained its pros and cons and classifications. She gave a brief about the fuzzy set. A question answer round was held where the participants clear their doubts from the resource person. The FDP ended with a thank you speech by Dr. Deepak Sonker and the convener of the event Ms. Shimpy Goyal.

MIN MAX NEURAL NETWORK - CLASSIFICATION

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
SUCSIF&T VIGNANPURI NANDED

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← **zdq-gomc-sux** ▶ ↻ 🔊

Let X be a space of points (objects) $x \in X$
 A fuzzy set (class) A is defined as a function which associates with each element x a real number in interval $[0,1]$.

The fuzzy set A is defined as the ordered pair

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 A fuzzy set (class) A is defined as a function which associates with each element x a real number in interval $[0,1]$.

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LEARNING OUTCOME:

The participants have learnt about

- important application of AI in different sector.
- Machine learning techniques for detection and prevention of security attacks.
- Deep learning methods for fraud detections.
- various free /open-source tool in AI & cyber security.