

ANNUAL MAGAZINE
INSTITUTE OF ENGINEERING & MANAGEMENT
HRDC

INTERNATIONAL Event

**AICTE - UKIERI Further Education Leadership and Management Training Programme
(Workshop 1)**

Organized by

Institute of Engineering & Management, Kolkata, West Bengal, India

in Collaboration with

Dudley College (UK) and British Council

Date: **November 23 to November 26, 2021**

A brainchild of AICTE to encourage academic excellence in technical education, the noteworthy UK-India Education and Research Initiative (UKIERI) started in April 2006 with the aim of enhancing educational linkages between India and the UK, a strategic priority for both the countries. This programme was the first of a series of programmes for the list of AICTE selected academic leaders for different regions through 8 different parallel workshops being conducted all across the country by 40 Master Trainers from across India, selected by AICTE with the vision to spread the Leadership Trainings throughout the country. We were proud to host the programme in our region.

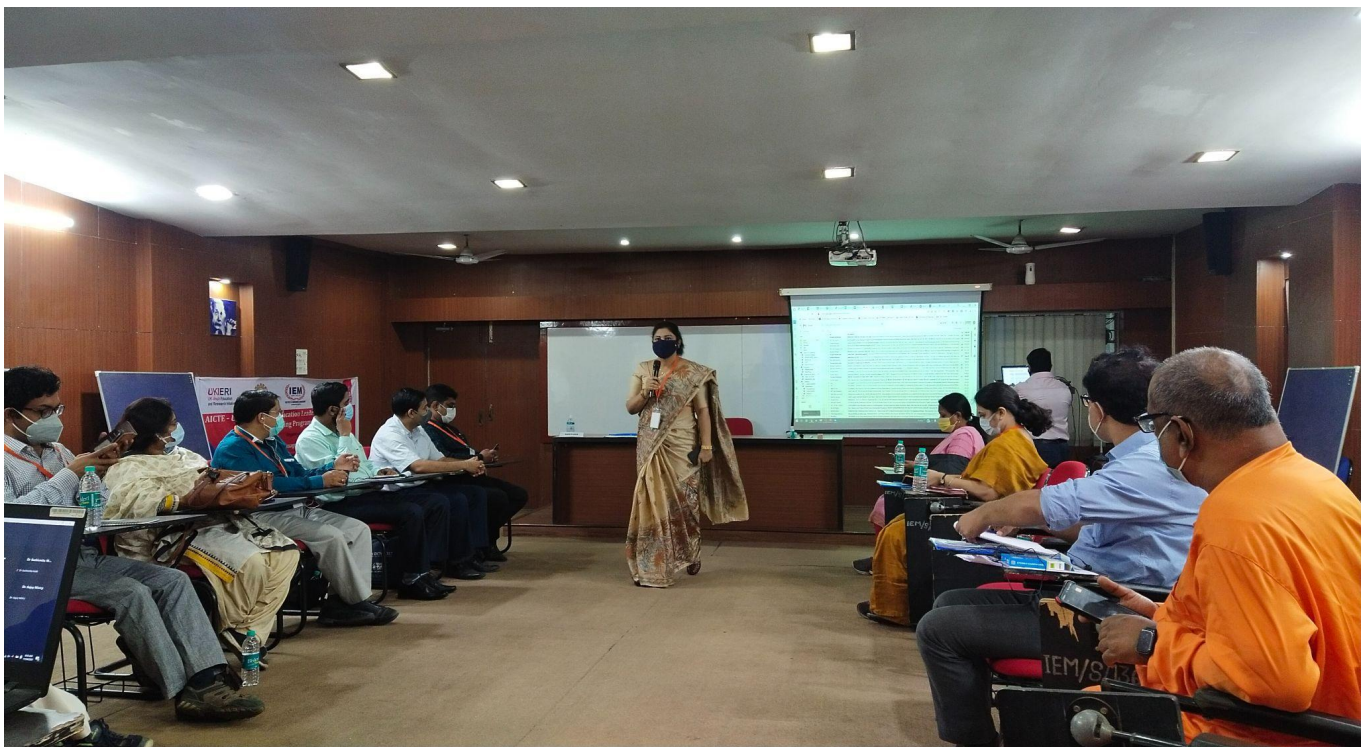
The 4 day Leadership and Management Training programme was intended to impart leadership and management skills to the senior faculty members of various Universities and colleges and create an awareness of the need for this type of training. Process of dealing with the challenges in technical education, motivational concepts, mission and vision of the organization, understanding one's own personality type, various leadership approaches and change management theory and practice were glimpsed in the programme. Various outdoor games related to the theory added flavor to the overall understanding of this participatory learning programme. This programme has received an overwhelming appreciation from all the participants from the various colleges and universities and it was general consensus that the process and methods discussed during the various sessions can have a positive and long-lasting effect towards the progress of the educational process at the grass-root level and at various management levels. Total 17 participants from various colleges and universities attended and completed the programme successfully.

A few Glimpses of the Program:

Group Photo with all the participants from various colleges and universities, all the AICTE-UKIERI Master Trainers, program organizing committee members and the director of Institute of Engineering and Management, Kolkata



Participatory Learning Session



Outdoor Games based Learning Session



AICTE - UKIERI Further Education Leadership and Management Training Programme (Workshop 2)

Organized by

Institute of Engineering & Management, Kolkata, West Bengal, India

in Collaboration with

Dudley College (UK) and British Council

**Date: January 17 to January 20, 2022
(in Virtual Mode)**

Institute of Engineering and Management organized the second 4-day workshop cum training programme on Leadership and Management as part of AICTE-UKIERI Further Education initiative. The programme was inaugurated and coordinated by Prof. Dr. Mohuya Chakraborty, Dean, IEM. She spoke about the UKIERI workshop 1 held in the month of November at IEM Prof. Dr. Satyajit Chakrabarti, Director, IEM gave the keynote speech mentioning the importance and awareness of leadership abilities in teachers so as to enhance the quality of education in engineering colleges and universities. He also talked about collaborative research works with other organizations who sent their delegates to this workshop. The workshop consisted of several theoretical sessions together with various cutting edge online games related to the topics of discussion. The technique involved learning by doing. The master trainers welcomed the delegates and conducted various other sessions including industry engagement, presentation skills, teaching and learning approaches, student support and soft skill development etc. The programme was successfully conducted and all the participants enjoyed understanding and participating in new techniques in teaching and learning concepts. The various change management projects that were presented were quite noteworthy.

Glimps of the Program:



AICTE - UKIERI Further Education Leadership and Management Training Programme (Workshop 3)

Organized by

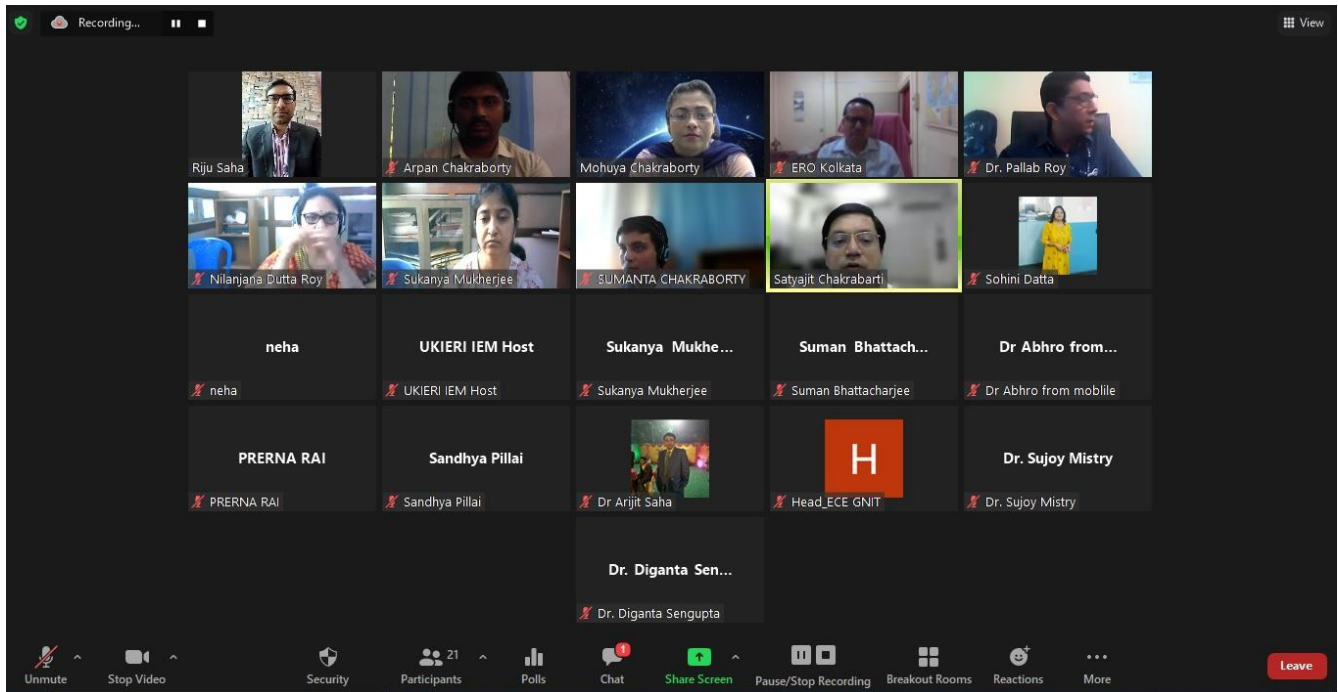
Institute of Engineering & Management, Kolkata, West Bengal, India

in Collaboration with

Dudley College (UK) and British Council

Date: **March 21 to March 23, 2022**
(in Virtual Mode)

Institute of Engineering and Management organized the third and final 3-day workshop cum training programme on Leadership and Management as part of AICTE-UKIERI Further Education initiative. The programme was inaugurated and coordinated by Prof. Dr. Mohuya Chakraborty, Dean, IEM. Our eminent guest speakers Mr. Riju Saha, TCS Segment Head and Major Neha Patel shared their valuable words about leadership and managerial quality in the inaugural session of this event. In this workshop the master trainers conducted sessions on difficult conversation, growth mindset and win-win in a very interactive manner. The participants were evaluated based on their performance in quiz and final presentation on change projects.



Conference

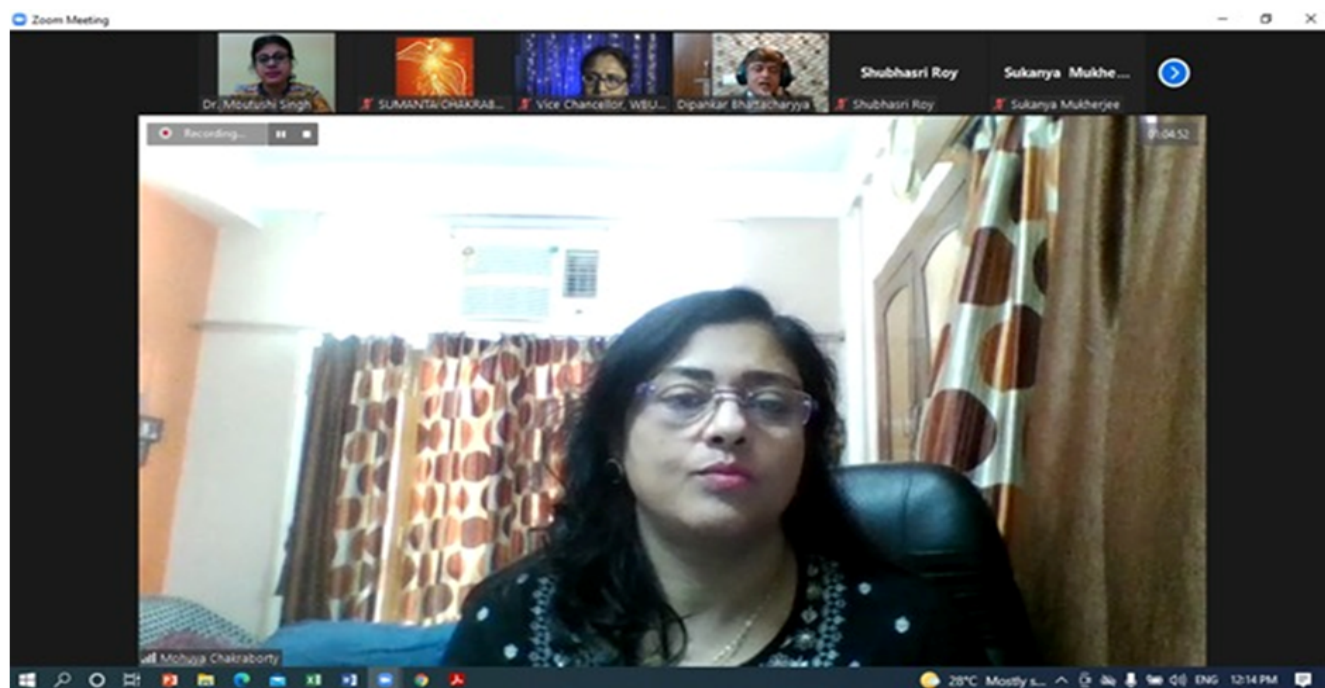
eHaCON 2021

November 7th – 9th, 13th – 14th & 19th – 20th, 2021

eHaCON 2021 International Ethical Hacking Conference, the 4th eHaCON in the series, organized by the Department of Computer Science & Engineering, Institute of Engineering and Management (IEM), Kolkata and successfully led by Prof. Dr. Mohuya Chakraborty, IEM, India. eHaCON 2021 represents a balanced endeavor consisting of 48 hours Gaming competition which is Capture The Flag(CTF), 12 hours online Hackathon (DeCipher) hosted by CodeChef, 2 days Three Minutes Scholarly Thesis (3MST) Presentation and Symposium. In CTF and DeCipher we got more than 1500 participations. The CTF got the participants from almost all over the world. In 3MST we received a huge number of submissions and the acceptance rate was 23%. Also, the short quiz competition by Cyber Security Centre of Excellence, Government of West Bengal saw huge participation with more than 300 participation as reflected in their official website.

In eHaCON 2021 we were glad to have Prof. Dr. Satyajit Chakrabarti, IEM, India as Patron; Prof. Dr. Satyajit Chakrabarti, IEM, India and Prof. Dr. Mohuya Chakraborty, IEM, India as General Chairs; Prof. Dr. Jyotsna Kumar Mandal, Kalyani University, India as Technical Program Committee Chair and Prof. Dr. Indraneel Mukhopadhyay, IEM, India as Program Committee Chair. The Conference Conveners were Prof. Dr. Moutushi Singh, IEM, India for 3MST, Prof. Avijit Bose, IEM, India for CTF and Prof. Sumanta Chakraborty, IEM, India for DeCipher.

The Keynote speakers and the speakers of the Panel Discussion, including eminent professors from various universities and Organizations, were Shri Sanjay Kumar Das (National Cyber Security Scholar, Joint Secretary, IT&E and State Information Security Officer, West Bengal, India), Mr. Michael Spurgeon (Technology and Cyber Security Expert), Prof. Dr. Suhrita Paul (Vice-chancellor, The West Bengal University of Health Sciences), Dr. Arnab Ganguly (MBBS, CCBMDO (IIM Indore), PGDMLE (NLSIU), PGDHEP (PHFI), MBA, MD) and Dr. Dipankar Bhattacharyya (MBBS, DGO, MD, MRCOG (LONDON), Obstetrician & Gynecologist).

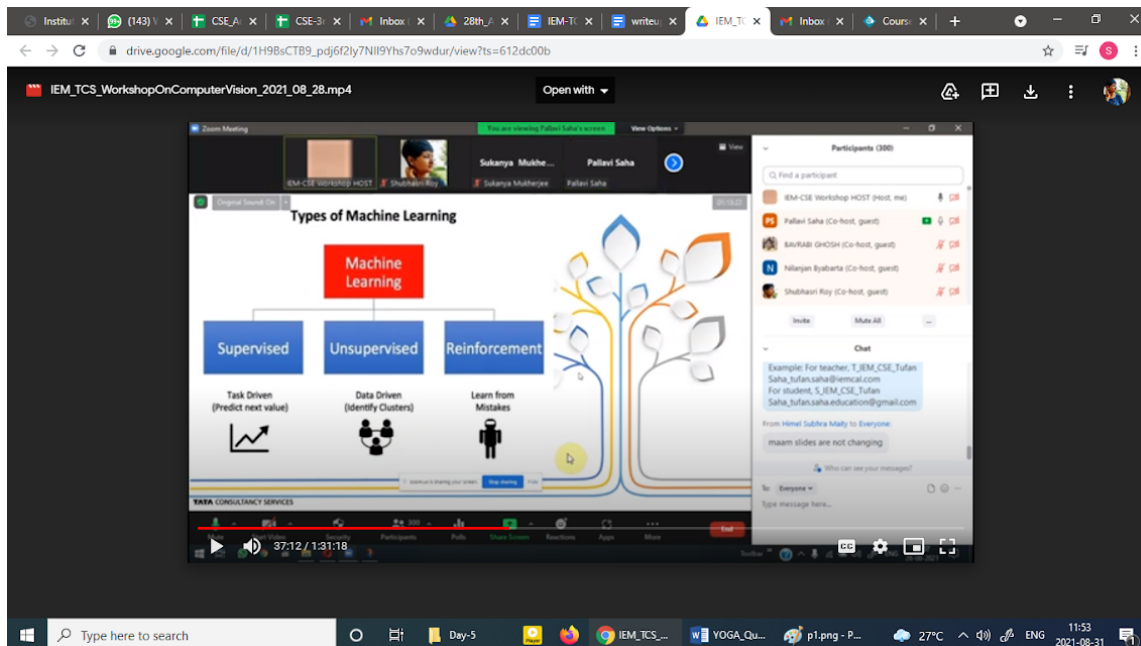


IEM-TCS Collaborative Workshop

IEM-TCS Workshop on Computer Vision

August 28, 2021

A Workshop on "IEM-TCS Workshop: Computer Vision " was organized by HRDC, IEM and CSE, IEM. The speaker of the session was Ms. Pallavi Saha (Scientist, TCS Research & Innovation).



IEM-TCS Collaborative Faculty Development Program

IEM-TCS FDP on Python (blended with Robotics applications)

March 23, 2021

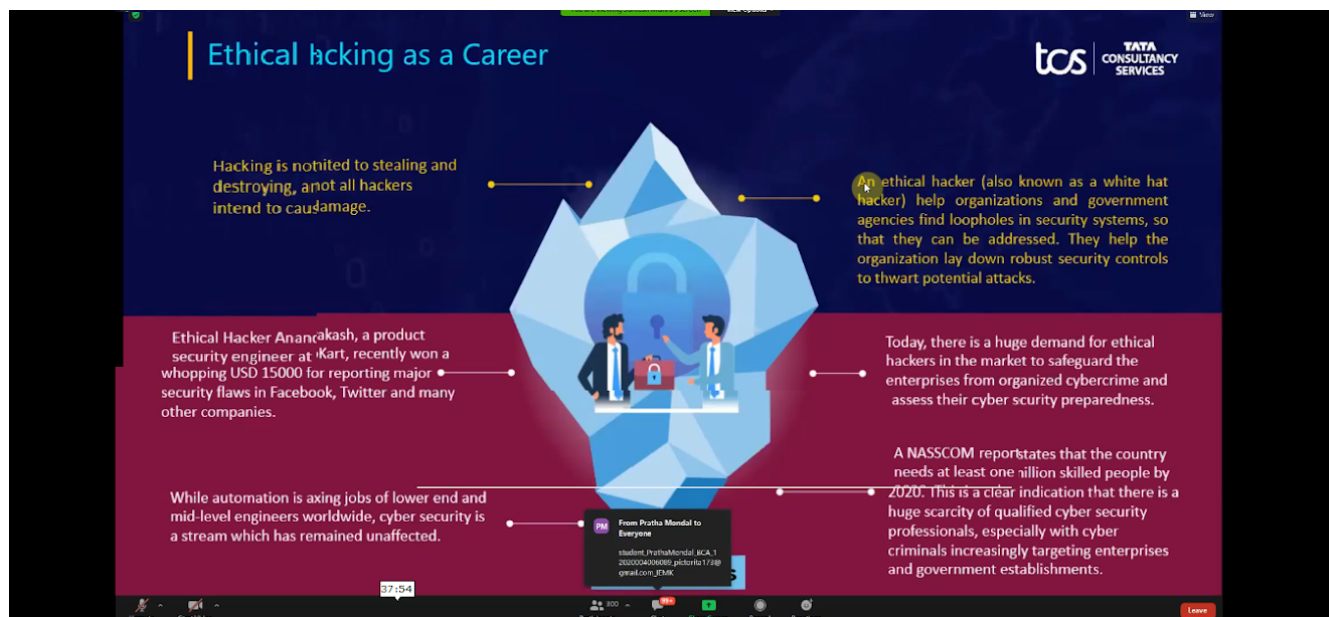
HRDC, IEM and CSE, IEM . The speaker of the event was Dr. Chayan Sarkar, Scientist, Embedded Systems and Robotics, TCS Research and Innovation, whose research interest areas are Human-Robot Interaction, Multi-Robot Systems, Networked Embedded Systems, Internet of Things and has 3.5 years of professional experience. The event was chaired by Mr. Partha Sarkar, Academic Relationship Manager, Tata Consultancy Services.



IEM-TCS FDP on Ethical Hacking

May 5, 2021

The second IEM-TCS FDP of this year was on Ethical Hacking. It was organized on the 5th of May, 2021. The speakers on this occasion were Mr. Kamakhya Prasad Jena, TCS Cyber Security, Enterprise Vulnerability Management, Mr. Santosh Mishra, TCS Cyber Security Solution Architect, Bhubaneswar. Mr. Sunil Nath-Security Expert, TCS Cyber Security Solution Architect. The Lecture was on different aspects of Ethical Hacking. The speakers shared the challenges faced and the existing opportunities in “Ethical Hacking Career”. Participants were introduced to - TCS Automated Vulnerability Remediation Platform to Secure Enterprises from Cyber Risk. It was a very interactive session and few tools were introduced to the participants. There were 300 participants(approximately). Apart from the lecture topics, our guest speaker also shared their experience. They also discussed on the several possibilities of ethical hacking.



Faculty Development Program

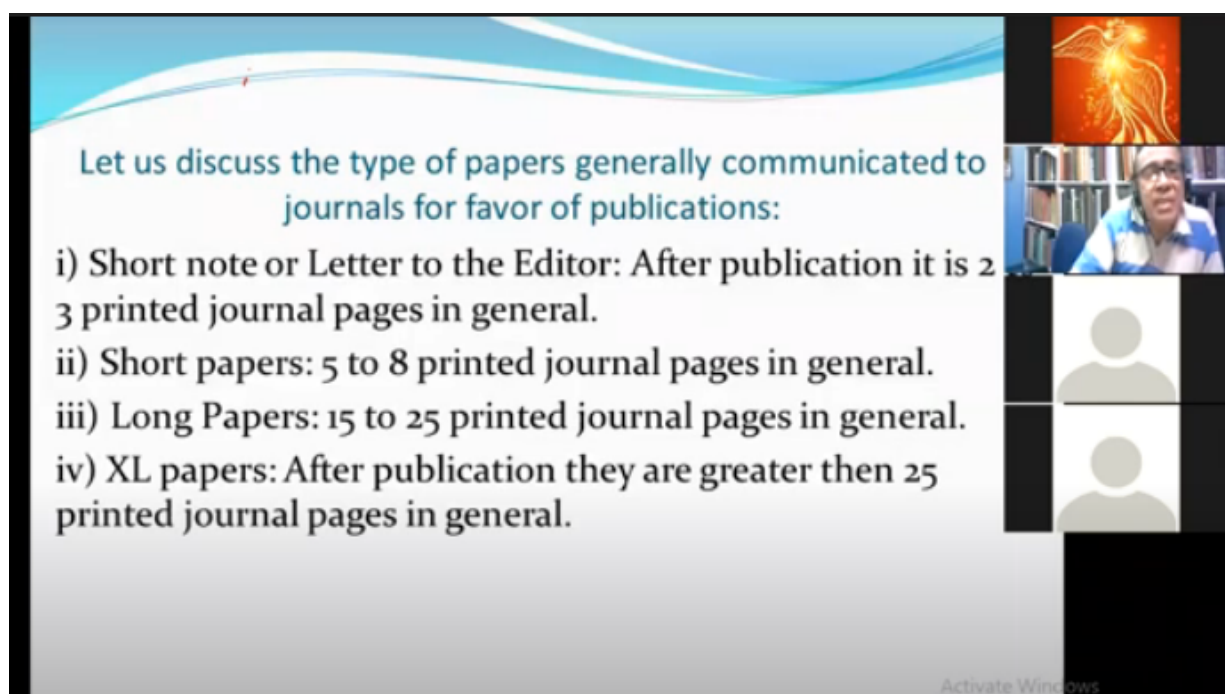
A 5 Days (Online) Faculty Development Program on Introduction to Java & Python for Beginners

February 06, 07, 13, 14, 20, 2021

A 5-day FDP was organized by IEM HRDC and CSE, IEM. The dates of the events were 6th, 7th, 13th, 14th and 20th of February, 2021. The faculty instructors were Prof. Srijita Basu, Prof. Anupam Mondal, Prof. Sainik Kumar Mahata and Prof. Sourav Ghosh. They covered the basics and real-life applications of Java and Python. The faculties-in-charge were Prof. Dr. Mohuya Chakraborty, Prof. Sumanta Chakraborty.

The list of the speakers, including the eminent professors from various universities is given hereby:

1	Prof. (Dr.) Kamakhya Prasad Ghatak, Top 2% scientists as prepared by Stanford University, USA, Professor at Institute of Engineering and Management Kolkata
2	Prof. (Dr.) Abir Chattopadhyay, Professor at University of Engineering and Management, Kolkata
3	Prof. (Dr.) Jyoti Prakash Singh, National Institute of Technology Patna
4	Prof. (Dr.) Debatosh Guha, Indian Antenna Researcher and Professor in the Institute of Radio Physics and Electronics at the Rajabazar Science College University of Calcutta
5	Prof. (Dr.) Bob Gill, Telecommunications and Networks expert in the wireless and wired networks, BCIT
6	Prof (Dr.) Amitava Sarkar, Former Director of Indian Institute of Social Welfare & Business Management (IISWBM)



Let us discuss the type of papers generally communicated to journals for favor of publications:

- i) Short note or Letter to the Editor: After publication it is 2-3 printed journal pages in general.
- ii) Short papers: 5 to 8 printed journal pages in general.
- iii) Long Papers: 15 to 25 printed journal pages in general.
- iv) XL papers: After publication they are greater than 25 printed journal pages in general.

Activate Windows

A 5 Days (Online) Faculty Development Program on Artificial Intelligence and Machine Learning under ATAL grant, an AICTE scheme

June 14 - 18, 2021

The 5 day Faculty Development Program on “Emerging Trends in the field of Artificial Intelligence and Machine learning application” started on the 14 th June, 2021. The FDP was very successful, with focus on both theoretical and practical aspects of Artificial Intelligence and Machine learning applications. The participants thoroughly enjoyed the sessions and had plenty of opportunities to interact with the speakers. The FDP concluded on the 18 th June, 2021.

Our sincere gratitude to the ATAL Academy, AICTE for sponsoring the event. We, the organizing team, are thankful to the management of IEM for supporting and motivating us to conduct this FDP.

Coordinator: Prof. Dr. Mohuya Chakraborty

Organizing Team members:

Dr. Nilanjana Dutta Roy

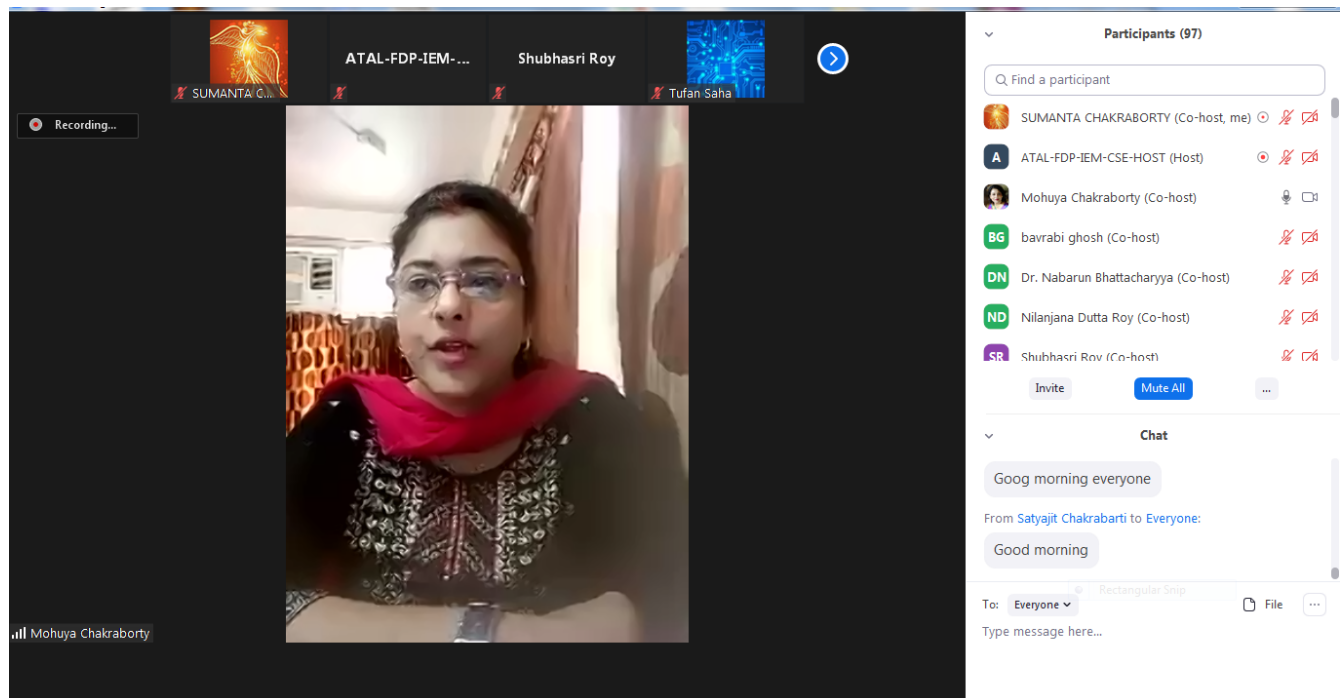
Prof. Sukanya Mukherjee

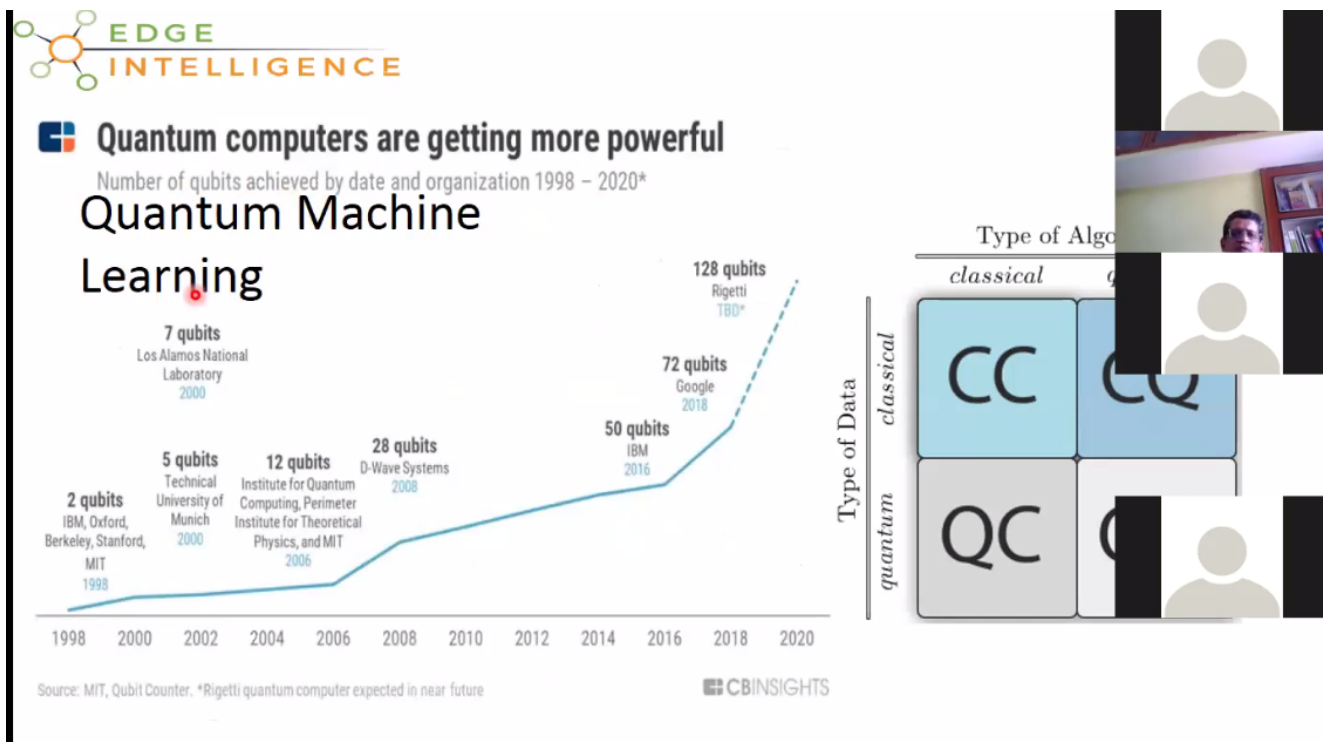
Prof. Tufan Saha

Prof. Sumanta Chakraborty

Prof. Shubhasri Roy

Prof. Bavrabhi Ghosh





A 5 Days (Online) Faculty Development Program on EVOLVING ROLE OF AI & ML IN STATE-OF-THE-ART RESEARCH & DEVELOPMENT under ATAL grant, an AICTE scheme

September 20 - 24, 2021

We are glad to share the press release of the five days FDP on “Evolving Role of AI & ML in State-of-the-Art Research & Development” (See page number 2 and 9 dated 19.10.2021 of Dainik Jugasankha), organized by the department of CSE from September 20 to September 24, 2021.

Our sincere gratitude to the ATAL Academy, AICTE for sponsoring the event. We, the organizing team, are thankful to the management of IEM for supporting and motivating us to conduct this FDP.

Coordinator: Prof. Dr. Mohuya Chakraborty

Organizing Team members:

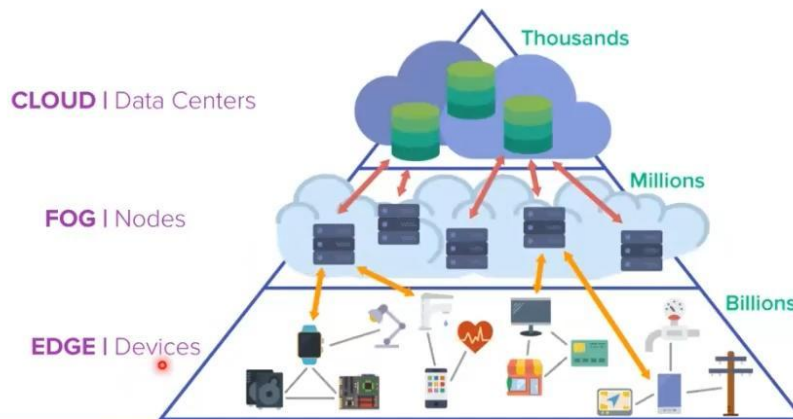
Prof. Dr. Nilanjana Dutta Roy

Prof. Sukanya Mukherjee

Prof. Tufan Saha

Prof. Sumanta Chakraborty

Cloud Fog Edge network



Recent Developments in the field of Computational Biology

November 22, 2021 - November 26, 2021

Computational biology is the study of leveraging biological data to build algorithms or models to understand biological systems and interactions. It encompasses many parts of bioinformatics and much more. This is a research field aimed at solving computer science problems using biological models. Within computer science, Computational biology relates to artificial intelligence and machine learning.

The 5-day Faculty Development Program on Recent developments in the field of Computational Biology aims to improve scientific knowledge of the mechanisms that underpin cognition and intelligent behavior, as well as its implementation into machines, utilizing computational biology. It's a gathering of researchers and faculty members who get together to discuss cutting-edge ideas and share methodologies, resources, and experiences. It will consist of a five-day programme featuring a mix of scientific and technological sessions.

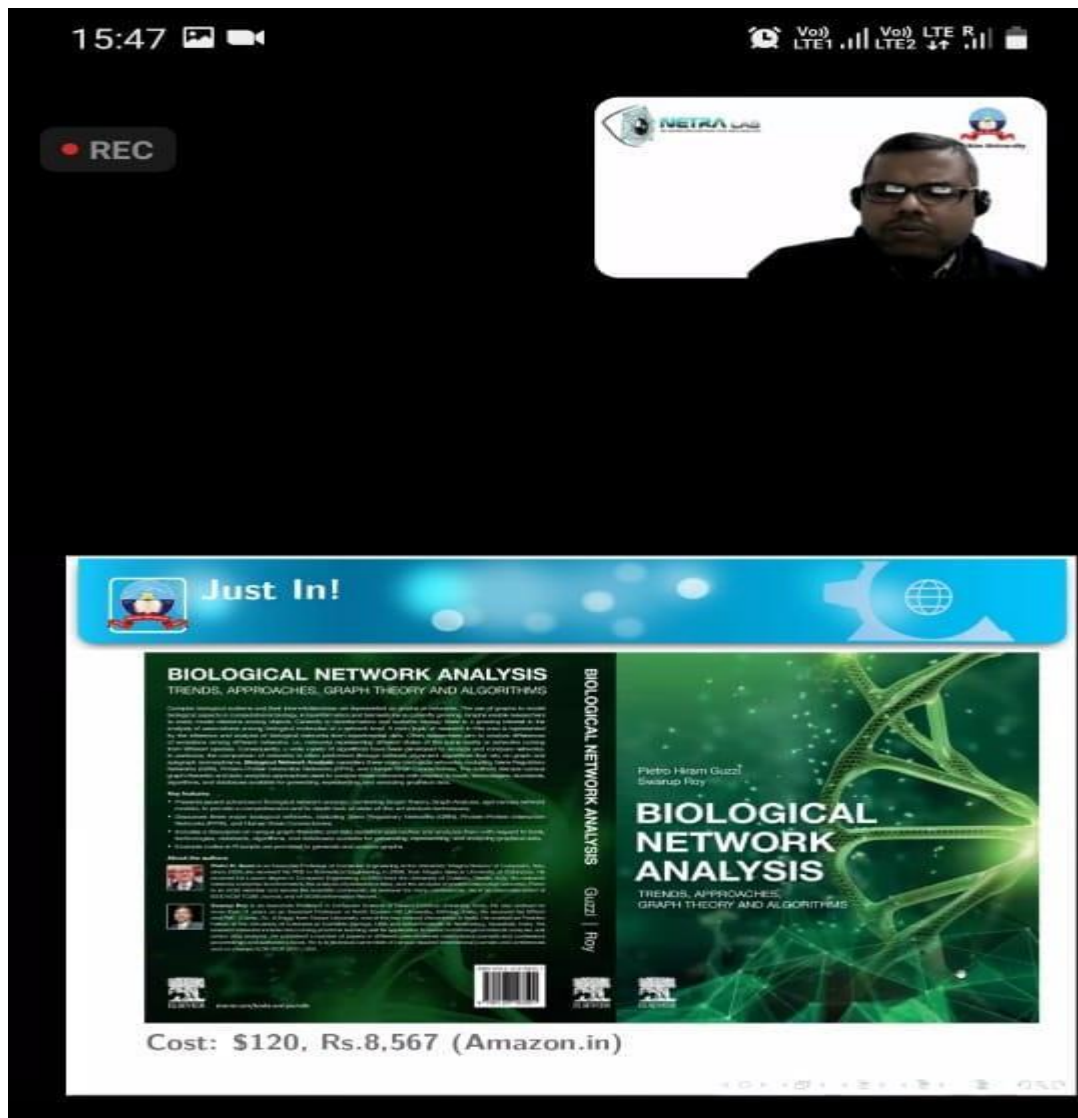
This FDP has received an overwhelming response from across India as well as abroad and has created a positive impact in the technology world.

Total 60 participants attended and completed the FDP successfully.

Some stats of the registration received:

Overseas: Malaysia, Nepal, Nigeria

India: Uttar Pradesh, Jharkhand, Assam, Delhi, Haryana, Madhya Pradesh, Manipur, Odisha, Meghalaya, Sikkim, Karnataka, Tamil Nadu, Maharashtra, Telangana, West Bengal.



5-Day Faculty Development Programme (Offline) on Open Source Software

December 15, 2021 - December 21, 2021

From December 15 to 21, 2021 a 5-Day Faculty Development Program on Open Source was organized by the Human Resource Development Centre (HRDC) and Department of Computer Science and Engineering, Institute of Engineering & Management, Kolkata. The resource persons were Prof. Paramita Mitra, Prof. Subindu Saha, Prof. Kajari Sur, Dr. Anupam Mondal, Prof. Sainik Kumar Mahata and Dr. Amit Kumar Das. They enlightened the participants on Logisim, LTspice, Weka and R. The sessions were very much interactive and engaging with the live demonstration of the recent open source tools. The total number of participants was 22.

Coordinators: Prof. Sumanta Chakraborty (CSE), Prof. Subhabrata Sengupta (IT).

IEM
INSTITUTE OF ENGINEERING & MANAGEMENT
KOLKATA

**5-DAY FACULTY DEVELOPMENT PROGRAMME
(OFFLINE)
ON
OPEN SOURCE SOFTWARE**

**ORGANIZED BY
INFORMATION TECHNOLOGY
&
COMPUTER SCIENCE AND ENGINEERING
INSTITUTE OF ENGINEERING AND MANAGEMENT, KOLKATA**

**VENUE: SEMINAR HALL 3, GURUKUL CAMPUS, IEM KOLKATA
DECEMBER 15 - DECEMBER 21, 2021
TIME: 4:30 - 5:30 P.M.**

**DAY 5:
R: Machine Learning Tool**

**PRESENTER:
DR. AMIT KUMAR DAS**



**FDP COORDINATORS:
PROF. SUBHABRATA SENGUPTA
PROF. SUMANTA CHAKRABORTY**

Human Resource Development Centre IEM



A 5 Days (Online) Faculty Development Program on "Internet-Of-Things (IoT)" under ATAL grant, an AICTE scheme

January 17 - 21, 2022

We are glad to share the press release of the five days FDP on “Internet-of-Things (IoT)”, organized by the Department of Computer Science and Engineering of Institute of Engineering & Management, Kolkata. The FDP was held from the 17th January 2022 to the 21st January 2022 in online mode and had the massive participation of 200 professors and academicians from all across India. We had eminent speakers from IIT, NIT, foreign universities of Melbourne, Australia, and MAKAUT.

Our sincere gratitude to the ATAL Academy, AICTE for sponsoring the event. We, the organizing team, are thankful to the management of IEM for supporting and motivating us to conduct this FDP.

Coordinator: Dr. Nilanjana Dutta Roy

Organizing Team members:

Prof. Sukanya Mukherjee

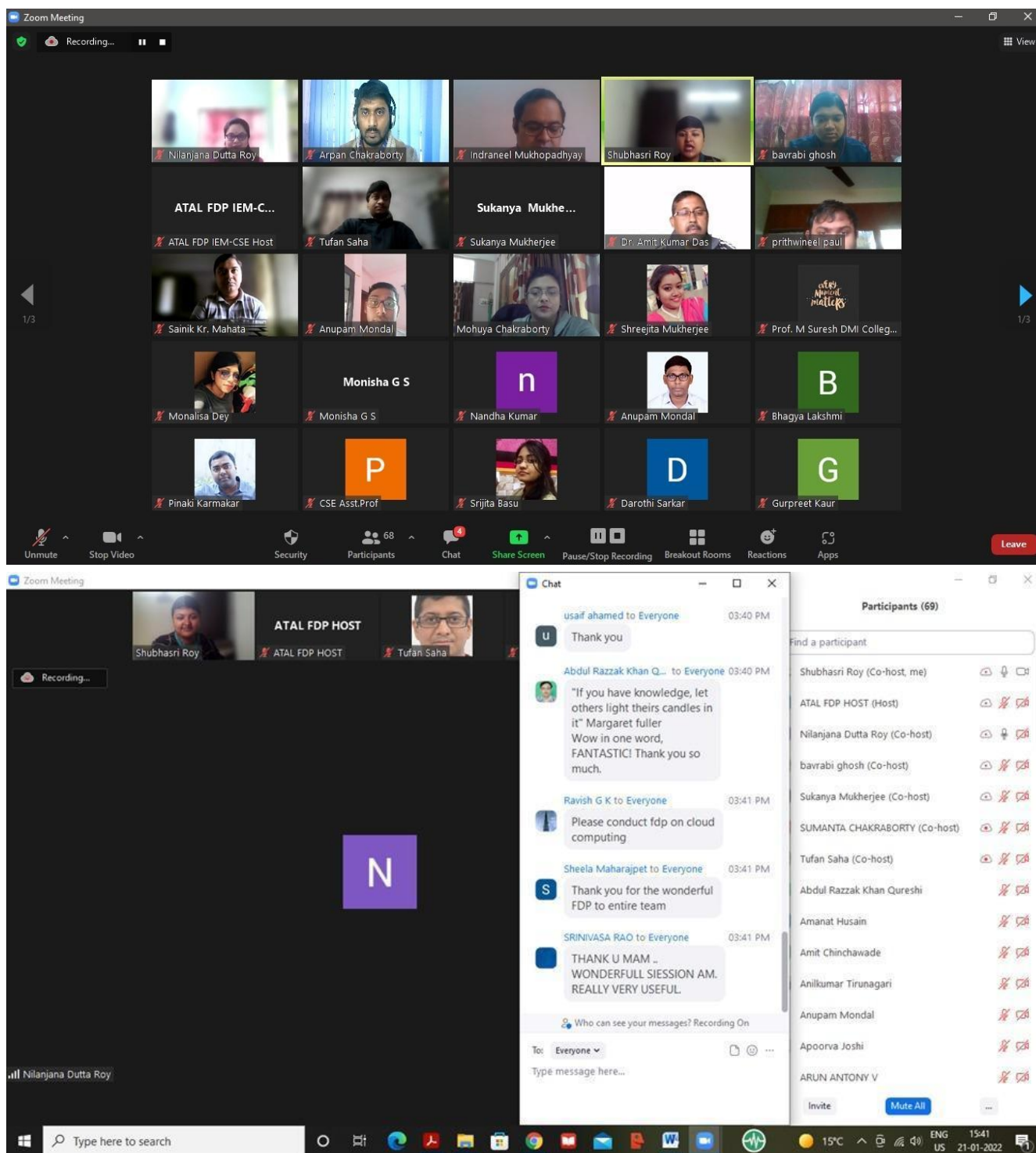
Prof. Tufan Saha

Prof. Sumanta Chakraborty

Prof. Shubhasri Roy

Prof. Bavrabi Ghosh

Prof. Arpan Chakraborty



5 Days FDP on Computer Vision and Its Applications

7th March to 11th March, 2022

The FDP on Computer Vision and Its Applications is scheduled from 7th March to 11th March, 2022.

Computer vision is a branch of artificial intelligence (AI) that allows computers and systems to extract useful information from digital photos, videos, and other visual inputs, as well as to conduct actions or make recommendations based on that data. If artificial intelligence allows computers to think, computer vision allows them to see, watch, and comprehend.

The 5-day Faculty Development Program on Computer Vision and Its Applications aims to improve our understanding of how Computer Vision works and how it is employed in a variety of industries, including energy and utilities, manufacturing, and automotive. It's a gathering of researchers and faculty members who get together to discuss cutting-edge ideas and share methodologies, resources, and experiences. It will consist of a five-day programme featuring a mix of scientific and technological sessions.

Following five eminent speakers give their valuable talks in this domain.

Date	Speaker	Description
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7th March, 2022	Dr. Pawan Kumar Singh Jadavpur University	Topic: An Introduction to Computer Vision Dr. Pawan Kumar Singh delivered his speech on Introduction to Computer Vision. He has given a detailed idea of computer vision along with various goals and limitations of it with examples. He discussed the typical perception pipeline of computer vision. He demonstrated the year-wise progress of computer vision. Thereafter, he described the differences between computer vision and graphics and computer vision and machine learning with examples. He gave a detailed idea related to vision and relation between computer and vision. He described different components of the computer vision system. He also discussed various important topics of computer vision such as imaging geometry, camera modeling, image filtering and enhancing, region segmentation, texture, color, image restoration, human action recognition, perceptual organization, shape analysis, stereo, motion and optical flow, high level vision. He described various applications of computer vision. Thereafter, he discussed the current state of the art of computer vision such as earth viewers and OCR. He gave a detailed overview of computer vision application in different types of sports. He also discussed visual reorganization techniques for organizing photos and smile detection. He discussed the overview of vision-based biometrics, login without a password, style transfer, motion capture, and Google cars. He also described how computer vision is used in smart cars, space, and medical imaging etc areas. He discussed various challenges and opportunities such as scale, deformation, occlusion, object intra-class variation and local ambiguity. Finally, he discussed various elements of the digital image processing system.
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8th March, 2022	Dr. Pratik Chattopadhyay IIT, BHU	Topic: Computer Vision-Based Gait Recognition: Current Developments and Future Directions Dr. Pratik Chattopadhyay, IIT BHU delivered a talk on Computer Vision-Based Gait Recognition: Current Developments and Future Directions. He illustrated the Gait recognition system with the help of an example of classifying a person from their walking patterns. In this context, he compared Fronto-Parallel view and Frontal view and it got noted that Fronto-Parallel view gives more information about Gait as movement of limbs, legs, hands are very clear from this. He also discussed the research trend in this domain starting from Binary Silhouettes (1999) to deep learning based approaches (2015 onwards). Dr. Chattopadhyay has given a detailed idea about Gait Energy Image feature which has become very efficient but because of the average silhouettes calculation it experiences information loss that can be recovered with the use of Pose Energy Image and Key Pose Estimation by using K-Means clustering. He elaborated the topic Dynamic Gait Energy Image feature where a GAN-based model is used to synthetically remove co-variant objects such as bag, coat etc. He has discussed a recent problem statement he and his team are working on Occlusion Handling in gait recognition.
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9 th March, 2022	Dr. Ram Sarkar Jadavpur University	Topic: Screening COVID-19 from CT Scans - A Meta-heuristic Approach Dr. Ram Sarkar spoke on the usage of CNNs for the detection of Covid-19 in radiological images. He mentioned an end-to-end framework for both feature extraction as well as feature selection to achieve this. His described model used pre-trained ResNets, DenseNet and Xception models to extract features from a CT scan image and thereafter used Harmony Selection and adaptive β-hill climbing for selection of features. Thereafter, the model used a CNN classifier on the selected features to predict positive/negative covid-19 cases.
10 th March, 2022	Dr. Suman Kumar Maji IIT, Patna	Topic: Realizing the Role of Geometric Transformations in Computer Vision Dr. Suman Kumar Maji, IIT Patna, delivered a talk on the Role of Geometric Transformations in Computer Vision. He started by talking about why transformations needed and where is the application of the same. Next, he illustrated how a simple scene is constructed using multiple geometrical shapes or models and on these models, appropriate affine/geometric transformations (2D/3D) are applied as required. Dr. Maji then moved on to explain the concept of 2D and 3D transformations in minute detail along with discussing special cases like scaling and topics like how Cartesian coordinate systems are related to 2D transformations and homogeneous coordinates.

11 th March, 2022	Dr. SanjoyPratihari IIIT, Kalyani	Topic: Elementary Geometric Features and Some Image Analysis Applications Dr.SanjoyPratihari delivered his speech on Elementary Geometric Features and Some Image Analysis Applications. He has given a detailed idea of computer vision and its related various tasks. He discussed various types of features and their structures of an image. In this talk he has primarily discussed three problems such as image level authentication, archiving of articles in digital archives, and information extraction. He demonstrated the requirements of authentication along with research questions. He described quasi-straightness based features and chain code sequence techniques. Dr.Pratihari also has given different examples of binarization, boundary extraction and thinning, and regions. Thereafter, he discussed finding text-handles for indexing scholarly articles in digital archives. He discussed different types of image categorization techniques which help to archive images. Finally, he discussed the information extraction steps from images.
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Zoom Meeting

Recording...

Indian Institute of Information Technology Kalyani



Why authentication required?

- In the early age, the messengers sent by rulers used to carry some inscribed stones or metal blocks to show authenticity.
- The messages were written in leaves or clothes.
- Then with invention of paper and printing technologies seals and stamps came in picture.
- The basic question: is the message from the right sender?

Sanjoy Pratihari

Elementary Features and Image Analysis

6

Sanjoy Pratihari

Sanjoy Pratihari

Darothi_IEM_CSE

Darothi_IEM_CSE

Saikat Chakrabarti

Anupam Mondal

Soumik Kundu

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Zoom Meeting

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11-03-2022

Zoom Meeting

Recording...

Sanjoy Pratihar is talking...

Indian Institute of Information Technology Kalyani

Feature vector

(a) (b)

Feature comparison: (a) CEDAR – person-12-Original-2 vs person-12-Original-17, (b) CEDAR – person-12-original-2 vs person-12-forged-17.

Sanjoy Pratihar Elementary Features and Image Analysis 31

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11-03-2022

5 Days FDP on Understanding MATLAB

August 05, 08, 10, 11, 12, 2022

The FDP on Understanding MATLAB was scheduled from August 05 - August 12, 2022 in online mode. The speakers were Dr. Prothwineel Paul and Dr. Susovan Jana. The coordinators were Prof. Sumanta Chakraborty and Prof. Sukanya Mukherjee. The number of faculty members who participated in the program, was 70.

Youtube Link: <https://www.youtube.com/playlist?list=PLQ6llF4zIWMwp10QArsQ3F17vFyJvhMCM>

Institute of Engineering & Management
Faculty Development Program

Organized by

IEM HRDC

5 Days Faculty Development Program on Understanding MATLAB

Program Schedule

Zoom Meeting Link:

<https://zoom.us/j/97484609231?pwd=R2tBdlBrMGh0UEdKY2lwOk1ZSURGOT09>

Meeting ID: 974 8460 9231

Passcode: 780592

Date	Time	Speaker	Topic
05.08.2022	04:15 pm to 5:15 pm	Dr. Prithwineel Paul	Data Processing using MATLAB
08.08.2022	04:15 pm to 5:15 pm	Dr. Prithwineel Paul	Regression Analysis using MATLAB
10.08.2022	04:15 pm to 5:15 pm	Dr. Prithwineel Paul	Time Series Analysis using MATLAB
11.08.2022	04:15 pm to 5:15 pm	Dr. Susovan Jana	Fundamentals of Image Processing using MATLAB
12.08.2022	04:15 pm to 5:15 pm	Dr. Susovan Jana	Applications & Research Areas of Image Processing
12.08.2022	09:30 pm to 10:00 pm	Examination	

5 Days FDP on Augmented Reality & Virtual Reality

September 19 - September 23, 2022

The FDP on Augmented Reality & Virtual Reality was scheduled from September 19 - September 23, 2022 in offline mode at IEM Labs. The speakers were Mr. Snehan Biswas, Mr. Rishit Chakraborty and Ms. Sudipa Dutta. The coordinators were Dr. Sukanya Mukherjee and Prof. Sumanta Chakraborty. The number of faculty members who participated in the program, was 33.

Date	Time	Speaker	Topic
19.09.2022	4:30 pm to 5:30 pm	Snehan Biswas, IEMA Research & Development Private Limited	Basic Introduction to Machine Learning, Deep Learning, and Data Science
20.09.2022	4:30 pm to 5:30 pm	Rishit Chakraborty, IEMA Research & Development Private Limited	Introduction about Connected Automotive with Blind Spot Monitoring and Pot Hole Detection
21.09.2022	4:30 pm to 5:30 pm	Sudipa Dutta, IEMA Research & Development Private Limited	Introduction to AR and VR with industry-level applications
22.09.2022	4:30 pm to 5:30 pm	Snehan Biswas, IEMA Research & Development Private Limited	Applications of AI from an industry perspective with Image processing applications
23.09.2022	4:30 pm to 5:30 pm	Rishit Chakraborty, IEMA Research & Development Private Limited	Introduction to drone technologies and applications of drone automation
26.09.2022	4:30 pm to 5:30 pm	Examination (Online mode)	