

September Volume -1 2021

Techno Philia

Create Stimulate Emulate

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Contents:

Items	Page no
About the Department	2
Vision of the Department	2
Mission of the Department	2
Department Achievements	
FDP's Organized	3
Seminars, Conferences, FDPs attended/ Organized	11
Student Achievements	12
Placements details	12

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About the Department

The KKR & KSR Institute of Technology and Sciences was established computer science engineering stream in the year of 2008. The Department of Computer Science and Engineering educates knowledge of computer and it' s engineering. Almost all fields are computerized to have an ease of handling the problems of designing, manufacturing, maintenance, servicing, researching, marketing and accounting. The B. /Tech computer engineering program includes computer operations on different languages, data generation, collection and utilization of information. The Department is implementing OBE based education.

Vision	Mission
To become a reputed center in computer Science and systems engineering for quality, competency and social responsibility	<ol style="list-style-type: none">1. Providing a strong theoretical and practical education in a congenial environment.2. Providing additional skills and training to meet the current needs of the industry.3. Inculcating ethical values to meet the challenges of life with courage and confidence.

Department Achievements

Faculty Development Programs Organized

Joint Two Weeks Online Certificate Programme

organized in association with

IIT Guwahati, IIT Kanpur, IIT Roorkee, MNIT Jaipur, NIT Patna, NIT Warangal and

PDPM IITDM Jabalpur

Deep Learning and Applications

August 23rd to September 03rd, 2021

Description:

To meet the ever-demanding prerequisites of the knowledge industry, Refresher Program have always been an effective tool to enrich teaching and research competencies of educationists. This 40 hours Faculty Development Programs is conducted by the Department of Computer Science and Engineering, KKR & KSR Institute of Technology and Sciences on “**Deep Learning and Applications**”. 42 Faculty members from various Engineering colleges, universities throughout the nation were participated. The participants obtained deep insights on Artificial Intelligence, Machine Learning and Artificial Neural Networks, How to use Google Colab, Introduction to Python, Artificial Neural Network for Classification, Deep Neural Networks and Back Propagation, Convolutional Neural Networks, Facial Expression Recognition, Implementing an Encoder Decoder Model for Image Segmentation, Object Detection State-of-the-Art-Algorithms, Image Captioning in Hindi using Deep Learning Frameworks, Deep Reinforcement Learning. Academicians enhanced their knowledge through practical sessions on MATLAB.

Team Member of FDP:

Shri Koyi Subbarao, Chief Parton, Chairman

Shri Koyi Shekar, Chief Parton, Secretary

Dr. P. Babu, Parton, Principal

Dr. K Hari Babu, Parton, Academic Director

Prof. R. Ramesh, Head of CSE

Dr. Ch. Aruna, Professor, Dept. of CSE

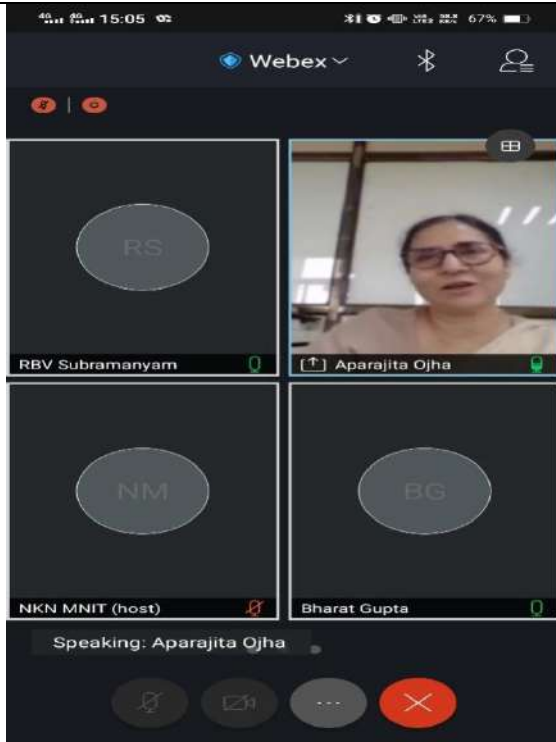
Mr. B. Prasanna Kumar, Associate Professor, Dept. of CSE

Schedule:

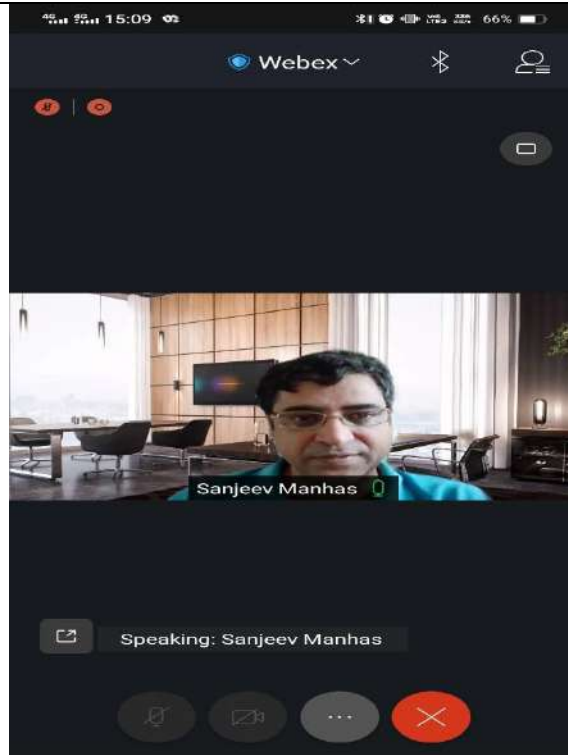
Date	Day	3:00-3:20PM	3:30-5:30PM	5:30-7:30PM	9:00-10:00PM	
		Inaugural Session				
23-Aug-21	Monday	Inaugural Session	L1: Prof. Aparajita Ojha, IIT DM Jabalpur Introduction to Artificial Intelligence, ML and ANN	P1: Introduction to Python Programming and a brief introduction to Keras, Google Colab (PTS)		
		3:00-5:00		5:30-7:00		
24-Aug-21	Tuesday	L2: Dr. Santosh Vipparthi, MNIT Jaipur Deep Neural Networks, Hyperparameter tuning, Regularization and Optimization		P2: Writing and running a code to build a Neural Network Classification model, hyperparameter tuning, Using different optimizers. (PTS)		
25-Aug-21	Wednesday	L3: Prof. Aparajita Ojha Convolutional Neural Networks, CNN Architectures		P3: Building a CNN Classification Model using Transfer learning (MV)		
26-Aug-21	Thursday	L4: Dr. Santosh Vipparthi Facial Expression Recognition using CNN		P4: Building a Deep Neural Network Model for facial expression recognition (MV)		
27-Aug-21	Friday	L5: Prof. Aparajita Ojha Autoencoders and their Applications, Image Segmentation using CNN		P5: Implementing an Encoder-Decoder Model for image segmentation (SC)		
28-Aug-21	Saturday	L6: Prof. Aparajita Ojha Object Detection in Conventional Views		P6: Implementation of Object detection algorithm (PTS)	Quiz-1 (30 Minutes)	
29-Aug-21	Sunday	Holiday				
		3:00-5:00		5:30-7:00		
30-Aug-21	Monday	L7: Dr. Santosh Vipparthi Object Detection/Moving Object in Aerial Views		P7: Implementation of Object detection in challenging scenarios (MV)		
31-Aug-21	Tuesday	Holiday (Janmashtami)				
01-Sep-21	Wednesday	L8: Dr. Sriparna Saha, IIT Patna Recurrent Neural Networks Part 1: Basics of RNN, LSTM, GRU and Attention Models		P8: Implementation of an LSTM model for sequenced data (PTS)		
02-Sep-21	Thursday	L10: Dr. Sriparna Saha RNN Part 2: Applications of RNN, Image caption generation using RNN.		L11: MATLAB Team Deep Reinforcement Learning	Quiz 2 (30 minutes)	

03-Sep-21

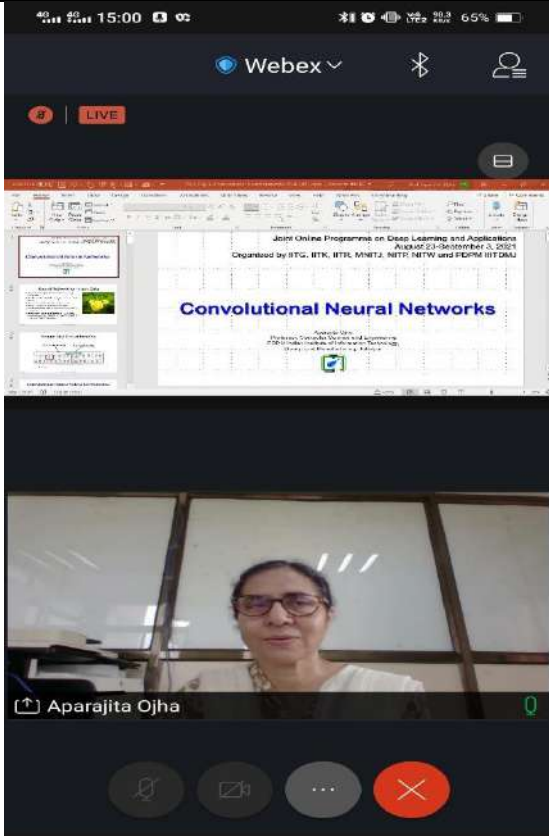
Friday

L12:MATLABTeam
WaveletswithCNNP8:MATLABTeam
Generative
AdversarialNetworks
7:30-7:45Valedictory

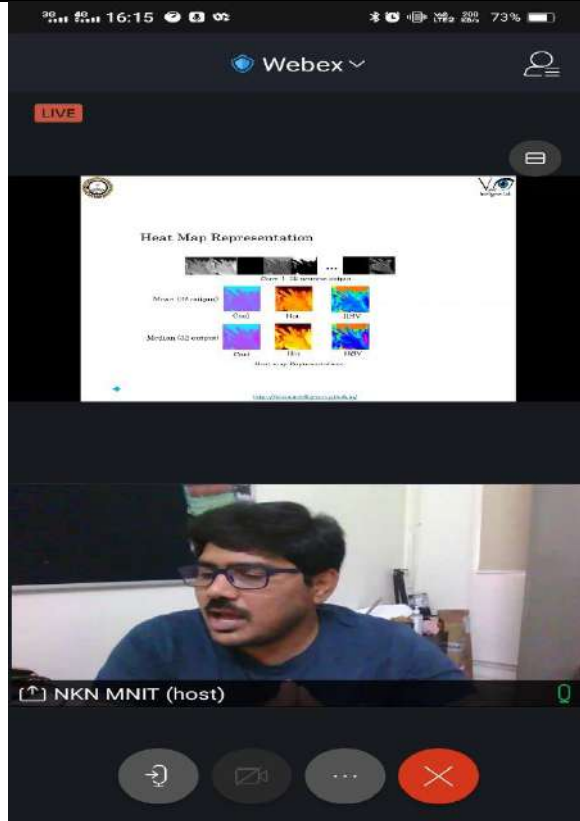
Inaugural address by **Dr.AparajithaOjha, IIT Guwahati.**



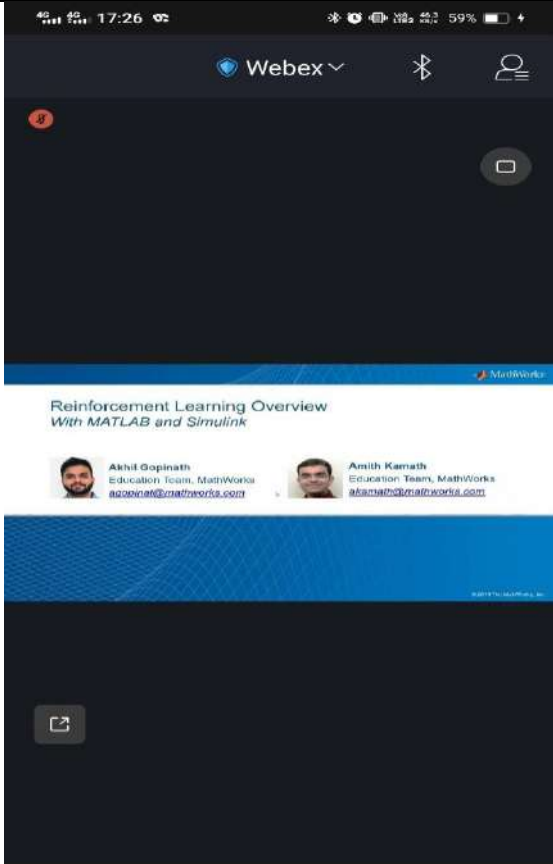
Key note speech by **Dr. Sanjeev Manhas.**



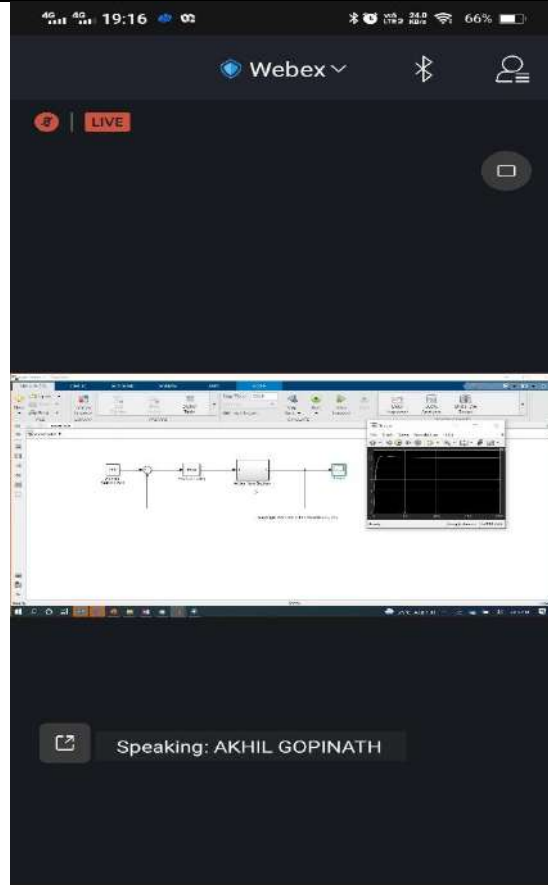
Session on Convolution Neural Networks by **Dr.AparajithaOjha, IIT Guwahati.**



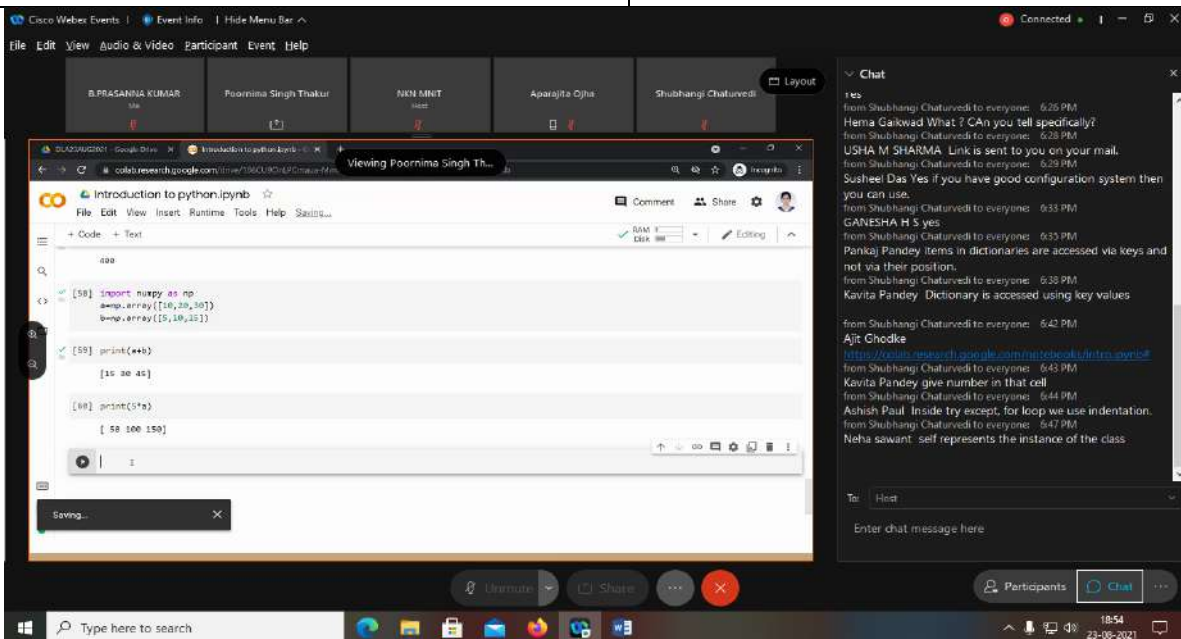
Session on Facial Expression Recognition using CNN by **Dr.SantoshVipparthi, MNIT Jaipur**



Hands on MATLAB by Mr. AkhilGopinadh and Amith Kamath form MathWorks



Hands on Simulink



Hands on Python Lab

The screenshot shows a Zoom meeting interface with participants: B.PRASANNA KUMAR, Poojima Singh Thakur, NIKH MNIT, and Shubhangi Chaturvedi. The main window displays a Jupyter Notebook titled 'ANN Classifications.ipynb'. The code includes data preprocessing steps and model selection:

```

11]
...
[0.29411765, 0.8880482, 0.59816393, ..., 0.398462, 0.87136658,
0.15
],
[0.05823351, 0.43315583, 0.49188528, ..., 0.4485942, 0.11571387,
0.43333333],
[0.05823351, 0.40773568, 0.57377883, ..., 0.45305514, 0.1011955,
0.43333333]]

12] from keras.utils import np_utils
exceed_Y = np_utils.to_categorical(Y)
encode_Y

array([[0., 1.],
[1., 0.],
[0., 1.],
...
[1., 0.],
[0., 1.],
[1., 0.]]) dtype=float32

from sklearn.model_selection import train_test_split
    
```

Hands on ANN Classification using Python

The screenshot shows a Zoom meeting interface with participants: B.PRASANNA KUMAR, Kuldeep Birdar, Aparajita Ojha, Monu Verma, and NIKH MNIT. The main window displays a Jupyter Notebook with code for building a neural network model:

```

conv2 = tf.keras.layers.Conv2D(32,(3,3),strides=(1,1),padding='same',activation='relu')(conv1)
max2 = tf.keras.layers.MaxPooling2D((2,2))(conv2)
flat = tf.keras.layers.Flatten()(max2)
dense1 = tf.keras.layers.Dense(100)(flat)
model = tf.keras.models.Model([input_data,max2])

model.summary()
    
```

The model summary is as follows:

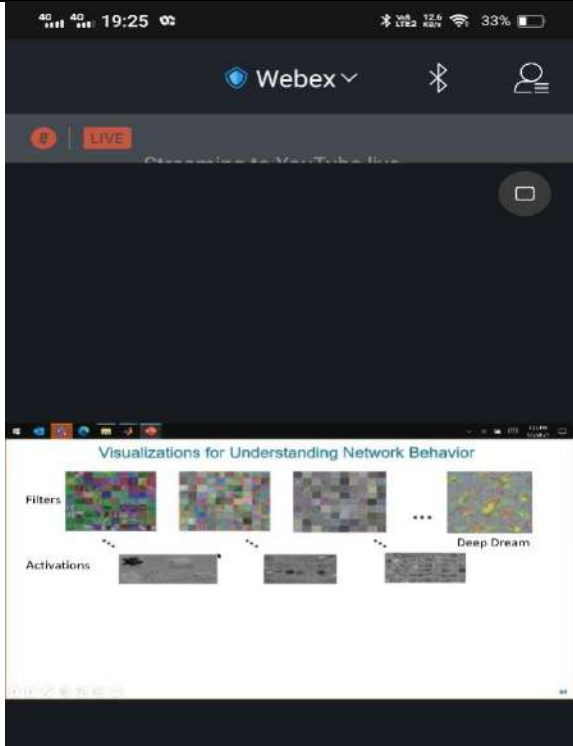
Layer (type)	Output Shape	Param #
Input_10 (InputLayer)	(None, 28, 28, 1)	0
Conv2D_10 (Conv2D)	(None, 24, 24, 32)	320
MaxPooling2D_7 (MaxPooling2D)	(None, 12, 12, 32)	0
Conv2D_17 (Conv2D)	(None, 10, 10, 64)	18496
AveragePooling2D_2 (AveragePooling2D)	(None, 5, 5, 64)	0
Conv2D_18 (Conv2D)	(None, 7, 7, 128)	73496
MaxPooling2D_8 (MaxPooling2D)	(None, 3, 3, 128)	0

Hands on session by Dr.KuldeepBirdar

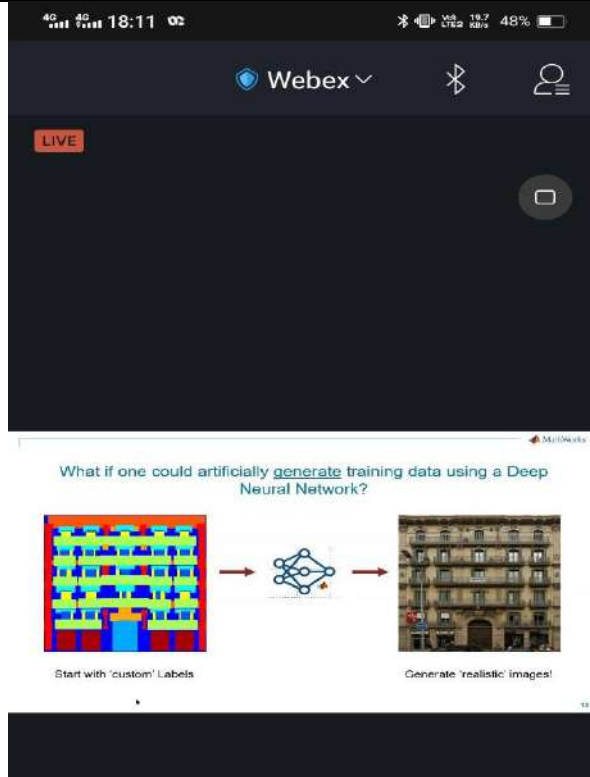
The screenshot shows a Cisco Webex meeting interface. At the top, the meeting title is "Cisco Webex Events | Event Info | Hide Menu Bar". Below the title bar, there are buttons for "File", "Edit", "View", "Audio & Video", "Participant", "Event", and "Help". The main content area is divided into two parts. On the left, a Jupyter Notebook titled "Untitled15.ipynb" is open, showing code for defining a MobileNet architecture. The code includes parameters like `input_shape=(224, 224, 3)`, `include_top=False`, `weights='imagenet'`, and `input_tensor='ini'`. A search bar in the notebook interface shows "Found 18 images by" and a reference link: <https://arxiv.org/abs/1704.04861>. On the right, a "Participants" panel is visible, listing the host "NKN MNIT" and attendees "Monu Varma", "kuldeep biradar", "Poornima Singh Thakur", and "B.PRASANNA KUMAR". The bottom of the screen shows a Windows taskbar with the date "26-08-2021" and time "18:03".

Hands on session by Dr. Monu Varma

Department of Computer Science and Engineering



Session on Visualizations for understanding Network Behaviour



Session on Deep Neural Networks

Guest Lectures/Seminars/Workshops/FDPs/Webinars Attended or Organized

S.No	Faculty Name	Event Type	Title of the event	Venue	No of Days	From Date	To Date	Role
1	KOTHA CHANDANA	FDP	DEEP LEARNING & ITS APPLICATIONS (PARALLEL ARCHITECTURES)	Online	14 days	23/08/2021	3/9/2021	Attended
2	Dr. A.GOPI	FDP	"Deep Learning & Applications (Parallel Architectures)	online	10	23/08/2021	3/9/2021	Attended
3	Dr. A. GOPI	FDP	Block Chain Technologies	ONLINE	5	6/9/2021	10/9/2021	Attended
4	MOHAMMAD RIYAZUDDIN	FDP	Deep Learning & it's applications	Electronics and ICT Academies	TWO WEEKS	23/08/2021	3/9/2021	Attended
5	SANDEEP KUMAR ARUDRA	FDP	Deep Learning & Application	Electronics and ICT Academies	14 days	23/08/2021	3/9/2021	Attended
6	Dr.S.RADHAKRISHNAN	FDP	INNOVATION MANAGEMENT	ONLINE	5	6/9/2021	10/9/2021	Attended
7	M. Purnachandra Rao	FDP	Deep Learning & Applications(Parallel Architectures)	online	2 weeks	23/08/2021	3/9/2021	Attended
8	G. Rohini Phaneendra Kumari	FDP	Deep learning & Applications	KKR & KSR Institute of Technology & sciences	10 days	23/08/2021	3/9/2021	Attended

9	B. PRASANNA KUMAR	FDP	Deep Learning & its Application (Parallel Architecture)	E&ICT Academy, IIT Guwahati	12	23/08/2021	3/9/2021	Attended
10	SANDEEP KUMAR ARUDRA	STTP/ TRAINING PROGRAM	Augmented Reality and Virtual Reality	MVGR College of Engineering	Six days	20/09/2021	25/09/2021	Attended
11	John Saida Mohammad	STTP/ TRAINING PROGRAM	Augmented Reality and Virtual Reality	MVGR College Of Engineering, Vizianagaram.	6	20/09/2021	25/09/2021	Attended
12	KOTHA CHANDANA	FDP	DEEP LEARNING & ITS APPLICATIONS (PARALLEL ARCHITECTURES)	Online	14 days	23/08/2021	3/9/2021	Attended

STUDENTS ACHIEVEMENTS

Campus Placement Details

- Pool Campus Drive Test was conducted for IV CSE students from 12-09-2021 to 19-09-2021. 54 students qualified in Test and advanced to further rounds. Among 54 students, 14 students qualified for Toppers Test (7.0 Lakhs per Annum package) and 40 students qualified for Interview (3.6 Lakhs per Annum package) The details are given below:

SNO	REGDNO	NAME	Toppers Test/ Interview
1	18JR1A0504	BANDI MEGHANA	Interview
2	18JR1A0506	BOMMAREDDY SAI CHARITHA	Interview

3	18JR1A0508	BURAGADDA VYSHNAVI	Interview
4	18JR1A0511	CHEJARLA YOGESWARI SAI PREETHI	Interview
5	18JR1A0513	CHERUKURI SIRISHA	Interview
6	18JR1A0514	CHINTALAPUDI PRASANNA	Interview
7	18JR1A0515	DANABOINA BHARGAVI	Interview
8	18JR1A0516	DANNAVARAPU LAKSHMIMOUNIKA	Interview
9	18JR1A0517	DASARI RAMYA	Interview
10	18JR1A0526	G MAHESWARI	Interview
11	18JR1A0527	GUDE KRITHIKA	Interview
12	18JR1A0530	INTURI MADHURI	Toppers Test
13	18JR1A0531	JANAMALA MOUNIKA	Interview
14	18JR1A0533	KALLAM HARIKA	Toppers Test
15	18JR1A0535	ANNAM VENKATESH BABU	Toppers Test
16	18JR1A0540	BONDILI RANA PRATHAP SINGH	Interview
17	18JR1A0555	GAVIRIBOINA SIVASAI	Interview
18	18JR1A0557	GOPIDESI BALACHENNAIAH	Toppers Test
19	18JR1A0560	KATTA SUPRAJA	Interview
20	18JR1A0563	KOMMU LAVANYA	Interview
21	18JR1A0568	KOUSALYA SIVA VYSHNAVI PRIYA	Interview
22	18JR1A0569	KSHATRI BABY LALITHA	Interview
23	18JR1A0575	MADDULA MONIKA	Interview
24	18JR1A0578	MATURI HARITHA SRI	Toppers Test
25	18JR1A0580	NARAMALA SWARNA SRI	Interview
26	18JR1A0581	NARU KAVITHA	Interview
27	18JR1A0582	NISSANKARA RAO VENKATA SAI BALA CHANDRIKA	Toppers Test
28	18JR1A0584	PENTYALA SRI LATHA	Toppers Test
29	18JR1A0590	POTTA GOWRI	Interview

30	18JR1A0597	KOCHARLA RAJA	Toppers Test
31	18JR1A0599	KOYA ARAVIND	Interview
32	18JR1A05A0	KRANTHI KUMAR MUNNANGI	Interview
33	18JR1A05A7	MALLAMPALLI RAGHUVAMSI	Interview
34	18JR1A05A8	MALLAVARAPU KETHAN KUMAR	Interview
35	18JR1A05B2	MIDATALA SIVA NAGA RAJU	Interview
36	18JR1A05B7	PRATHI SUMITHRA	Toppers Test
37	18JR1A05C0	RAMINENI NAGALAKSHMI	Interview
38	18JR1A05C3	SAYAPANENI MEGHANA	Toppers Test
39	18JR1A05D0	SHAIK SALMA RAHIMUNNISA	Interview
40	18JR1A05D1	SIDDABATHULA DHANA LAKSHMI	Interview
41	18JR1A05D3	SYED TABASSUM	Interview
42	18JR1A05D5	TAVVA MONIKA RANI	Toppers Test
43	18JR1A05D6	THIRUVAYIPATI AMULYA	Interview
44	18JR1A05D7	THORLIKONDA SAI SUSHMA	Interview
45	18JR1A05D8	VANDAMASU GNANA MANOGNA	Interview
46	18JR1A05E4	VENNA RUPA SRI THANMAI	Interview
47	18JR1A05E6	YARAMOTHU NAVYASAI	Interview
48	18JR1A05E7	YERUSU VENKATA RAJESWARI	Interview
49	18JR1A05F3	POTTI VENKATA SIVA SAI SUMANTH	Toppers Test
50	18JR1A05G5	SHIAK JAFAR SADIK	Toppers Test
51	18JR1A05H1	THALABATTULA SAMUEL PREM KUMAR	Interview
52	18JR1A05H3	VAJRALA DAYAKAR REDDY	Interview
53	18JR1A05H5	Y BADRI	Toppers Test
54	19JR5A0506	VULLI HANUMANTHA RAO	Interview
No.of Students Qualified for Toppers Test			14
No.of Students Qualified for Interview			40

Total	54
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- Training Classes are conducted from 20th-23rd September, 2021 for IV CSE students in connection to Wipro Pool Campus Drive Test scheduled from 25th September 2021.