TEQIP-III SPONSORED
FACULTY DEVELOPMENT PROGRAM
ON
"MACHINE LEARNING AND SMART ELECTRONIC SYSTEM"
(MLSES-2020)

03th-05th September, 2020

Organized by

Rajasthan Technical University, Kota

&

Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Host Institute

Department of Electronics & Communication
Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur-302017
www.skit.ac.in

A
Report
on
Three Days
Faculty Development Program
Machine Learning and Smart Electronic System
MLSES-2020
3rd – 5th September 2020

Sponsored by TEQIP III

RTU Event Coordinator:

Mr. Riyaz Ahmad

Host Institute Coordinators:

Ms. Kiran Rathi
Mr. Vikas Pathak
Ms. Pooja Choudhary

Organized By

Rajasthan Technical University, Kota
&
Swami Keshvanand Institute of Technology Management & Gramothan, Jaipur

Host Institute

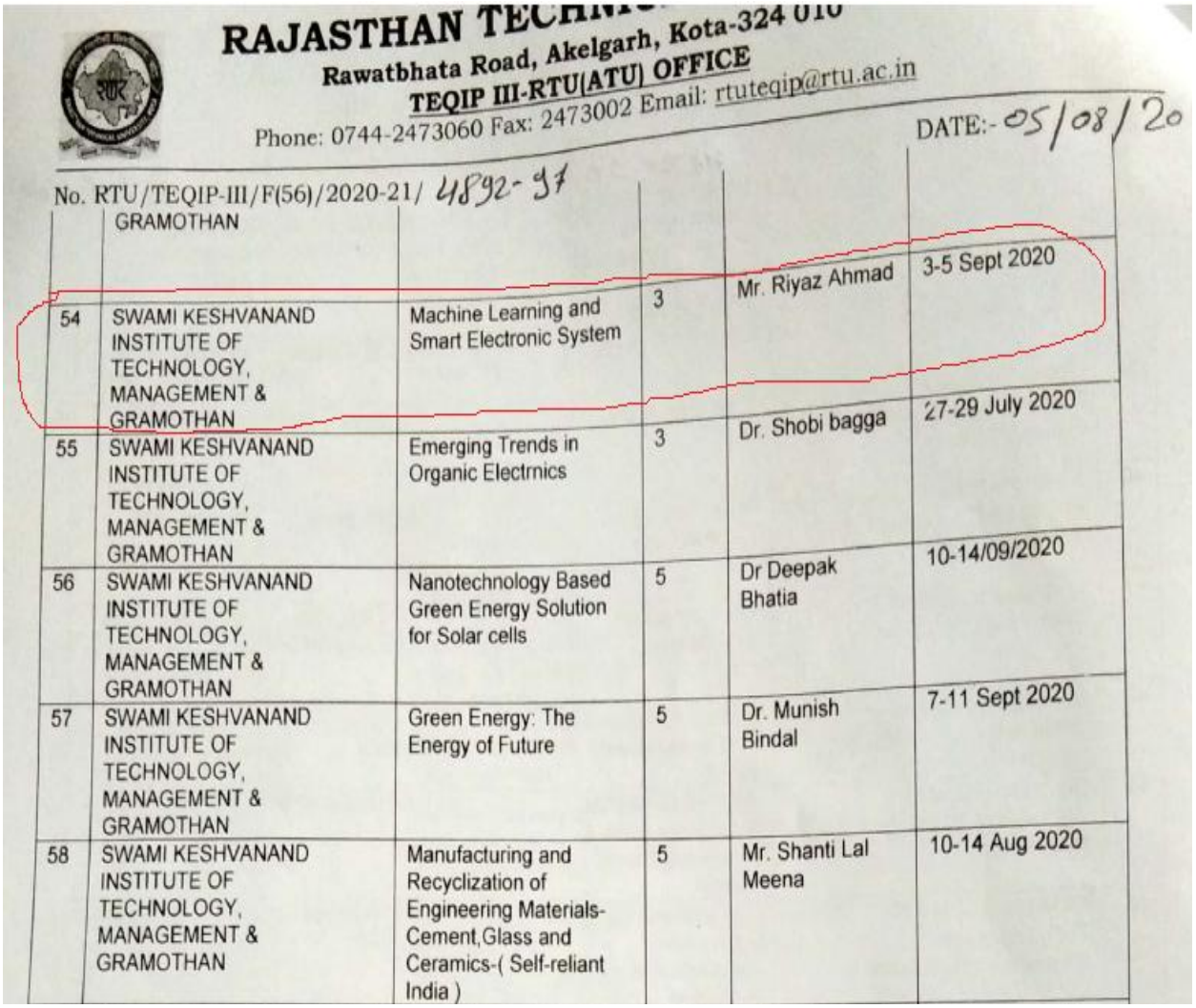
Department of Electronics and Communication Engineering
Swami Keshvanand Institute of Technology Management & Gramothan, Jaipur

Approval Letter

Notice

No. RTU/TEQIP-II/F(56)/2020-21/4892-97 **Date: 05/08/20**

Hon'ble Vice-Chancellor is pleased to approve the FDP program to be conducted in online mode at the affiliated college under subhead 1.2.2.4 of RTU (ATU) TEQIP-III Action plan as per the mentioned Schedule.



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TEQIP III-RTU(ATU) OFFICE
Phone: 0744-2473060 Fax: 2473002 Email: rtuteqip@rtu.ac.in

DATE:- 05/08/20

No. RTU/TEQIP-III/F(56)/2020-21/ 4892-97

	GRAMOTHAN				
54	SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN	Machine Learning and Smart Electronic System	3	Mr. Riyaz Ahmad	3-5 Sept 2020
55	SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN	Emerging Trends in Organic Electrnics	3	Dr. Shobi bagga	27-29 July 2020
56	SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN	Nanotechnology Based Green Energy Solution for Solar cells	5	Dr Deepak Bhatia	10-14/09/2020
57	SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN	Green Energy: The Energy of Future	5	Dr. Munish Bindal	7-11 Sept 2020
58	SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN	Manufacturing and Recyclization of Engineering Materials-Cement,Glass and Ceramics-(Self-reliant India)	5	Mr. Shanti Lal Meena	10-14 Aug 2020

OBJECTIVE OF MLSES-2020

Machine Learning (ML) and smart electronics play a significant role in the modern engineering and information processing systems. It is a rapidly growing field. The Machine Learning is an essential part of pattern recognition, object detection and classification, clustering, data mining and speech recognition etc. Current trends demand for efficient and secured electronic systems for commercial and industrial applications.

The aim of this FDP is to provide an exposure to both basics and recent advances in Machine Learning and smart electronic systems to the teaching and research communities.

- To introduce basics of Machine Learning and deep learning
- Establishing the basic concept of Embedded Systems with smart electronics
- To introduce the machine learning in healthcare
- Learning the various aspects of Smart electronics like smart hearing aids, Wireless sensor network and cyber physical system for health care.

COURSE PROGRAM

- The program is split into various lectures.
- Assignment for enhanced learning.
- Interaction and learning with experts from academia.
- Certificate to the participants by TEQIP III and RTU Kota.

CONTENT OF THE FDP

- Machine Learning - I
- Embedded Systems for smart electronics
- Cyber Physical system for healthcare
- Machine Learning – II
- Introduction to deep Learning
- Wireless sensor network
- Machine Learning in Healthcare
- Smart Hearing aids

OUTCOMES OF THE COURSE

Faculties, Researchers have

- Understood the fundamentals of machine learning and deep learning.
- Known the main techniques in deep learning and the main research in this field.
- Established the basic concepts and key components of machine learning
- Ability to design and implement neural network systems
- Got the concept of applications of machine learning in healthcare systems
- Learned the various aspects of Smart electronic systems like - smart hearing aids, Wireless sensor network and cyber physical system for health care.
- Analyzed the abilities & limits of the latest techniques and with this they may guide the students regarding the same.
- Got the flavor of different areas of machine learning, deep learning and smart electronics systems resulting in publications and product development.
- Appreciate the underlying mathematical relationships within and across Machine Learning algorithms and the paradigms of supervised and un-supervised learning.
- Ability to design and implement various machine learning algorithms in a range of real-world applications.

EXPERT DETAILS

1. **Dr. S. J. Nanda (MNIT, Jaipur),**
   Assistant Professor,
   Department of Electronics and Communication Engineering,
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   Department of Electronics and Communication Engineering

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Event Coordinator's Details

Mr. Riyaz Ahmad

(RTU Event Coordinator)

Assistant Professor

Electronics and Communication Engineering Department

University Departments, Rajasthan Technical University, Kota

Host Institute Co-ordinator Details

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RESOURCE PERSON

The Various sessions of the FDP preceded by the experts from IITs, NITs and other reputed institutes.

REGESTRATION FEE

There is No Registration Fee.

TARGETED AUDIENCE

Faculty of various engineering institutes affiliated to Rajasthan Technical University, Bikaner Technical University and other academic institutions.

FDP SCHEDULE

RAJASTHAN TECHNICAL UNIVERSITY, KOTA
SWAMI KESHVANAND INSTITUTE of TECHNOLOGY, MANAGEMENT & GRAMOTHAN, JAIPUR
TEQIP-III RTU (ATU) SPONSORED
Three Days Faculty Development Programme
on
Machine Learning and Smart Electronics System
(03/09/2020 to 05/09/2020)

VENUE: SKIT M & G, Jaipur
FDP SCHEDULE

DAY/DATE	Session –I 10:00 -11:30 AM	Session – II 11:45 AM – 12:45 PM	Session – III 2:00 PM – 3:30 PM
Thursday **03-09-2020**	**Online Inauguration** **(9:30 AM-10:00 AM)** Machine Learning -I **(10:00-11:30)** **EXPERT : Dr. S. J. Nanda** **MNIT Jaipur**	Embedded Systems for Smart Electronics **EXPERT : Dr. Lava Bhargava,** **MNIT Jaipur**	Cyber Physical System for healthcare **Expert: Dr. Amit M. Joshi** **MNIT, Jaipur**
Friday **04-09-2020**	Machine Learning -II **EXPERT : Dr. Nithin V. George** **IIT, Gandhi Nagar**	Introduction to Deep Learning **EXPERT : Dr. Kuldeep Singh** **MNIT Jaipur**	Wireless Sensor Network **EXPERT : Dr. Trilochan Panigrahi** **NIT Goa**
Saturday **05-09-2020**	Machine Learning in Health care	Smart Hearing Aids	**Feedback and Valedictory**

	EXPERT : Dr. Sitanshu S. Sahu **BIT Mesra, Ranchi**	**EXPERT : Dr. Vasundhara** **NIT Warangal**	**(12:45 PM – 1:15 PM)**

Note: First break from 11:30 am to 11:40 am, and second break from 12:45 to 2:00 pm

Riyaz Ahmad
RTU Coordinator

Ms. Kiran Rathi
Mr. Vikas Pathak
Ms. Pooja Choudhary
Host Institute Coordinator

Signature & Seal
Head of Institute

PRINCIPAL
Swami Keshvanand Institute of

LIST of PARTICIPANTS

S. No.	Salute	Name of Participant	Department	Designation	Institute
1	Mr.	ABHAY KUMAR	Associate Professor	Computer Science and Engineering	J B Institute of Engineering and Technology
2	Mr.	Abhinandan Jain	Assistant Professor	ECE	SKIT.JAIPUR
3	Mr.	Abhishek Sharma	Associate Professor	Electronics and Comm. Engg.	Stani Memorial College of Engineering & Technology, Phagi - Jaipur
4	Dr.	Abidoye Luqman Kolawole	Senior lecturer/ Head of Department	Chemical Engineering	Osun State University
5	Mr.	Adolph Sedem Yaw Adu	Lecturer	Computer Science	Ho Technical University
6	Ms.	Aisha Jangid	Assistant Professor	ECE	JIET Jodhpur
7	Mr.	Ajay Rupani	Assistant Professor	ECE	JIET JODHPUR
8	Mr.	Akash Deo	Assistant Professor	Electrical engineering	skit jaipur
9	Mr.	Akwashiki OMBUGADU	Lecturer	Department of Zoology	Federal University of Lafia
10	Mr.	Akwasi Asiedu	Lecturer	Computer Science	Ho Technical University
11	Mr.	AMAR RANJAN DASH	Assistant Professor	COMPUTER SCIENCE & ENGINEER	PARALA MAHARAJA ENGINEERING COLLEGE
12	Mr.	Amaresh Choudhury	Lecturer	Electrical Engineering	Nilachal Polytechnic
13	Dr.	Ambar Bajpai	Assoc Prof	ECE	Atria Institute of Technology, Bangalore
14	Mr.	AMIT KUMAR KAUSHIK	ASSISTANT PROFESSOR	ELECTRICAL ENGINEERING	VAISH COLLEGE OF ENGINEERING, ROHTAK, HARYANA
15	Mr.	Amit Kumar Sharma	Assistant Professor	Computer Science	Sri Balaji College Of Engineering & Technology
16	Mr.	AMIT SHARMA	Associate Professor	ECE	Arya College Of Engineering & I.T.
17	Ms.	Amruta Satish Jondhale	Assistant professor	Instrumentation and control	Pravara Rural Engineering College
18	Mr.	Ananta Kumar Sahoo	Assistant professor	Electrical Engineering	Synergy institute of engineering and technology
19	Prof.	Anil. A. R	Associate Professor	Computer Science & Engineering	Sree Buddha College of Engineering

20	Mr.	Anish. T. P	Assistant Professor	Computer Science and Engineering	St. Peter's College of Engineering and Technology
21	Mr.	Ankit Vijayvargiya	Associate Professor	Electrical Engineering	Swami Keshvanand Institute of Technology, Management & Gramothan
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23	Ms.	Aparna Ashok Kamble	Assistant professor	Computer science	Mitwpu pune
24	Ms.	ARPITA MISHRA	ASSOCIATE	IT	CET, BBSR
25	Ms.	Arpita Sharma	Ta	Ece	Riet
26	Mr.	Ashish Sharma	Assistant professor	ECE	JECRC Foundation
27	Dr.	Aswini.J	Assistant Professor	CSe	Saveetha School of Engineering
28	Mr.	AVADHESH KUMAR SHARMA	Assistant professor	Electrical Engineering	Swami Keshvanand Institute of Technology Management & Gramothan Jaipur
29	Dr.	B.Rajesh Shyamala Devi	Assistant Professor	Electronics and Communication Engineering	Hindustan Institute of Technology and Science
30	Prof.	Babasaheb Bapu Waghmode	Asst.professor	Computer engineering	SMSMPITR, Akluj
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33	Ms.	BHARTI	Assistant Professor	Computer Science and Engineering	Baddi University of Emerging Sciences and Technologies, Baddi
34	Mr.	CHANDAN KUMAR BARICK	DIRECTOR	ELECTRICAL ENGINEERING	GENESIS ENGINEERING
35	Mr.	Chandan shaw	Lecturer	Science and technology	Government polytechnic munger
36	Mr.	Chougule abhijit	Assistant professor	Electronics	Bvcoek
37	Mr.	Cylirus Albert Kaijage	Applied Statistician	Data Management and Information Technology	National Institute for Medical Research
38	Mr.	D V S RAMANJANEYULU	Assistant professor	ECE	Ace engineering college
39	Mr.	David Victor Anataku	Technologist	Electrical electronic engineering	Federal polytechnic Bida
40	Ms.	Deepa Modi	Assistant Professor	CSE	SKIT
41	Mr.	Deepak Asudani	Assistant	Computer	KITS, Ramtek

			Professor	Technology	
42	Mr.	Deepak shankhala	Asst professor	Ece	JECRC
43	Mr.	Digambar Puri	Assistant professor	Extc	RAIT Nerul Navi Mumbai
44	Mr.	Dinesh Bhatia	Assistant Professor	Electronics Engineering	University Departments, RTU, Kota
45	Mr.	Dr G.S.sarma	Professor	ECE	St marys group of colleges
46	Dr.	Dr. B Venkata Raman	Professor	Research and Development	Audisankara College of Engineering and Technology
47	Dr.	Dr. H. JOSEPH PRABHAKAR WILLIAMS	PROFESSOR & HEAD/EEE	EEE	SRI INDU COLLEGE OF ENGINEERING AND TECHNOLOGY, HYDERABAD -501510
48	Dr.	Dr. Nayani Kishore Nath	Scientist-G and Project Director-VEDA	Management	Advanced Systems Laboratory
49	Dr.	Dr.E.THANGASELVI	Assistant professor	ECE	PSNA College of engineering and technology
50	Dr.	Dr.Sunil Datt Sharma	Assistant Professor	ECE	Jaypee University of Information Technology
51	Dr.	Dr.Sushilkumar N Holambe	Associate Professor	CSE	TPCT'S college of engineering OSMANABAD
52	Ms.	Ekta Soni	Research scholar	Electronics and communication	G.D.Goenka University
53	Ms.	Etika Goyal	Assistant professor	Electronics and communication	Stani Memorial College of Engineering and Technology
54	Dr.	G.ARUN SAMPAUL THOMAS	Associate Professor	CSE	JBIET
55	Mr.	G.Boopathi Raja	Assistant Professor	ECE	Velalar College of Engineering and Technology
56	Mr.	GAJULA SRI VENKATA RAMA ABHISHEK	Assistant Professor	Computer Science And Engineering	BHIMAVARAM INSTITUTE OF ENGINEERING AND TECHNOLOGY
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60	Ms.	Gloria Joseph	Assistant professor	ECE	Swami keshwanand institute of technology
61	Dr.	Gokulananda Sahu	Associate Professor	Electronics and Communication Engineering	Bhubaneswar College of Engineering
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64	Mr.	Hemraj Kumawat	Assistant Prof.	ECE	SBNITM Jaipur
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101	Mr.	Mr. JOGESWAR TRIPATHY	Research Scholar	CSE	ITER, S'O'A DEEMED TO BE UNIVERSITY ODISHA

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128	Dr.	Pankaj kumar	Assistant professor	Mathematics	Ramjas college
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130	Mr.	Patrick Aalangdong	IT Engineer	Corporate Management and Services	Kwame Nkrumah University of Science and Technology
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132	Prof.	Pooja Vitthal Baravkar	Assistant Professor	Computer Engineering	SMSMPITR,Akluj
133	Prof.	Prachi Sarode	Assistant Professor	School of Computer Engineering & Technology	MIT WPU University Pune
134	Mr.	PRASAD PRAKASH KULKARNI	Assistant Professor	Electronics and Telecommunication Engineering	NK Orchid College of Engineering and Technology Solapur
135	Mr.	PRASHANTH KUMAR A P	Head of the Department	Electronics and Communication Engineering	Aryabharathi Polytechnic
136	Dr.	Praveen Kumar Jain	Professor	ECE	Swami Keshvanand Institute of Technology, Management & Gramothan
137	Ms.	Priyanka Karjal (Panji)	Asst. Professor	Entc	Plgp
138	Ms.	Priyanka Sharma	Assistant Professor	CS	SKIT
139	Ms.	Priyanka Trikha	Assistant Professor	CSE	Skit,Jaipur
140	Prof.	Prof. Suraj Shivaji Bhoite	Assistant Professor	Computer science and engineering	SMSMP Institute of Technology and Research Akluj
141	Mr.	PURNA CHANDRA SETHI	ASSISTANT PROFESSOR	COMPUTER SCIENCE	RAMA DEVI WOMEN'S UNIVERSITY
142	Dr.	R. Sankarganesh	Associate	Electrical and	Vinayaka Mission's

			Professor	Electronics Engineering	Kirupananda Variyar Engineering College
143	Ms.	R.MAHALAKSHMI	LECTURER	Computer Engineering	NPA CENTENARY POLYTECHNIC COLLEGE
144	Mr.	R.SARAVANAN	Assistant Professor	ECE	PSNA College of Engineering and Technology
145	Dr.	R.Velmurugan	Professor	Electrical and Electronics Engineering	Malla Reddy Engineering College for Women
146	Mr.	Rahul Pandey	Assistant Professor	ECE	SKIT
147	Dr.	Rajesh Bhatt	Associate Professor	Electronics Engineering	University Departments, Rajasthan Technical University, Kota
148	Mr.	RAJESH KANWADIA	Assistant Professor	Electronics and Communication	Shankara Institute of Technology
149	Mr.	Rajesh U Yawle	Assistant professor	Electronics and telecommunications engineering	Sinhgad Academy of Engineering Kondhwa pune
150	Ms.	Rajni Idiwal	Assistant Professor	ECE	Swami Keshvanand Institute of Technology ,Management and Gramothan
151	Mr.	Rakesh Kumar Sharma	Assistant Professor	ECE	Arya College of Engineering & IT
152	Mr.	Ratnesh Kumar Shukla	Assistant Professor	CSE	CCSIT TMU Moradabad, Uttar Pradesh
153	Mr.	Ravishankar Shaligram Kankale	Assistant Professor	Electrical Engineering	Shri Sant Gajanan Maharaj College of Engineering Shegaon
154	Ms.	RICHA SHARMA	ASSISTANT PROFESSOR	ECE	SKIT
155	Ms.	Ritu Yadav	Assistant professor	Electronics and communication	Vaish college of engineering
156	Prof.	RS Meena	Professor	EC department RTU Kota	RTU Kota
157	Ms.	RUCHI YADAV	RESEARCH SCHOLARS	ELECTRONICS AND COMMUNICATION ENGINEERING	SHARDA UNIVERSITY
158	Mr.	RUDRA PRATAP SINGH	Assistant professor	Electrical Engineering	UNIVERSITY DEPARTMENT RAJASTHAN TECHNICAL UNIVERSITY KOTA
159	Dr.	Rukhsar Zafar	Associate Professor	ECE	Swami Keshavanad Institute of Technology Jaipur
160	Mr.	RUPESH KUMAR RAWAT	LECTURER	ELECTRONICS & COMMUNICA	JNU

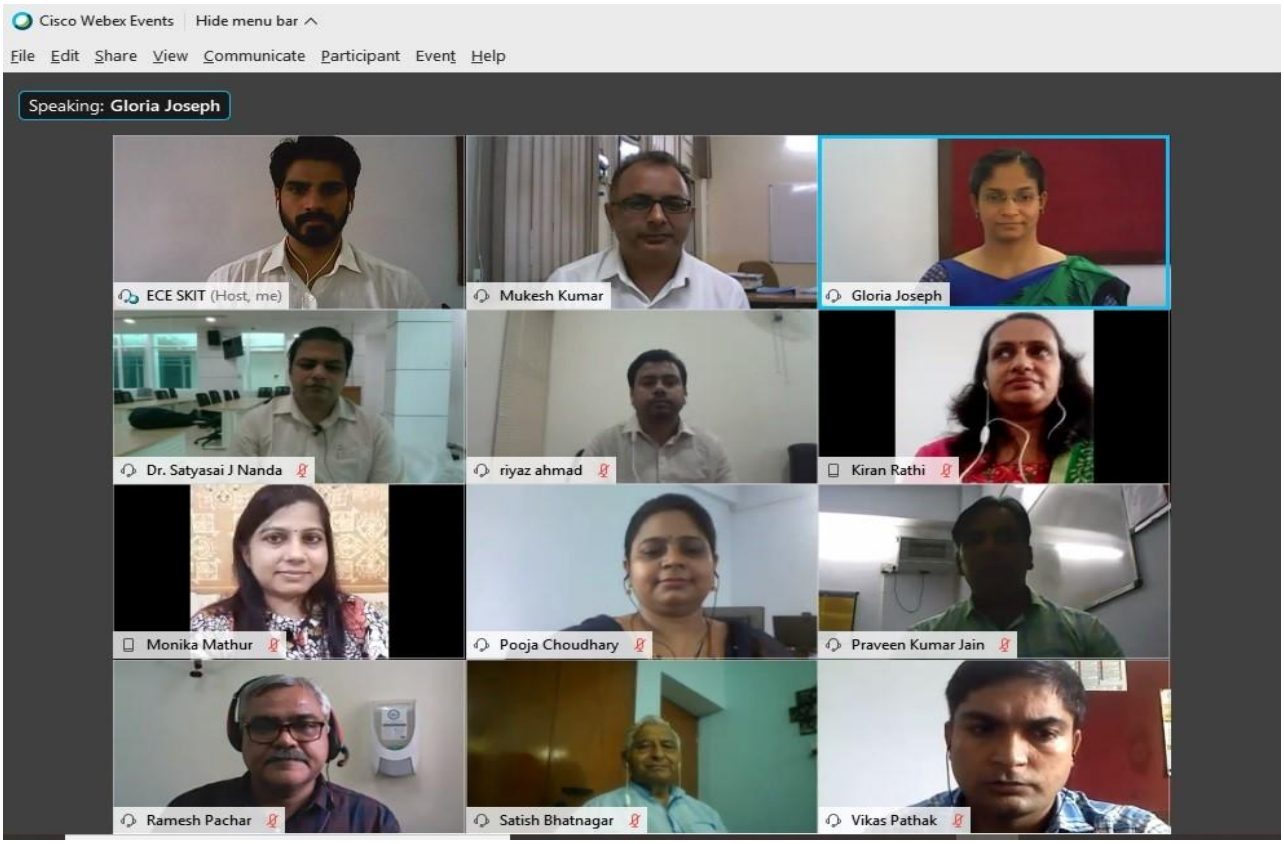
				TIONS	
161	Dr.	S SRINIVASULU RAJU	Assistant Professor	EIE	Velagapudi Ramakrishna Siddhartha Engineering College
162	Ms.	S VENNILA	Teacher	Mathematics	GHSS, KARISAVAYAL, THANJAVUR DT, TAMIL NADU
163	Dr.	S. K. Bhatnagar	Director (Research)	ECE	SKIT
164	Mr.	S.ELANGO	Assistant Professor	EEE	Nandha Engineering College
165	Mr.	S.GOWDHAM KUMAR	TRAINING OFFICER	INDUSTRIAL INSTITUTE	PSG INDUSTRIAL INSTITUTE
166	Dr.	S.SRINATH	Professor	EEE	Velammal Engineering College,Chennai
167	Dr.	S.Srinivasan	Associate Professor	Computer Science & IT	Jain Deemed to be University
168	Dr.	Sachin Agrawal	Assistant Professor	CSE	College of Engineering and Technology, Akol
169	Mr.	Sachin Balo	Assistant Professor	IT	MCKV Institute of Engineering
170	Mr.	Sambhaji Sarode	Assistant professor	Computer science and Engineering, MIT ADT University.	MIT ADT University
171	Ms.	Sancy Mirandah	Trainee	HSTG	CDAC
172	Mr.	Sandeep Kumar Dotya	Assistant professor	Electronics and communication	JECRC JAIPUR
173	Mr.	Sandeep Mandia	Assistant professor	ECE	Govt. Women Engineering College
174	Mr.	SANDEEP SINGH	Assistant professor	Electrical Engineering	VAISH COLLEGE OF ENGINEERING
175	Dr.	Sandhya Save	Professor	Electronics	TCET
176	Dr.	SANDIP D SATAV	Associate Professor	Information Technology	JSPM's Jayawantrao Sawant COE Pune 411028
177	Ms.	Sanghamitra Behera	Assistant professor	Electrical Engineering	DRIEMS POLYTECHNIC
178	Mr.	SANJAY BHANDARI	ASSOCIATE PROFESSOR	ECE	JODHPUR INSTITUTE OF ENGINEERING & TECHNOLOGY
179	Mr.	Sanjay Kumar Tehariya	Assistant professor	Computer Science and engineering	Ujjain Engineering College Ujjain
180	Mr.	Satendra Singh	Assistant Professor	Mechanical Engineering	Vivekananda Institute of Technology, Jaipur
181	Prof.	Satyaprakash Rout	Assistant Professor	Electrical Engineering	DRIEMS (AUTONOMOUS)
182	Mr.	SATYENDRA	Research	Computer	Gurukula Kangri

		SINGH	Scholar	Science	Vishwavidyala Haridwar Uttarakhand
183	Mr.	Saurabh Gupta	Assistant professor	ME	SKIT JAIPUR
184	Dr.	SENGOLRAJAN T	Associate Professor	EEE	Kongunadu College of Engineering and Technology (Autonomous)
185	Dr.	Shailendra Tripathi	Assistant Professor	ECE	Sharda University
186	Ms.	Shanu Tripathi	Assistant Professor	Computer Science & Engineering	Swami Keshvanand Institute of Technology, Management & Gramothan
187	Ms.	SHARMISTHA BANERJEE	Asst Professor	MCA	MCKV Institute of Engineering
188	Ms.	shiksha Jain	Assistant Professor	ECE	I.E.T
189	Dr.	Shishir Jagtap	Assistant Professor	ECS	Pillai College of Engineering
190	Ms.	Shivangi Bansal	Assistant professor	ECE	NIU
191	Mr.	Shivom Keshary	Research Scholar	Instrumentation and control engineering	Kalasalingam Academy of Research Education
192	Prof.	Shubhangi Mangesh Verulkar	ASSISTANT PROFESSOR	Information Technology	K.C.COLLEGE OF ENGINEERING AND MANAGEMENT STUDIES AND RESEARCH
193	Dr.	Shubhi Jain	Assistant Professor	ECE	SKIT College
194	Ms.	Shweta Agrawal	Assistant professor	Electronic and communications	Shankara institute of technology kukas jaipur
195	Dr.	Shyam Ramlal Sihare	Assistant Professor	Computer Science and Application	Dr. APJ Abdul Kalam Government College
196	Ms.	Simran sharma	Researcher	Computer science	Mbm college jodhpur
197	Ms.	Smita Prajapati	Assistant Professor	School of Mechatronics	Symbiosis University of Applied Sciences Indore
198	Ms.	Smrithi G Nair	Trainee	Health & Software Technology Group	CDAC
199	Ms.	Sonali Ashok Ekatpure	Lecturer	Computer Technology	SIET(Poly),Paniv
200	Mr.	Sougata Dey	Assistant professor of IT dept	IT	MCKV INSTITUTE OF ENGINEERING
201	Mr.	SRINU DHARAVATH	ASSOCIATE PROFESSOR	COMPUTER SCIENCE AND	JOGINPALLY B R ENGINEERING COLLEGE

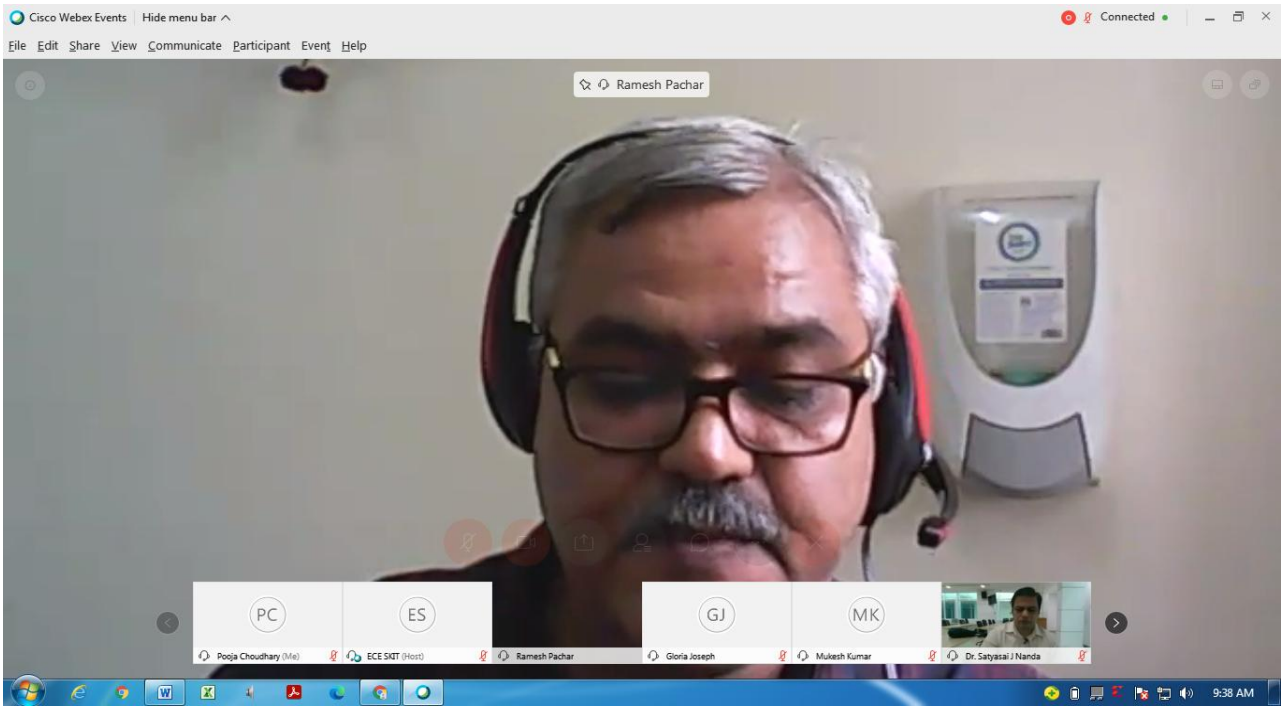
				ENGINEERING	
202	Mr.	SUDALAIMANI	Scientist E	Health and Software Technology	CDAC
203	Mr.	Sudarshan Kumar Jain	Assistant Professor	ECE	Jagannath University
204	Mr.	Sudesh Garg	Assistant Professor	Mechanical	SKIT
205	Dr.	Sujit Kumar Bhuyan	Associate Professor	Electrical Engineering	Bhadrak Institute of Engineering & Technology
206	Ms.	Suman Sharma	Assistant professor	IT	SKIT, JAIPUR
207	Mr.	Sunil Dhankhar	Associate professor	Cse	Swami Keshvanand Institute of Technology, Management and Gramothan
208	Dr.	Sunil K Moon	Associate professor	E&TC	PICT,PUNE
209	Mr.	Sunil Kumar	Assistant Professor	Electronics & Communication	Shri Bhawani Niketan Institute of Technology & Mgmt
210	Mr.	Sunil Kumar	Assistant professor	Mechanical engineering	SKIT
211	Dr.	Sunita Gupta	Associate Professor	Computer Science and Engineering	SKIT Jaipur
212	Prof.	Supriya Suresh bondre	Assistant professor	E&TC	SMSMPITR, Akluj
213	Mr.	Suraj Prakash Sharma	Trainer	IT	CNC infotech
214	Ms.	Surbhi Sharma	Asst. Professor	CSE	JECRC University Jaipur
215	Mr.	Sushant Khedgikar	Dean - Academics	Electronics and Telecommunication	P. E. S. College of Engineering
216	Mr.	Sushanta Kumar Sethy	Associate Professor	Electrical Engineering	DRIEMS Autonomous Engineering College
217	Prof.	Swapnali Krushnarao Londhe	Assistant professor	Computer Science and Engineering	SMSMPITR
218	Mr.	T.VINAY KUMAR	Assistant Professor	Electrical and Electronics Engineering	GNDEC
219	Mr.	Tanvir singh	Asst professor	Cse	Sharda University
220	Mr.	Tarun Kumar Chheepa	Assistant Professor	Electrical Engineering	Swami Keshvanand Institute of Technology, Management and Gramothan
221	Mr.	TARUN NARUKA	Associate professor	ELECTRICAL	SKIT M& G Jaipur
222	Dr.	Tushar Hrishikesh Jaware	Asst Prof	E&TC	R C Patel Institute of Technology Shirpur
223	Mr.	Umesh Kumar	Also. Proof.	Electronics and	Arya College of engineering

		sharma		communication engg.	and I.T.
224	Mr.	V BESLIN GEO	ASSISTANT PROFESSOR	ECE	HINDUSTAN INSTITUTE OF TECHNOLOGY AND SCIENCE
225	Ms.	vanila s	assistant professor	EEE	SRM VALLIAMMAI ENGINEERING COLLEGE
226	Dr.	Vijay Mohan Vyas	Assistant Professor	Management	Govt. Engineering College Bikaner
227	Mr.	Vikas Sharma	Assistant Professor	Electronics and communication engineering	Jaipur Engineering College & Research Center Jaipur
228	Mr.	Vishal D. Bharate	Assistant Professor	Electronics and Telecommunication	Sinhgad Academy of Engineering, Pune
229	Mr.	Vishnu Jangid	Assistant Professor	Mechanical Engineering	SKIT Jaipur
230	Mr.	Vivek Sharma	Asst Professor	Electrical Engineering	SKIT jaipur
231	Ms.	Yashika saini	Assistant Professor	ECE	AIET, Jaipur
232	Mr.	Lalit walia	DGM electrical	Electrical	Smcc construction india ltd
233	Prof.	Pandhare Sachin Dadaso	HOD, CSE	CSE	SMSMPITR, AKLUJ
234	Mr.	Ravi Kumar Jangir	Assistant Professor	ECE	Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur
235	Mr.	Ankit Agarwal	Assistant Professor	ECE	Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur
236	Ms.	Priyanka Sharma	Assistant Professor	ECE	SKIT

Event Photographs



Inauguration


Cisco Webex Events
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Connected
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Ramesh Pachar
PC
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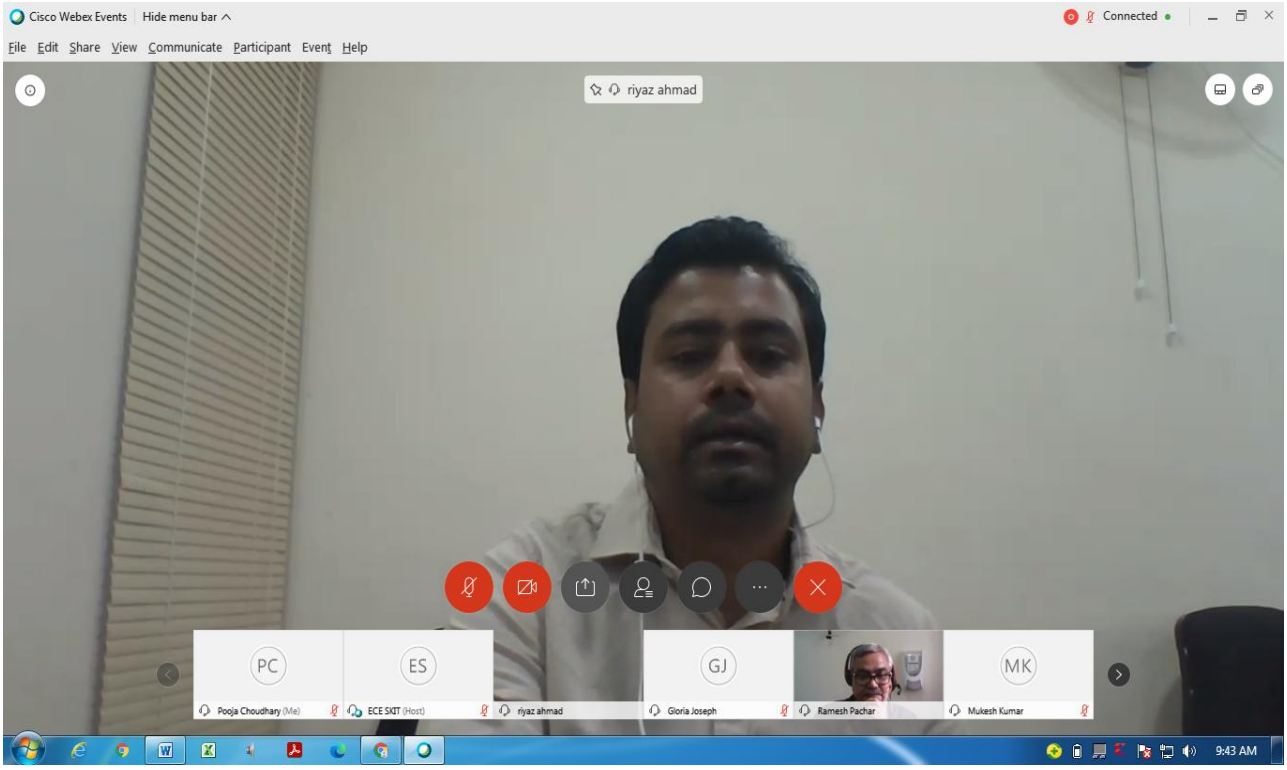
GJ
MK
Pooja Choudhary (Me)
ECE SKIT (Host)
Ramesh Pachar
Gloria Joseph
Mukesh Kumar
Dr. Satyasai J Nanda
9:38 AM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riyaz ahmad
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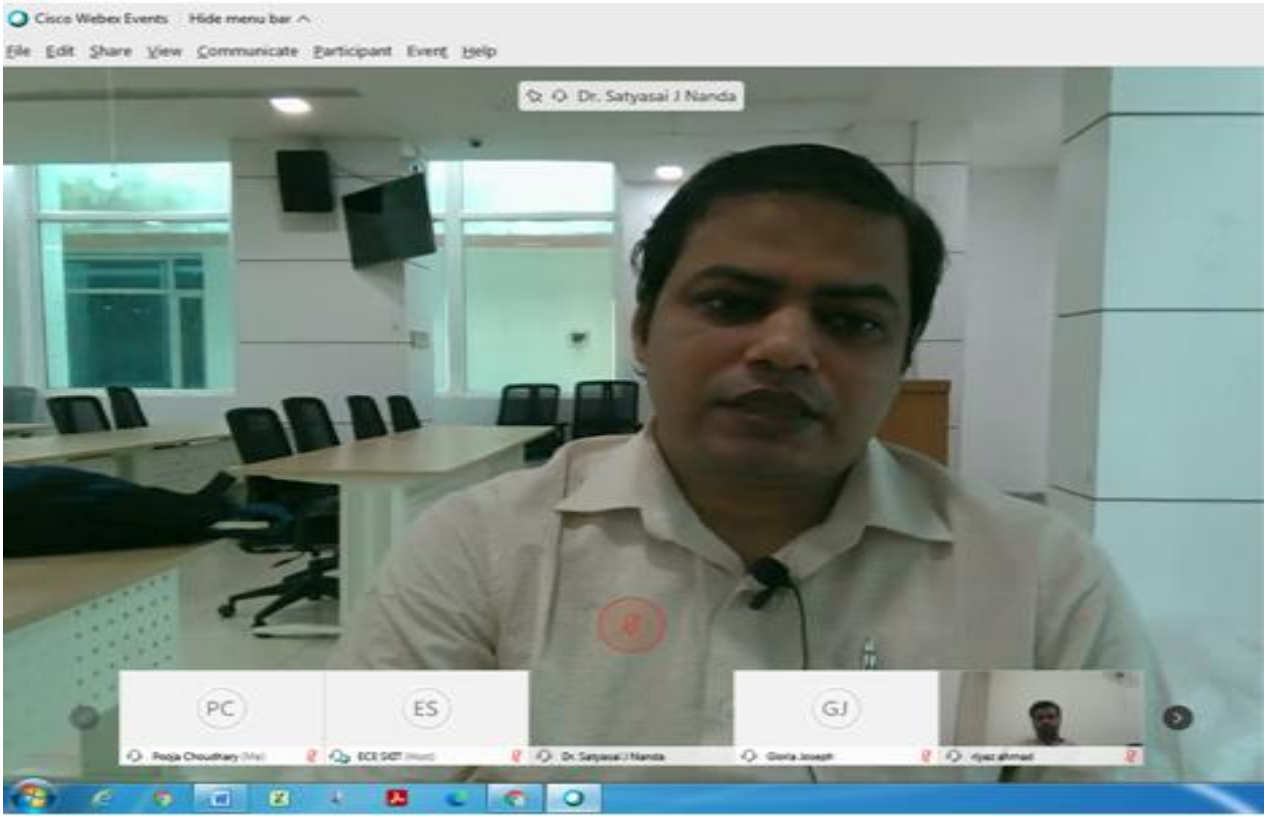
Pooja Choudhary (Me)
ECE SKIT (Host)
riyaz ahmad
Gloria Joseph
Ramesh Pachar
Mukesh Kumar
9:43 AM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Dr. Satyasai J Nanda
PC
ES
GJ

Cisco Webex Events
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Mukesh Kumar
ES
GJ

Day-1

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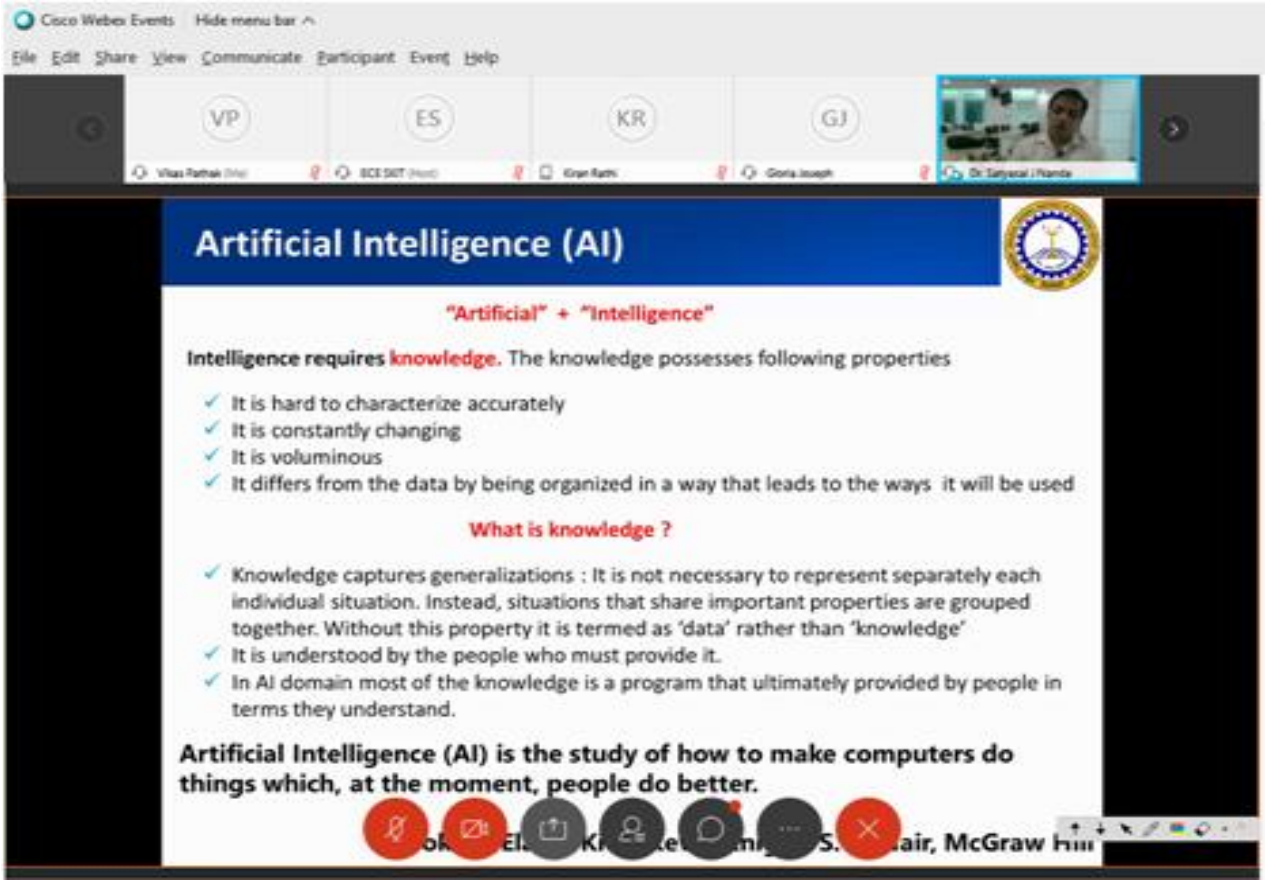
ES
Dr. Satyasai Jagannath Nanda, Ph.D.
(IIT Bhubaneswar)
Assistant Professor
MNIT Jaipur
• He is presently working as Assistant Professor with Department of Electronics and Communication at MNIT, Jaipur.
• He received the PhD degree from School of Electrical Sciences, IIT Bhubaneswar.
• He was the recipient of Canadian Research Fellowship- GSEP, from Dept. of Foreign Affairs and Intern. Trade (DFAIT), Govt. of Canada for the year 2009-10 with which he has worked at University of Western Ontario, Canada.
• He is the recipient of prestigious IEI Young Engineers Award in the field of Electronics and Telecommunication Engineering for the year 2018-19
• He was awarded Best PhD thesis award at SocPros 2015 by IIT Roorkee.
• He received the best research paper awards at IC3-2018 at SMIT Sikkim, SocPros-2017 at IIT Bhubaneswar, IEEE UPCON-2016 at IIT BHU and Springer OWT-2017 at MNIT.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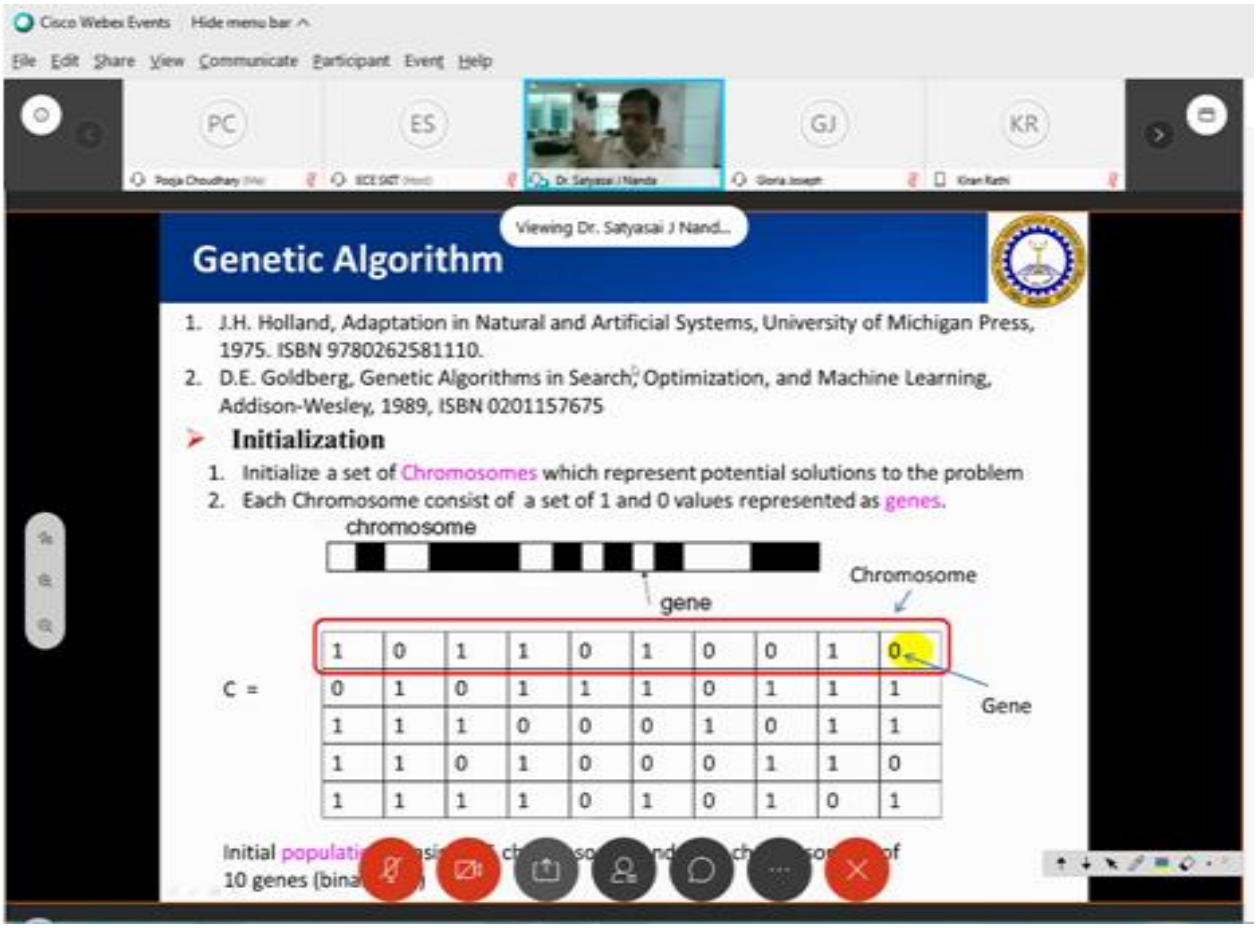
Artificial Intelligence (AI)
"Artificial" + "Intelligence"
Intelligence requires knowledge. The knowledge possesses following properties
✓ It is hard to characterize accurately
✓ It is constantly changing
✓ It is voluminous
✓ It differs from the data by being organized in a way that leads to the ways it will be used
What is knowledge ?
✓ Knowledge captures generalizations : It is not necessary to represent separately each individual situation. Instead, situations that share important properties are grouped together. Without this property it is termed as 'data' rather than 'knowledge'
✓ It is understood by the people who must provide it.
✓ In AI domain most of the knowledge is a program that ultimately provided by people in terms they understand.
Artificial Intelligence (AI) is the study of how to make computers do things which, at the moment, people do better.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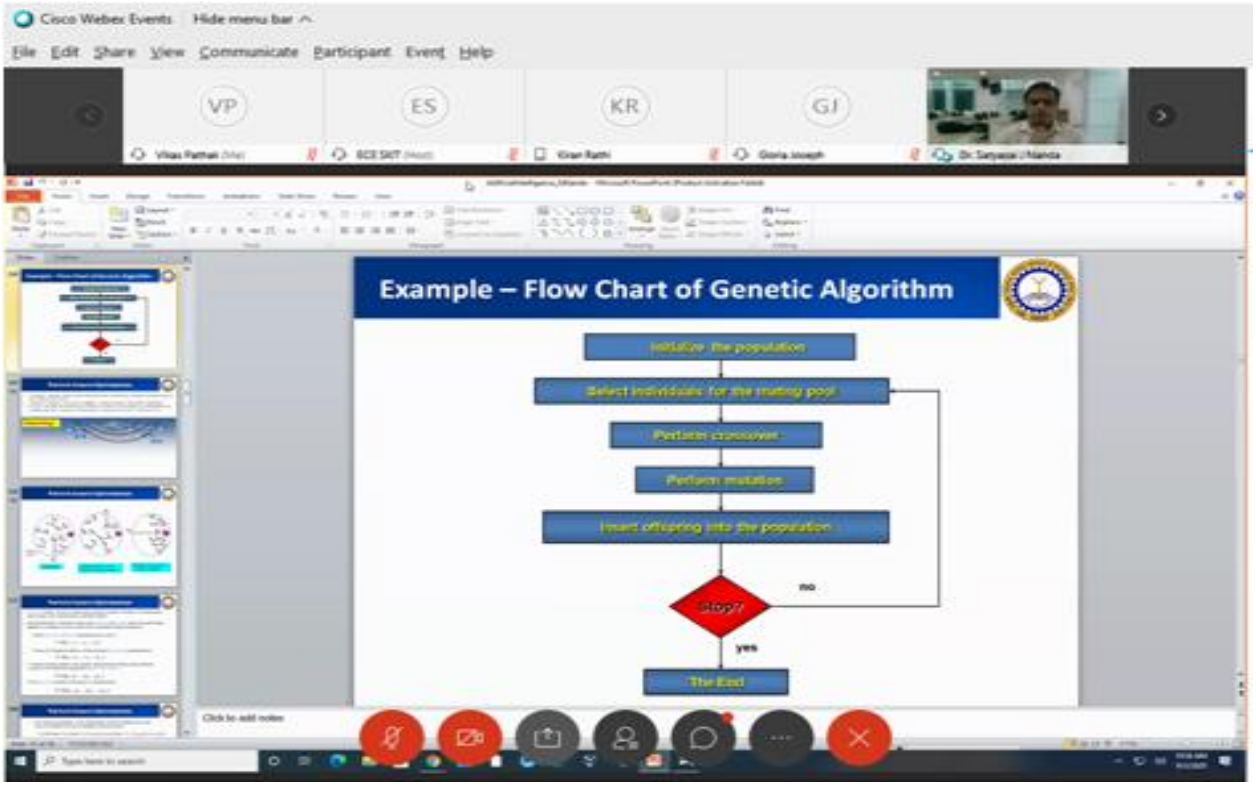
Viewing Dr. Satyasai J Nand...
Genetic Algorithm
1. J.H. Holland, Adaptation in Natural and Artificial Systems, University of Michigan Press, 1975. ISBN 9780262581110.
2. D.E. Goldberg, Genetic Algorithms in Search, Optimization, and Machine Learning, Addison-Wesley, 1989, ISBN 0201157675
Initialization
1. Initialize a set of Chromosomes which represent potential solutions to the problem
2. Each Chromosome consist of a set of 1 and 0 values represented as genes.
chromosome
gene
Chromosome
C =
Gene
Initial populati
10 genes (bina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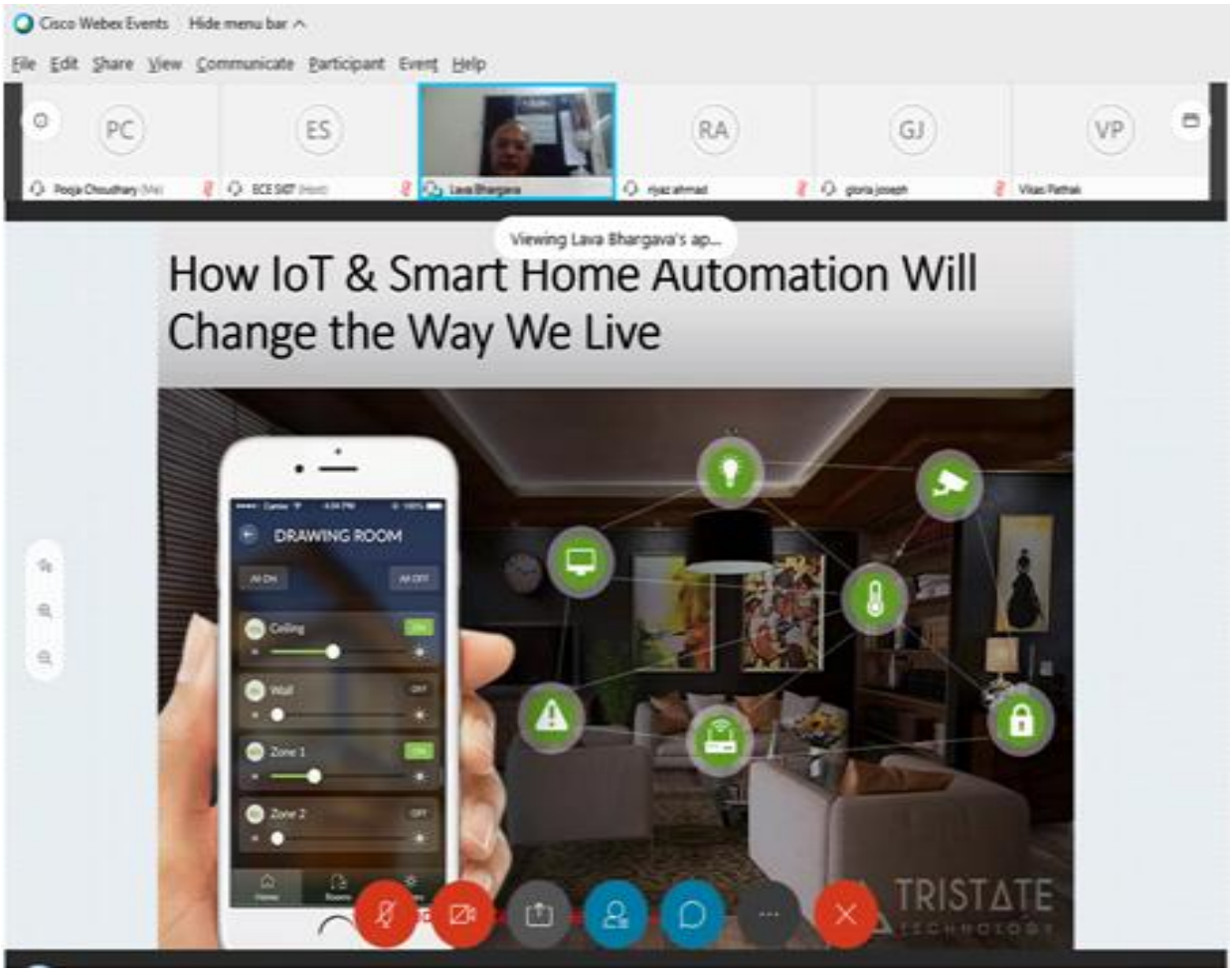
Example – Flow Chart of Genetic Algorithm
Initialize the population
Select individuals for the mating pool
Perform crossover
Perform mutation
Insert offspring into the population
Stop?
no
yes
The End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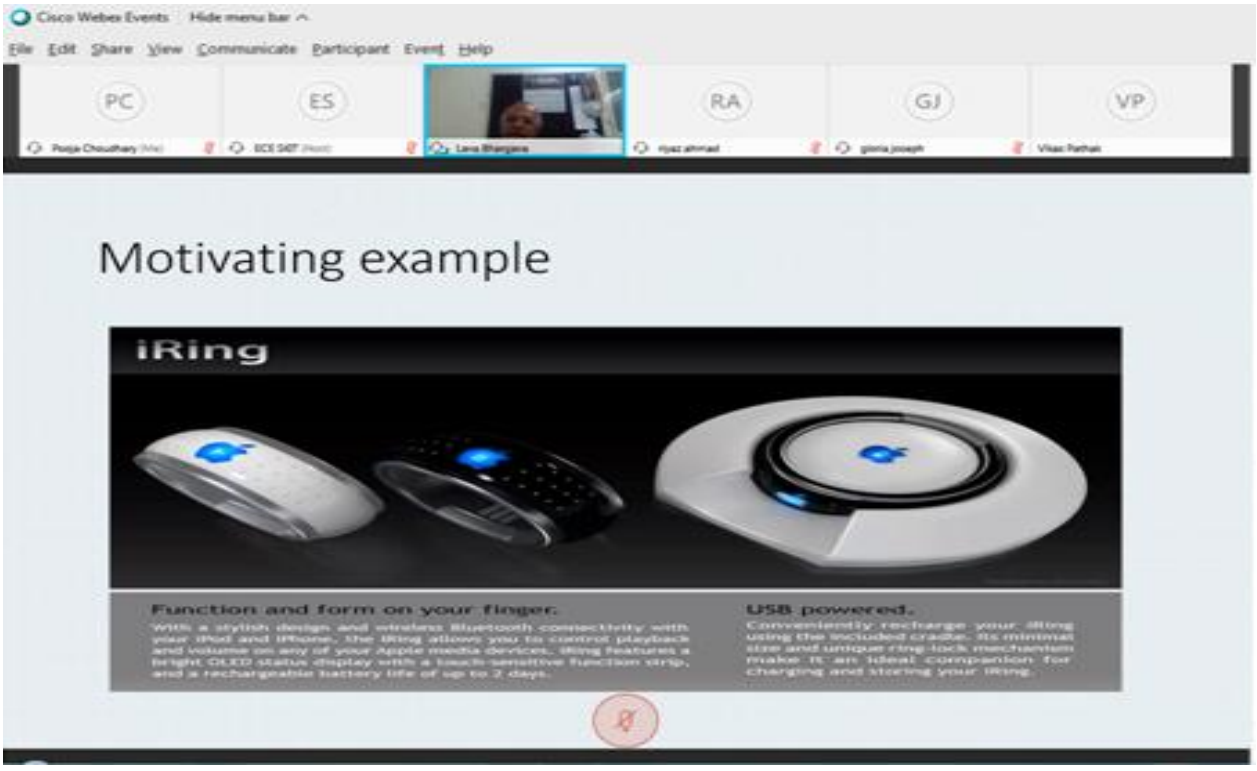
Viewing Lava Bhargava's ap...
How IoT & Smart Home Automation Will Change the Way We Live
DRAWING ROOM
Ceiling
Wall
Zone 1
Zone 2
TRISTATE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Motivating example
iRing
Function and form on your finger.
USB powered.

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PC ES RA GJ VP

Viewing Lava Bhargava's ap...

Embedded Systems

- Future of computing technology would be
  - Disappearing computer,
  - Ubiquitous computing,
  - Pervasive computing,
  - Ambient intelligence,
  - Post-PC era,
  - Cyber-physical systems.
  - Internet of Things
- Basic technologies:
  - ***Embedded Systems***
  - **Communication technologies**

Slide couresy Dr.

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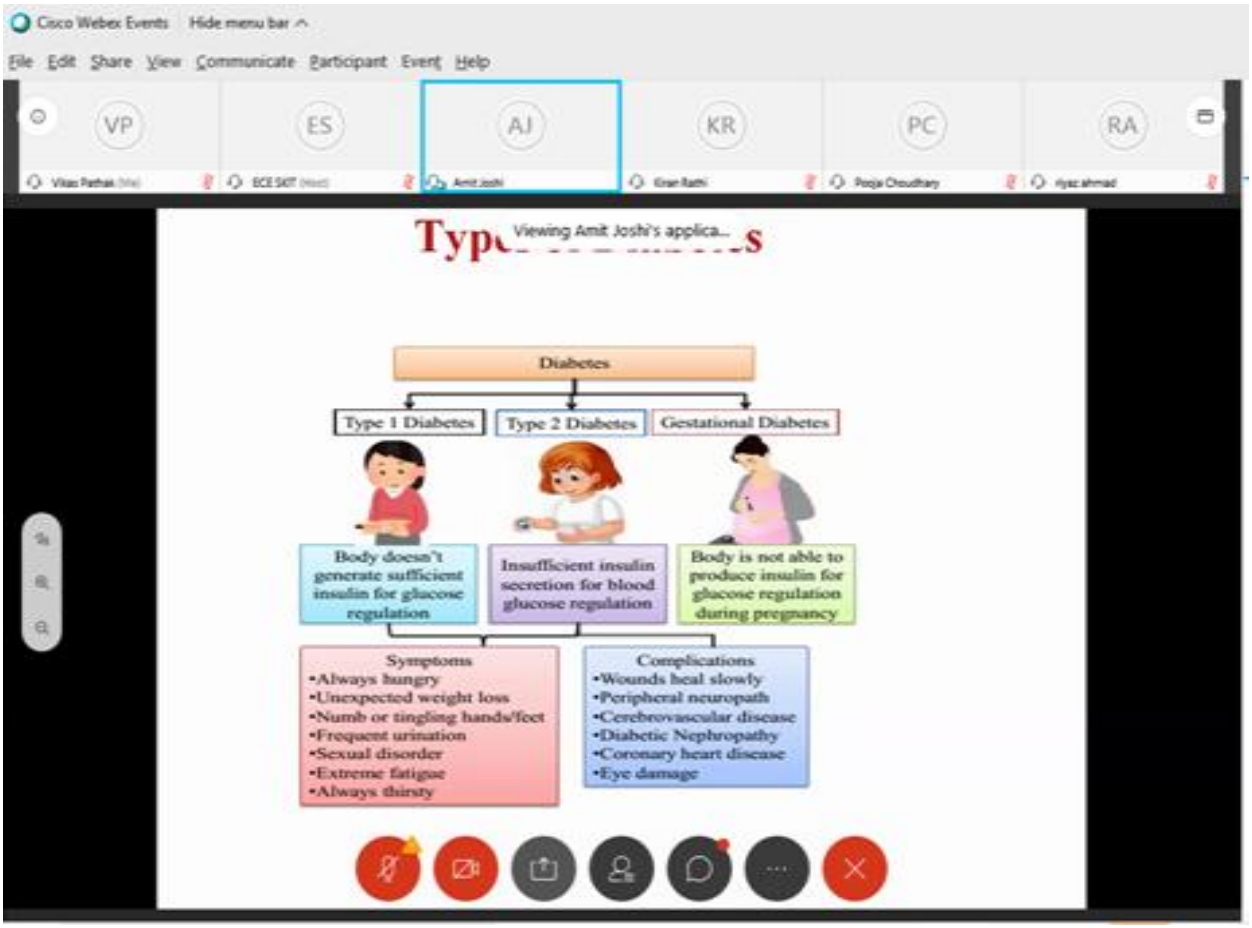
PC ES KR GJ

Viewing Lava Bhargava's ap...

What is IoT?

- Internet of Things
  - Internet connected objects (things) working together to solve a business problem
  - Has been around for quite a while, but only recently has become affordable for personal use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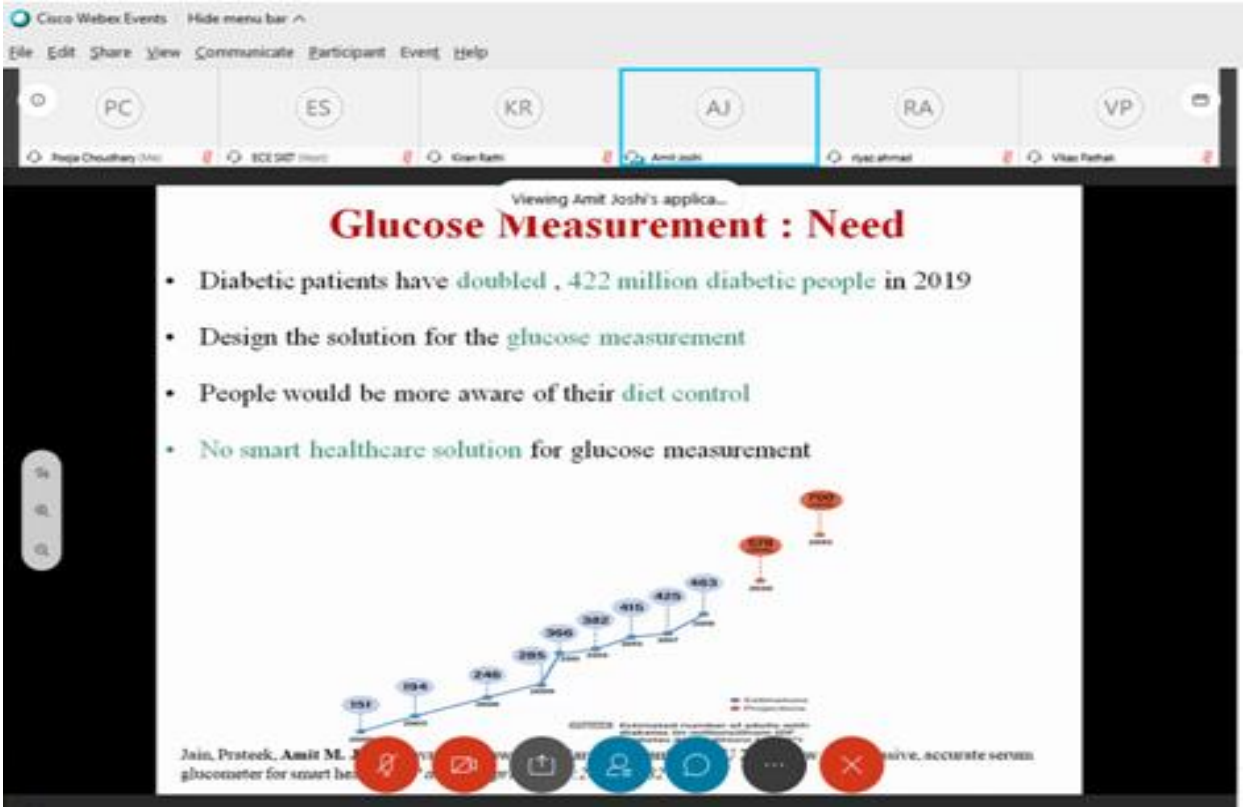
Viewing Amit Joshi's applica...
Diabetes
Type 1 Diabetes
Type 2 Diabetes
Gestational Diabetes
Body doesn't generate sufficient insulin for glucose regulation
Insufficient insulin secretion for blood glucose regulation
Body is not able to produce insulin for glucose regulation during pregnancy
Symptoms
•Always hungry
•Unexpected weight loss
•Numb or tingling hands/feet
•Frequent urination
•Sexual disorder
•Extreme fatigue
•Always thirsty
Complications
•Wounds heal slowly
•Peripheral neuropath
•Cerebrovascular disease
•Diabetic Nephropathy
•Coronary heart disease
•Eye damage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Viewing Amit Joshi's applica...
Glucose Measurement : Need
• Diabetic patients have doubled , 422 million diabetic people in 2019
• Design the solution for the glucose measurement
• People would be more aware of their diet control
• No smart healthcare solution for glucose measurement
151
194
246
295
366
382
415
425
463
476
700

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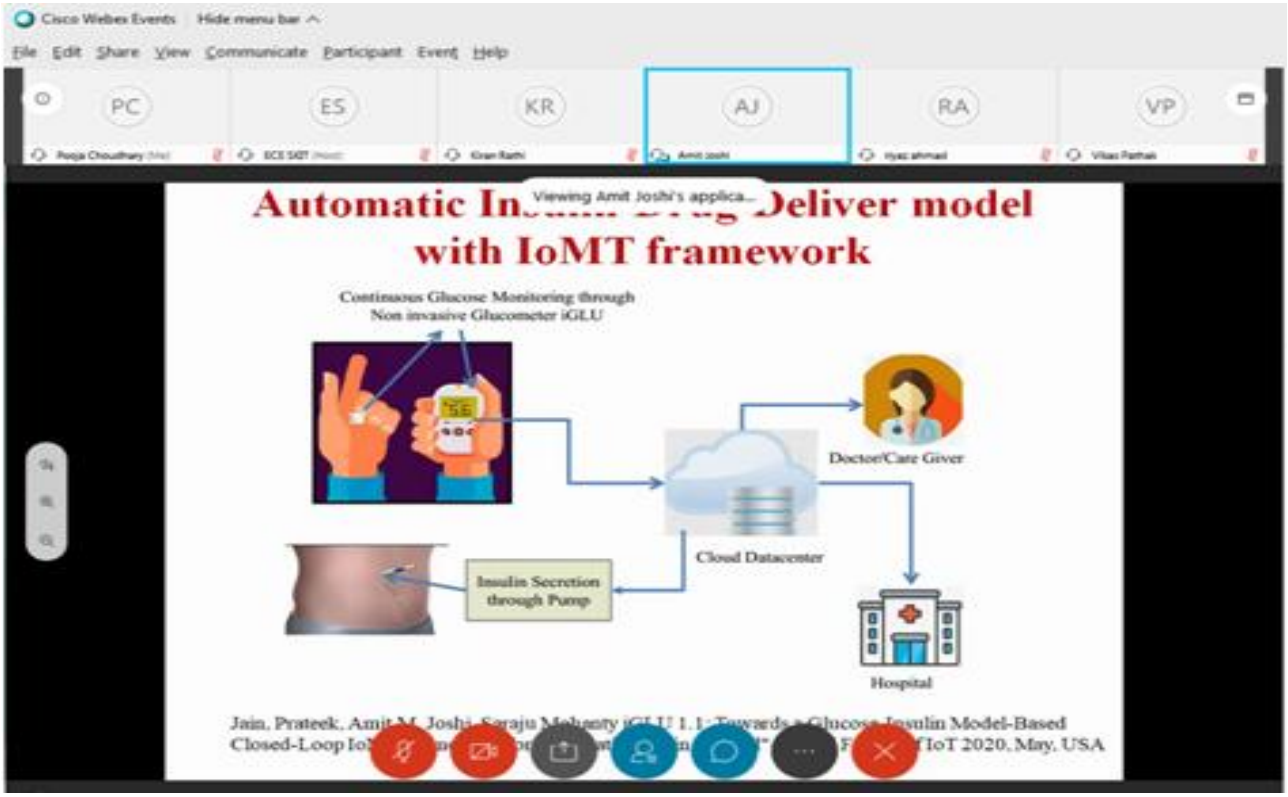
Invasive vs Non -invasive
Invasive Approach (Capillary Glucose Measurement)
Preparation of Lancet
Pricking of the Blood
Contact to strip for Monitoring
Blood Glucose Monitoring (mg/dl)
Invasive Approach (Serum Glucose Measurement)
Blood Sample Collection
Clinical Centrifuge for Separation of Serum
Prepared Serum for Glucose Measurement
Glucose Value (mg/dl) using Glucose Analyzer
Non Invasive Approach
Pricking of the Blood
Sample Preparation in Lab/ Requirement of Disposable Strips and Lancets
Data Acquisition and Prediction of Blood Glucose
Fingertip/Earlobe/ Skin between fingers
Light Detection through Optical Sensors and Signal Processing
Data Acquisition and Prediction of Blood Glucose using Regression Model
Blood Glucose Monitoring (mg/dl)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Viewing Amit Joshi's applica...
with IoMT framework
Continuous Glucose Monitoring through Non invasive Glucometer iGLU
Doctor/Care Giver
Cloud Datacenter
Insulin Secretion through Pump
Hospital
IoT 2020, May, USA

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Viewing Amit Joshi's applica...

EMG signal use for prosthetic

- An EMG (electromyogram) based anthropomorphic upper limb help the amputated people to bring back the functionality like real arm.
- Developing an anthropomorphic arm and pattern recognition of EMG signals for actuation of hand
- development of pattern recognition of intention from surface EMG (sEMG) or in the development of anthropomorphic hand.

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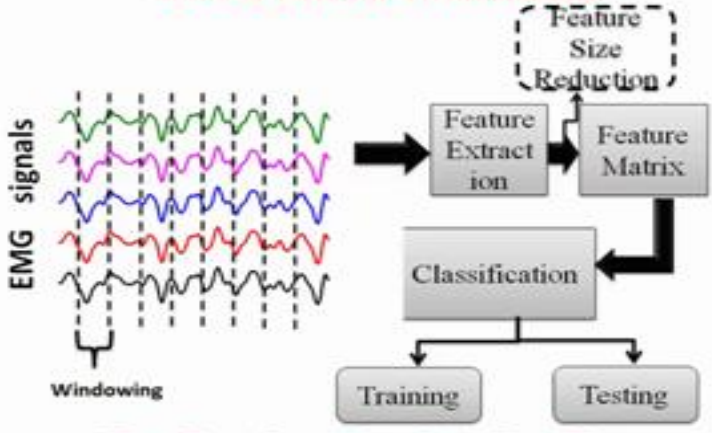
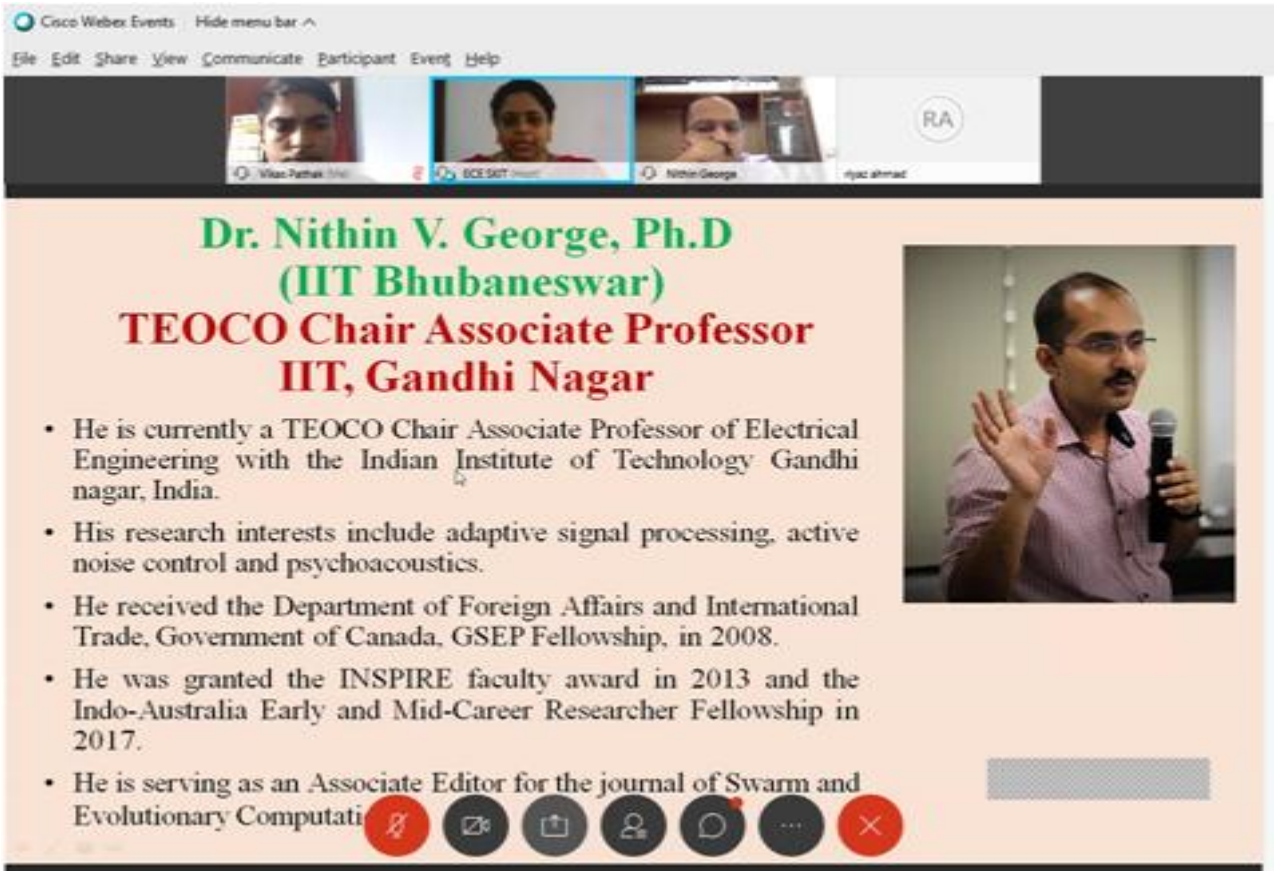
Viewing Amit Joshi's applica...

Basic Flow of Machine learning in EMG based Prosthetic



S. Pancholi and A. M. ... is Application," in *IEEE Sensors Journ...* ...018.2809458.

Day-2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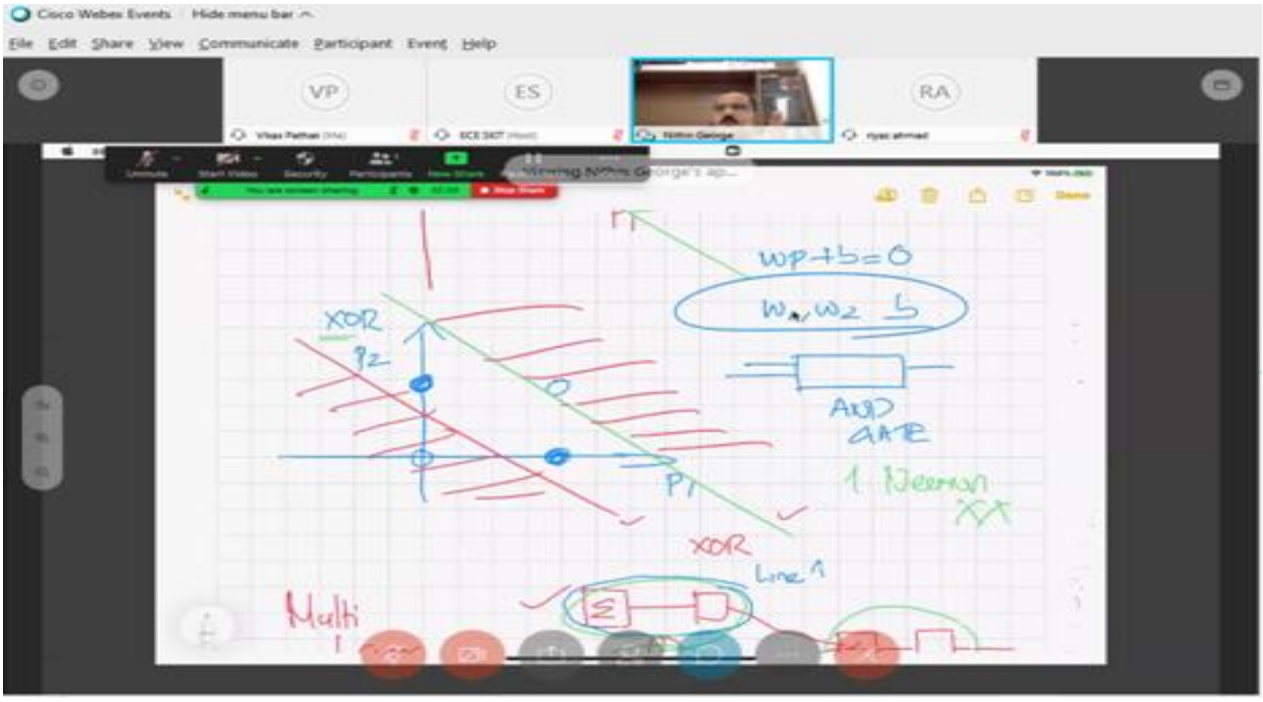
RA
Dr. Nithin V. George, Ph.D
(IIT Bhubaneswar)
TEOCO Chair Associate Professor
IIT, Gandhi Nagar
• He is currently a TEOCO Chair Associate Professor of Electrical Engineering with the Indian Institute of Technology Gandhi nagar, India.
• His research interests include adaptive signal processing, active noise control and psychoacoustics.
• He received the Department of Foreign Affairs and International Trade, Government of Canada, GSEP Fellowship, in 2008.
• He was granted the INSPIRE faculty award in 2013 and the Indo-Australia Early and Mid-Career Researcher Fellowship in 2017.
• He is serving as an Associate Editor for the journal of Swarm and Evolutionary Computati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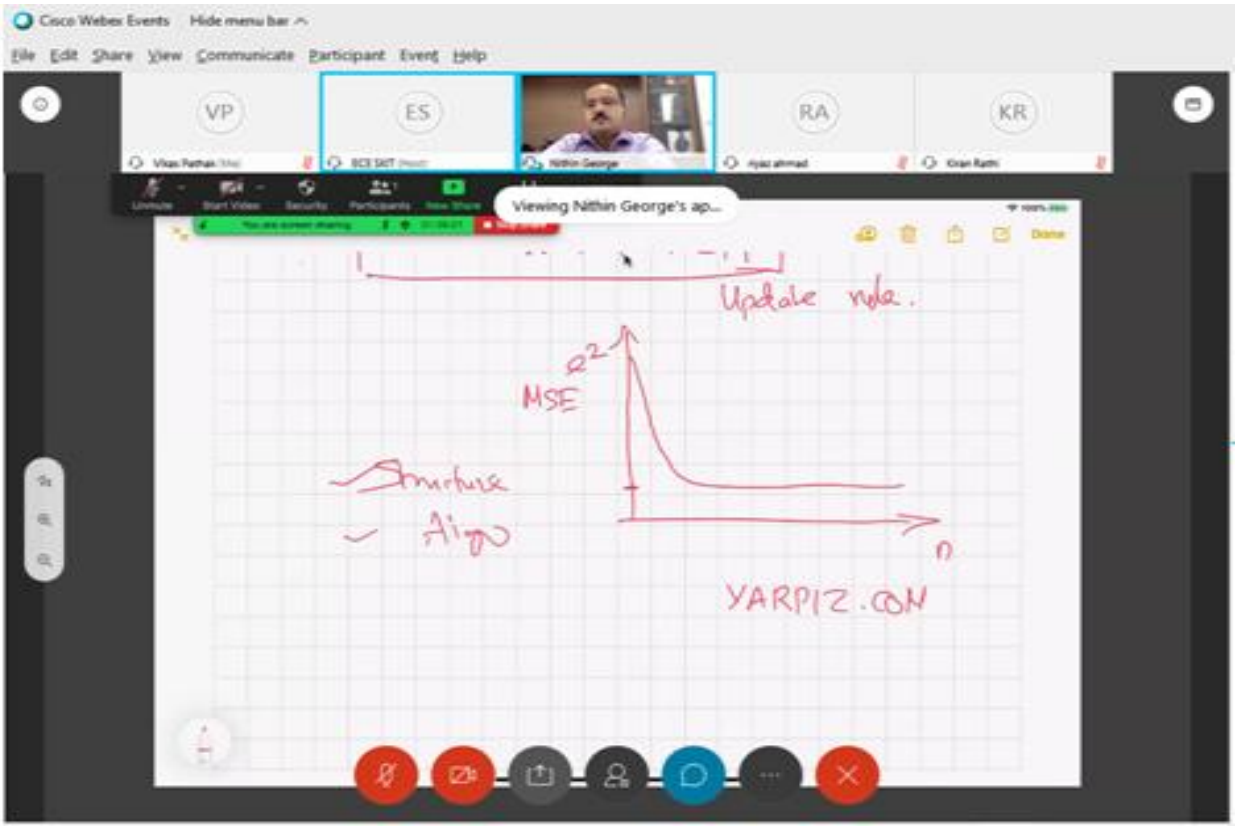
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Viewing Nithin George's ap...
Update rule.
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n
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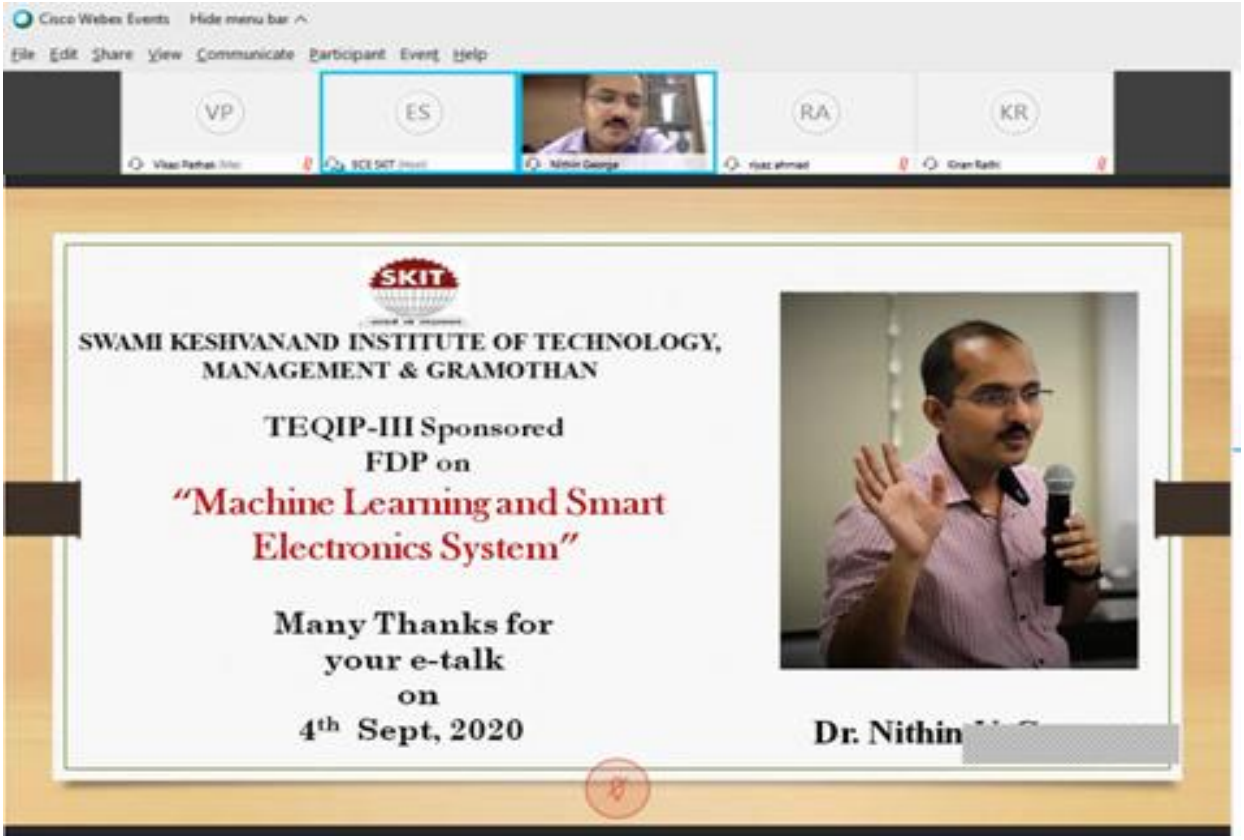
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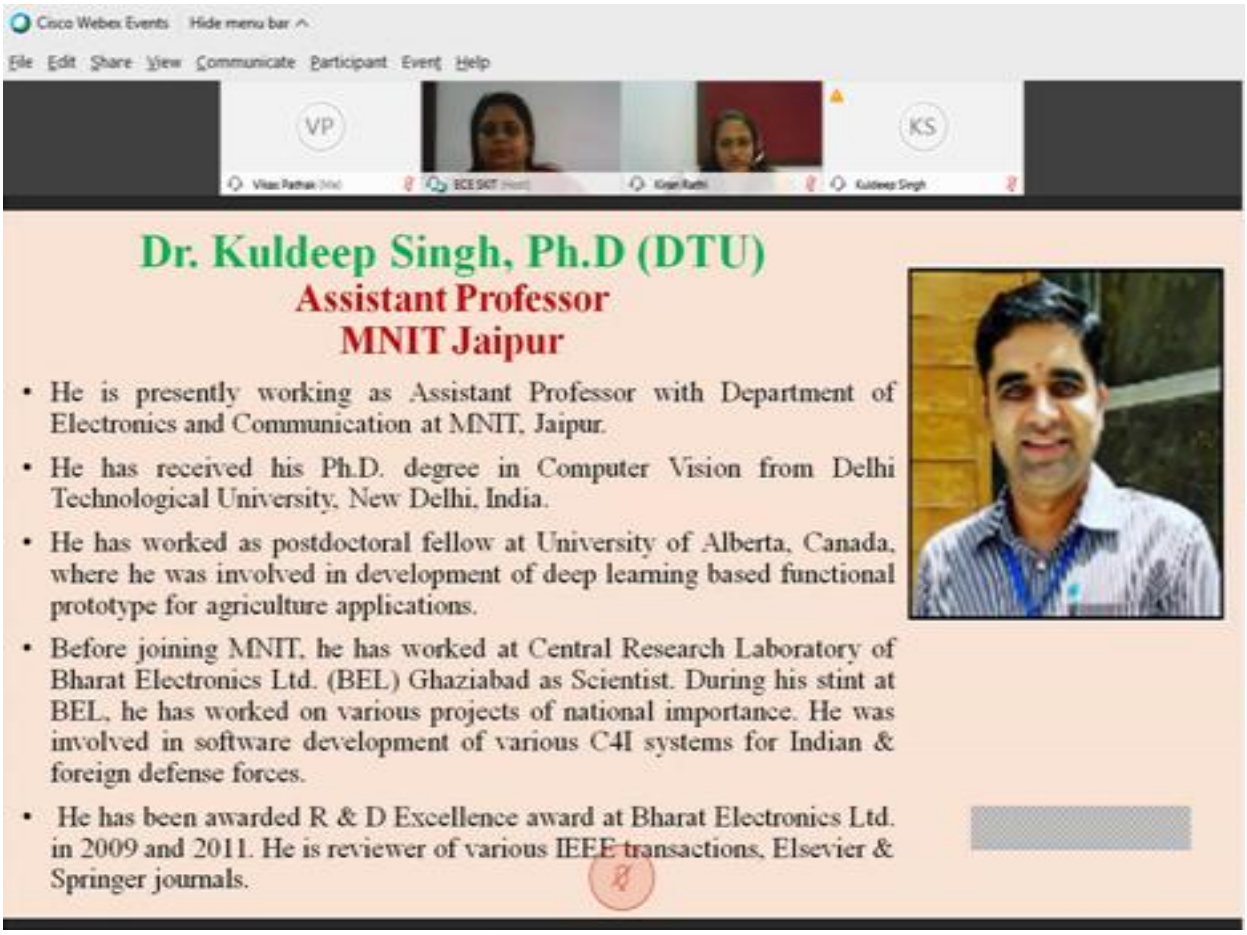
SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN
TEQIP-III Sponsored
FDP on
"Machine Learning and Smart Electronics System"
Many Thanks for your e-talk on
4th Sept, 2020
Dr. Nithin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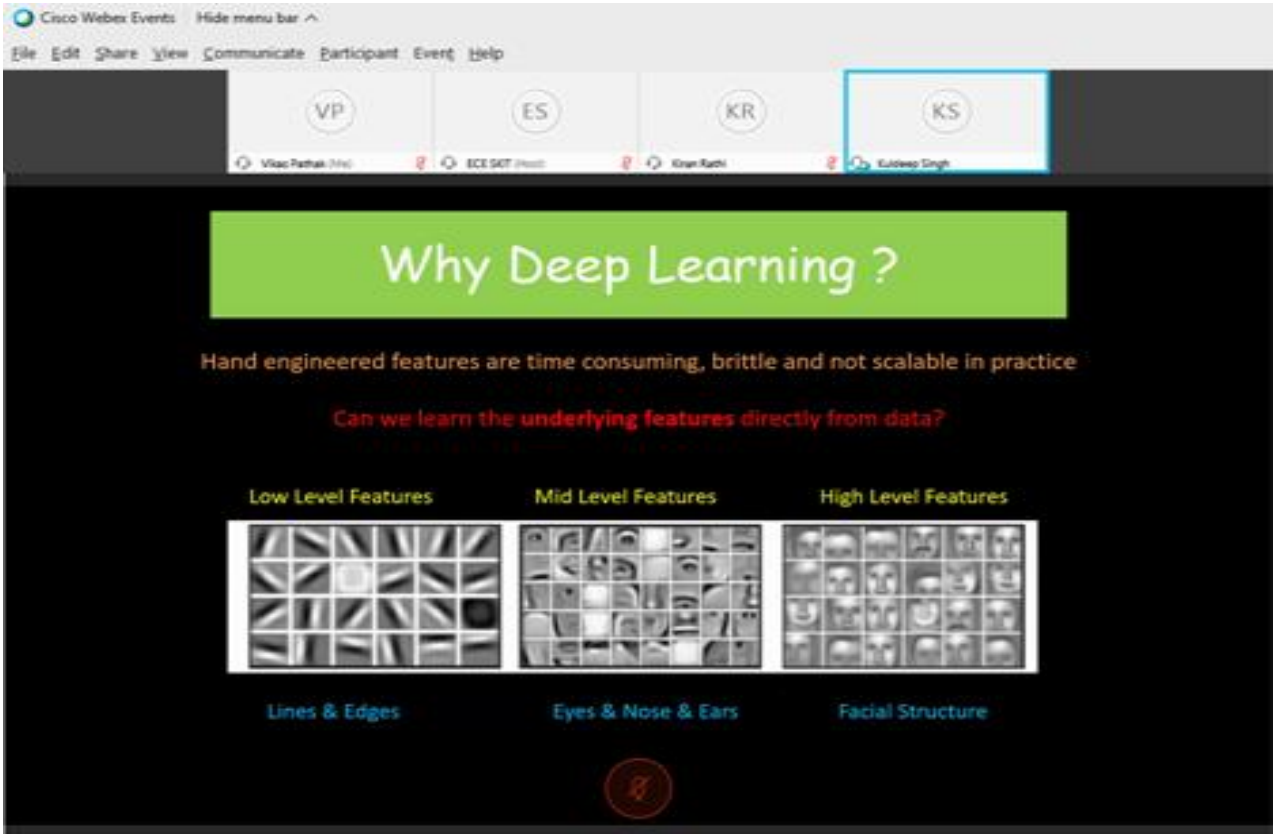
VP
KS
Dr. Kuldeep Singh, Ph.D (DTU)
Assistant Professor
MNIT Jaipur
• He is presently working as Assistant Professor with Department of Electronics and Communication at MNIT, Jaipur.
• He has received his Ph.D. degree in Computer Vision from Delhi Technological University, New Delhi, India.
• He has worked as postdoctoral fellow at University of Alberta, Canada, where he was involved in development of deep learning based functional prototype for agriculture applications.
• Before joining MNIT, he has worked at Central Research Laboratory of Bharat Electronics Ltd. (BEL) Ghaziabad as Scientist. During his stint at BEL, he has worked on various projects of national importance. He was involved in software development of various C4I systems for Indian & foreign defense forces.
• He has been awarded R & D Excellence award at Bharat Electronics Ltd. in 2009 and 2011. He is reviewer of various IEEE transactions, Elsevier & Springer journals.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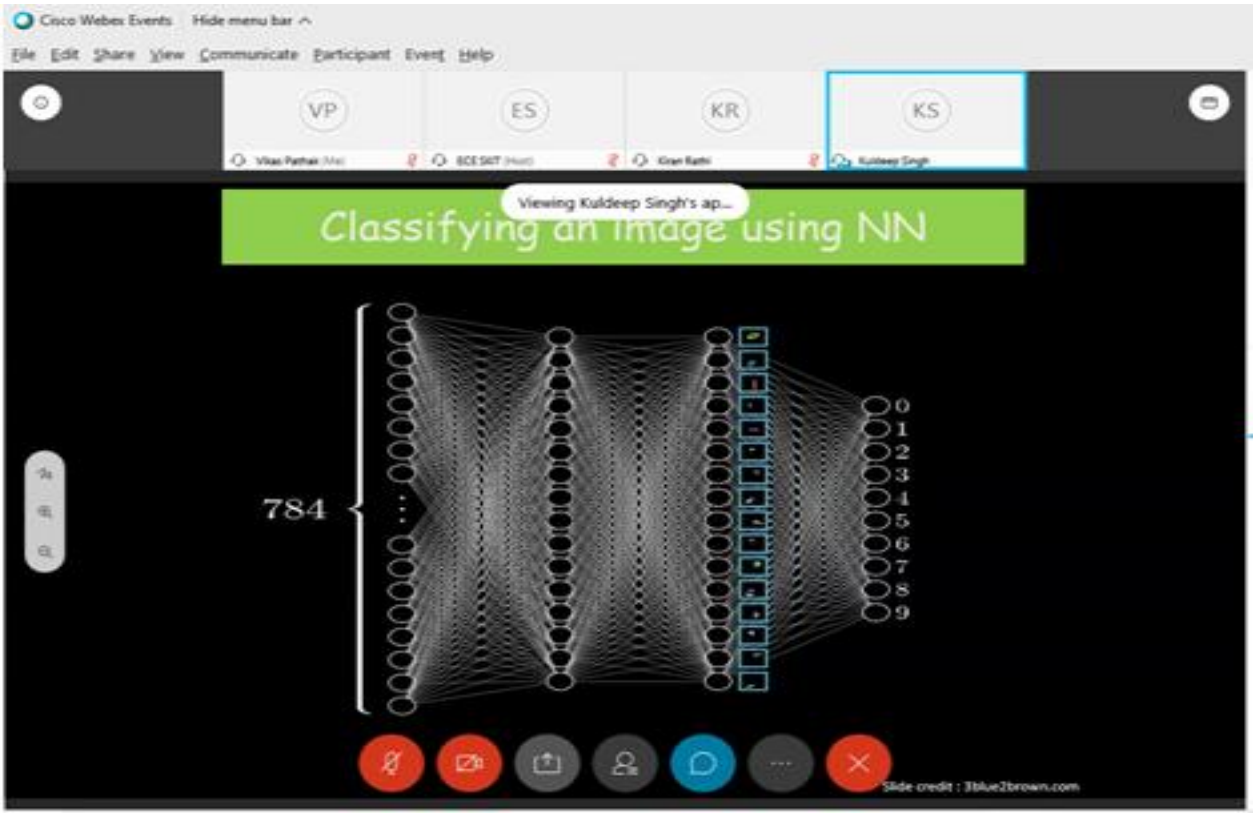
Why Deep Learning ?
Hand engineered features are time consuming, brittle and not scalable in practice
Can we learn the underlying features directly from data?
Low Level Features
Mid Level Features
High Level Features
Lines & Edges
Eyes & Nose & Ears
Facial Structure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Viewing Kuldeep Singh's ap...
Classifying an image using NN
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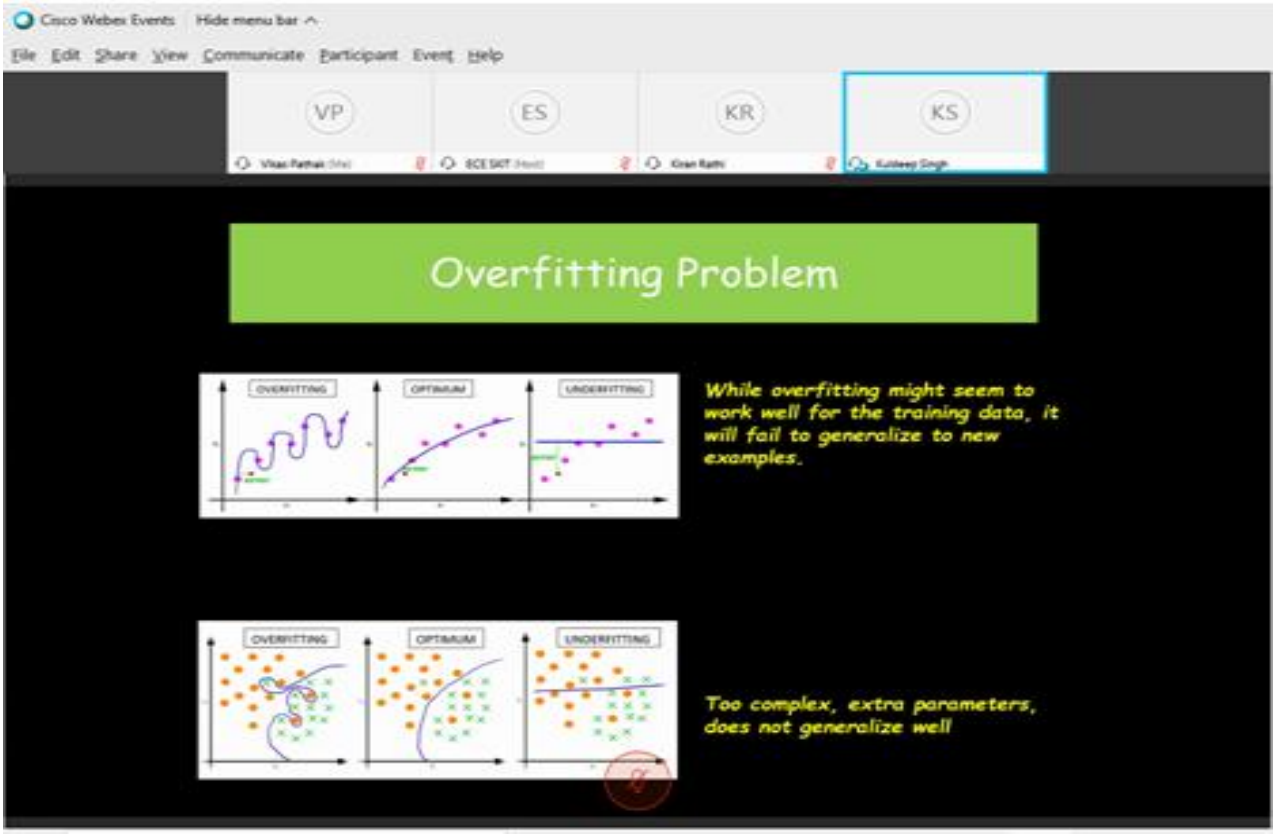
Slide credit : 3blue2brown.com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Overfitting Problem
OVERFITTING
OPTIMUM
UNDERFITTING
While overfitting might seem to work well for the training data, it will fail to generalize to new examples.
OVERFITTING
OPTIMUM
UNDERFITTING
Too complex, extra parameters, does not generalize well

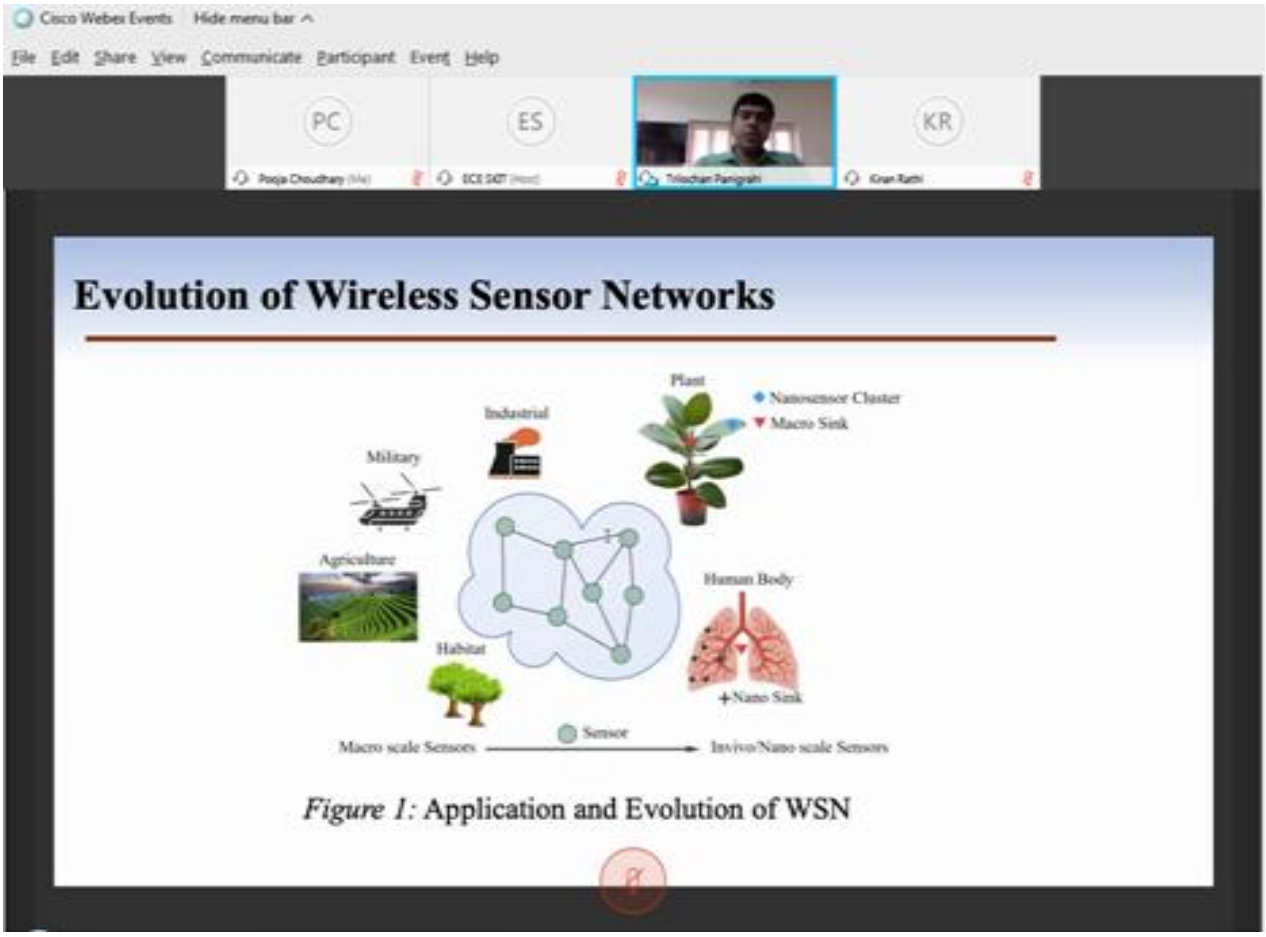

Figure 1: Application and Evolution of WSN

Day-3

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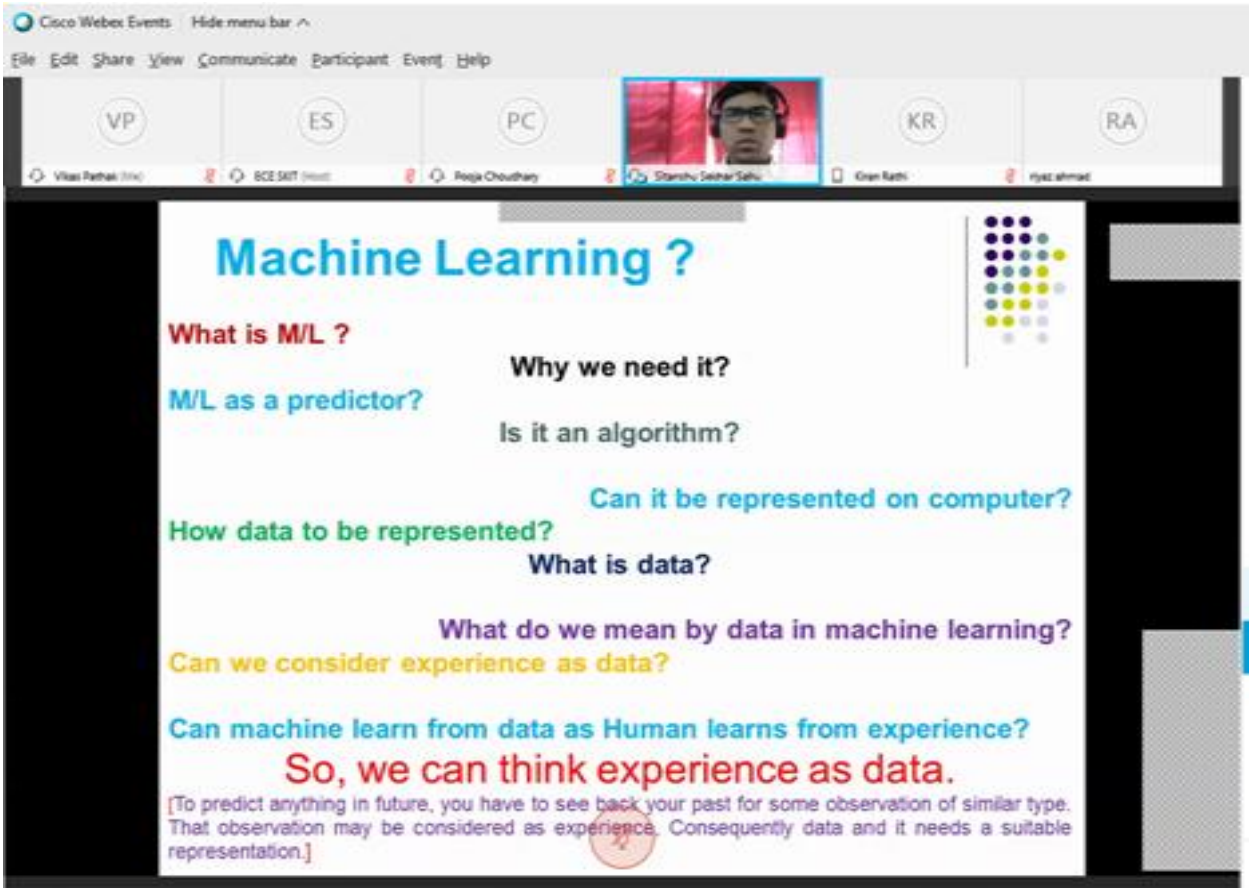
Dr. Sitanshu Sekhar Sahu, Ph.D. (NIT Rourkela)
Assistant Professor
BIT, Mesra
He is presently working as an Assistant Professor, in the Department of Electronics and Communication Engineering at Birla Institute of Technology Mesra, Ranchi.
He has received Ph.D Degree from NIT Rourkela in 2011.
He has completed Postdoctorate from Oklahoma State University, USA in 2012-2014.
He has been a recipient of DFAIT GSEF Fellowship from Canada Govt. in 2008.
He has published more than 60 research papers in reputed referred international journals and conferences with 550 citations and h-index of 11 & i-10 index of 12.
He has completed several research projects from DST, MHRD, Govt of India and JCST, Jharkhand Govt.
He has chaired in many National and International Conferences.
His research area includes Signal Processing, Speech Processing, Image Processing, Bioinformatics, Machine Learning and Computer Vision.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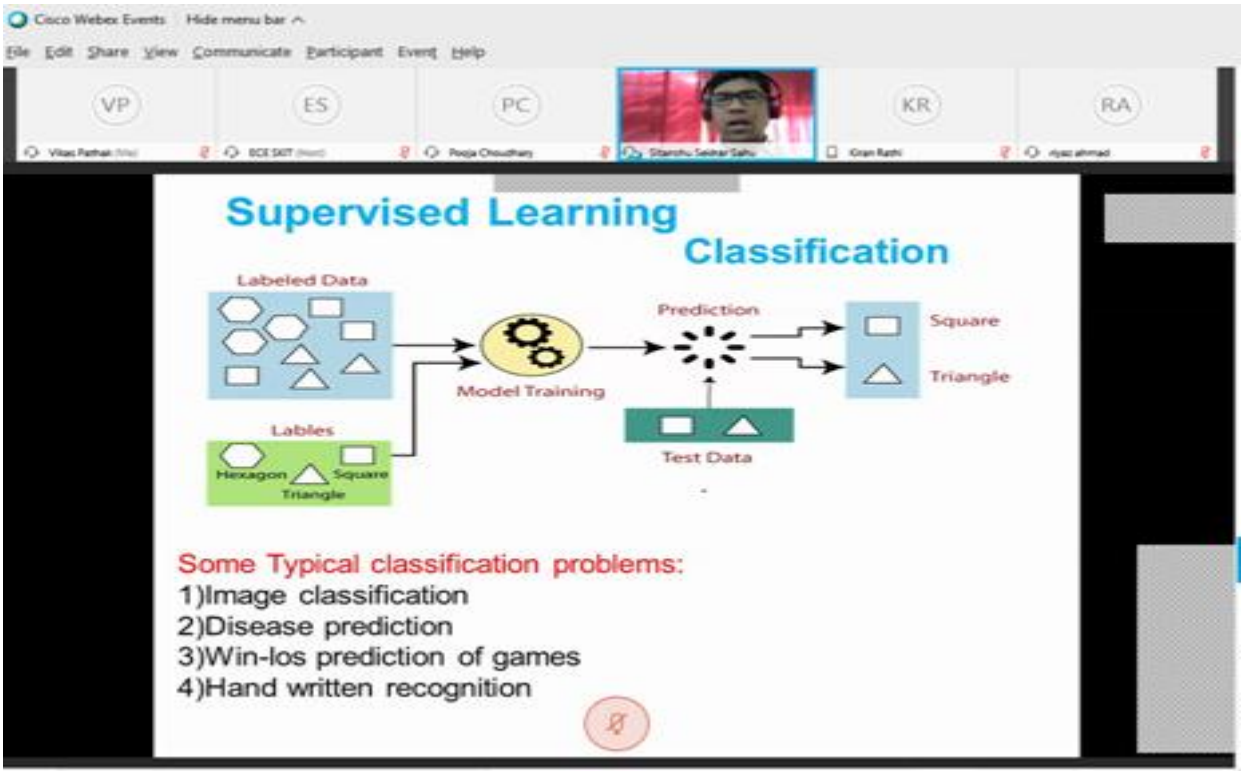
Machine Learning ?
What is M/L ?
Why we need it?
M/L as a predictor?
Is it an algorithm?
Can it be represented on computer?
How data to be represented?
What is data?
What do we mean by data in machine learning?
Can we consider experience as data?
Can machine learn from data as Human learns from experience?
So, we can think experience as data.
[To predict anything in future, you have to see back your past for some observation of similar type. That observation may be considered as experience. Consequently data and it needs a suitable representation.]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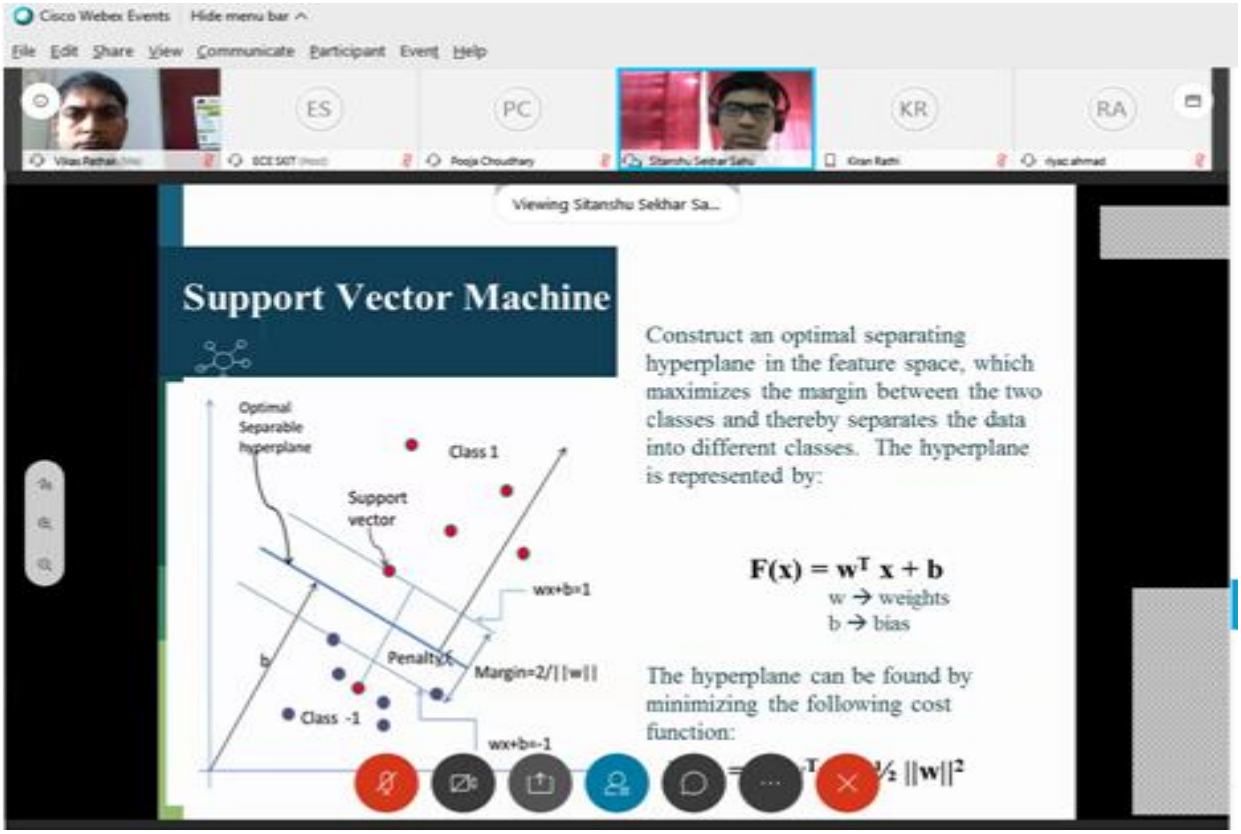
Supervised Learning
Classification
Labeled Data
Lables
Hexagon
Square
Triangle
Model Training
Prediction
Square
Triangle
Test Data
Some Typical classification problems:
1)Image classification
2)Disease prediction
3)Win-los prediction of games
4)Hand written recognition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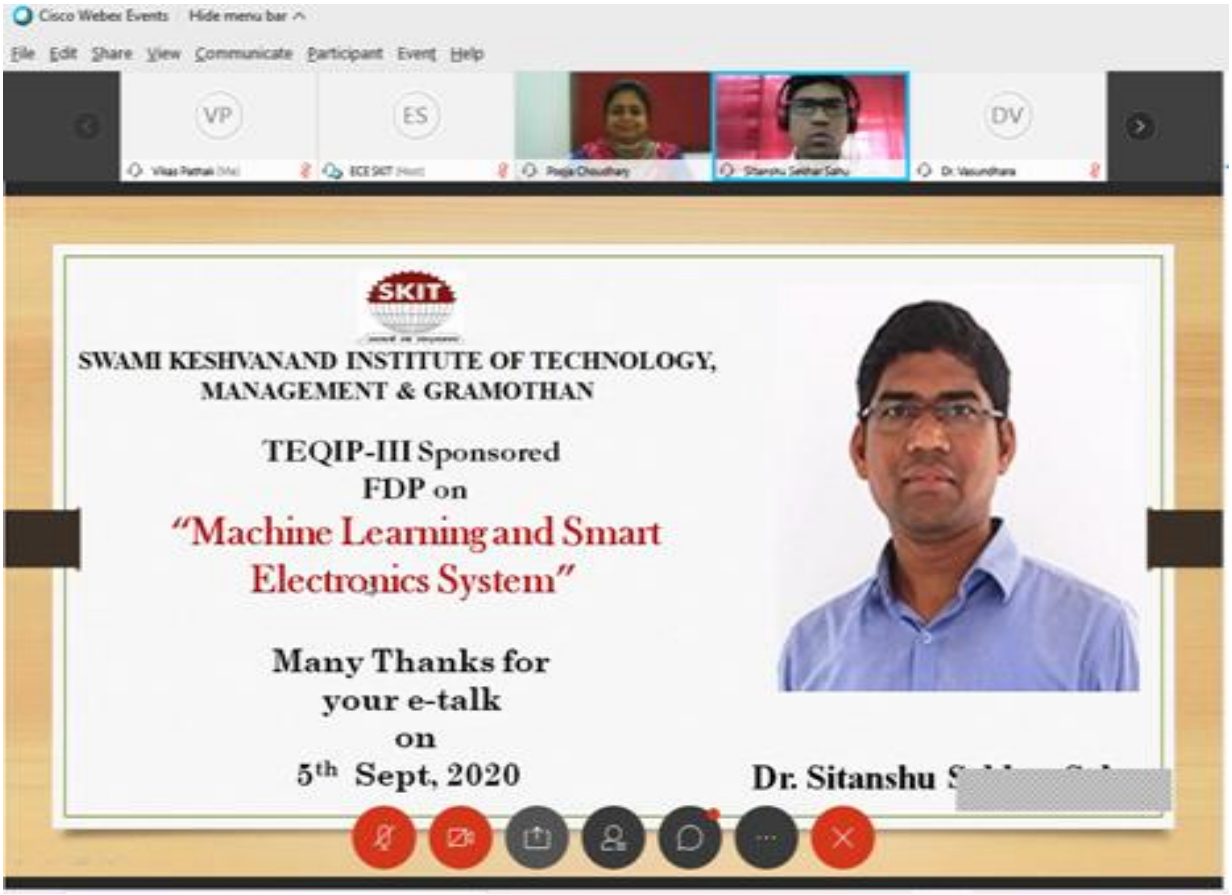
Viewing Sitanshu Sekhar Sa...
Support Vector Machine
Optimal Separable hyperplane
Class 1
Support vector
wx+b=1
Penalty
Margin=2/||w||
b
Class -1
wx+b=-1
Construct an optimal separating hyperplane in the feature space, which maximizes the margin between the two classes and thereby separates the data into different classes. The hyperplane is represented by:
F(x) = wT x + b
w → weights
b → bias
The hyperplane can be found by minimizing the following cost function:
½ ||w||2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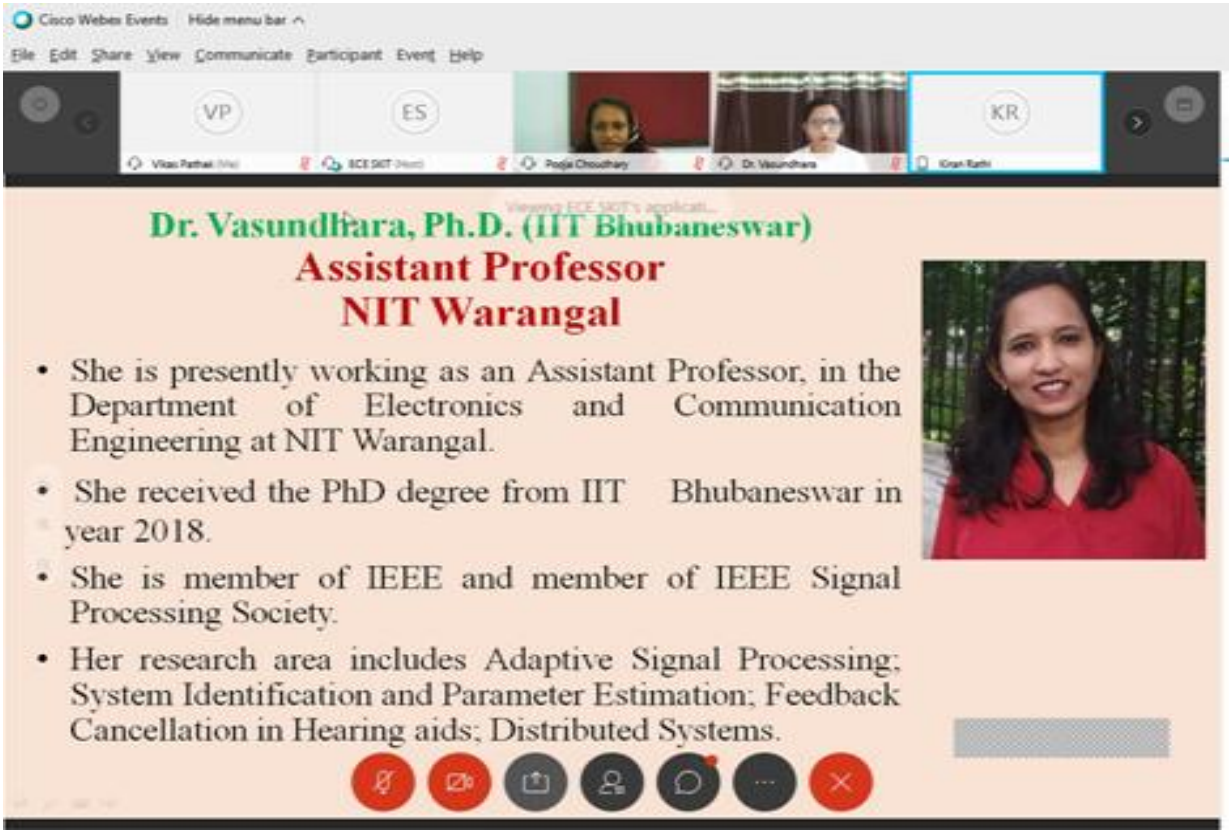
SKIT
SWAMI KESHVANAND INSTITUTE OF TECHNOLOGY, MANAGEMENT & GRAMOTHAN
TEQIP-III Sponsored
FDP on
"Machine Learning and Smart Electronics System"
Many Thanks for your e-talk on
5th Sept, 2020
Dr. Sitanshu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Dr. Vasundhara, Ph.D. (IIT Bhubaneswar)
Assistant Professor
NIT Warangal
• She is presently working as an Assistant Professor, in the Department of Electronics and Communication Engineering at NIT Warangal.
• She received the PhD degree from IIT Bhubaneswar in year 2018.
• She is member of IEEE and member of IEEE Signal Processing Society.
• Her research area includes Adaptive Signal Processing; System Identification and Parameter Estimation; Feedback Cancellation in Hearing aids; Distributed Systems.

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VP ES PC KR RA

The present topic of research is acoustic feedback identification and cancellation in hearing aids.

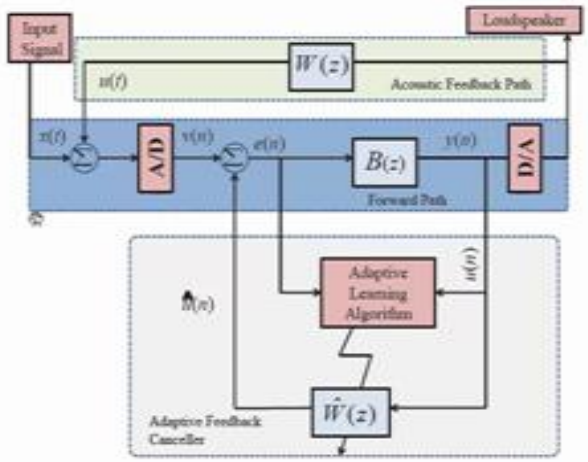

Figure: Block diagram of hearing aid with feedback cancellation

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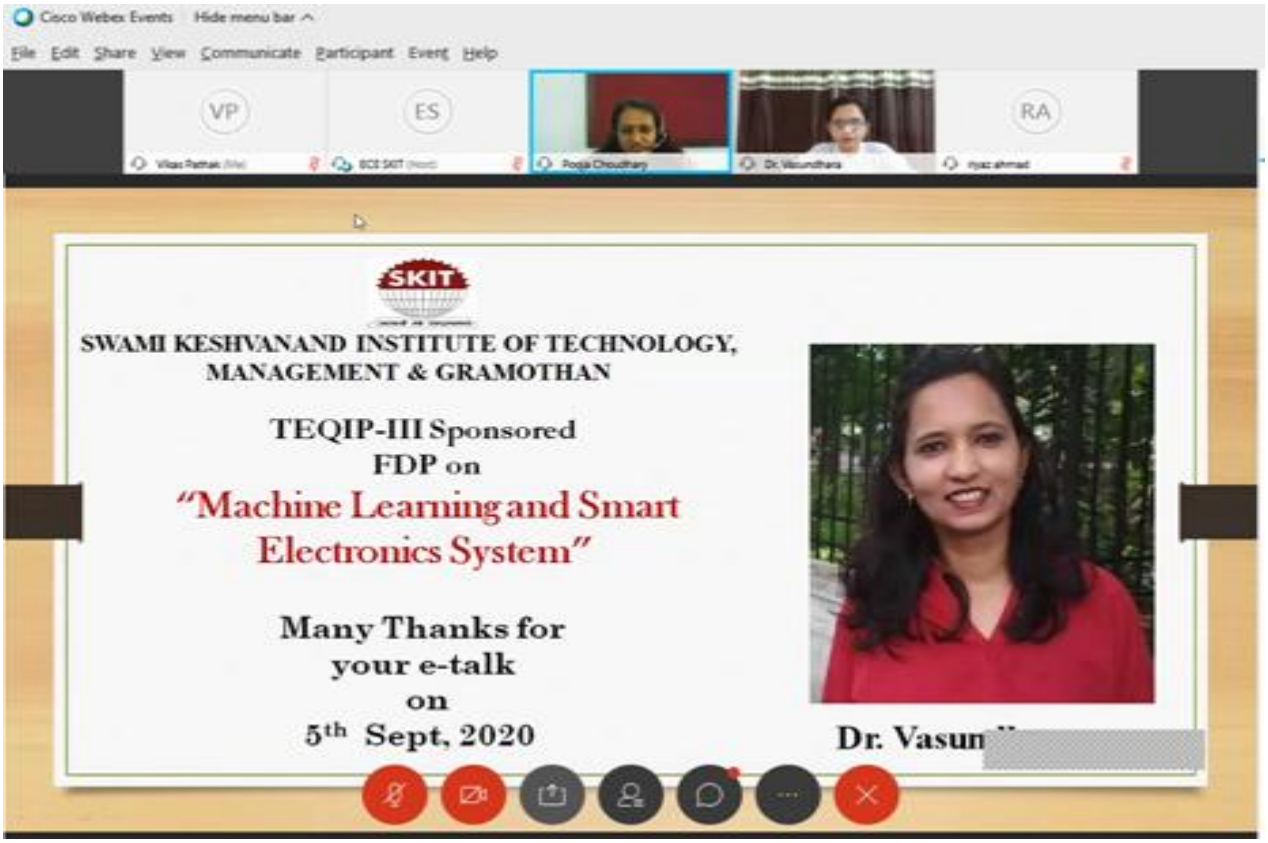
Formulation of the proposed method

FLAF	Functional Link Adaptive Filter
TFLAF	Trigonometric Functional Link Adaptive Filter
AEF-TFLAF	Adaptive Exponential Parameter
DI-AEF	Decorrelated Improved AEF

13/57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Many Thanks for
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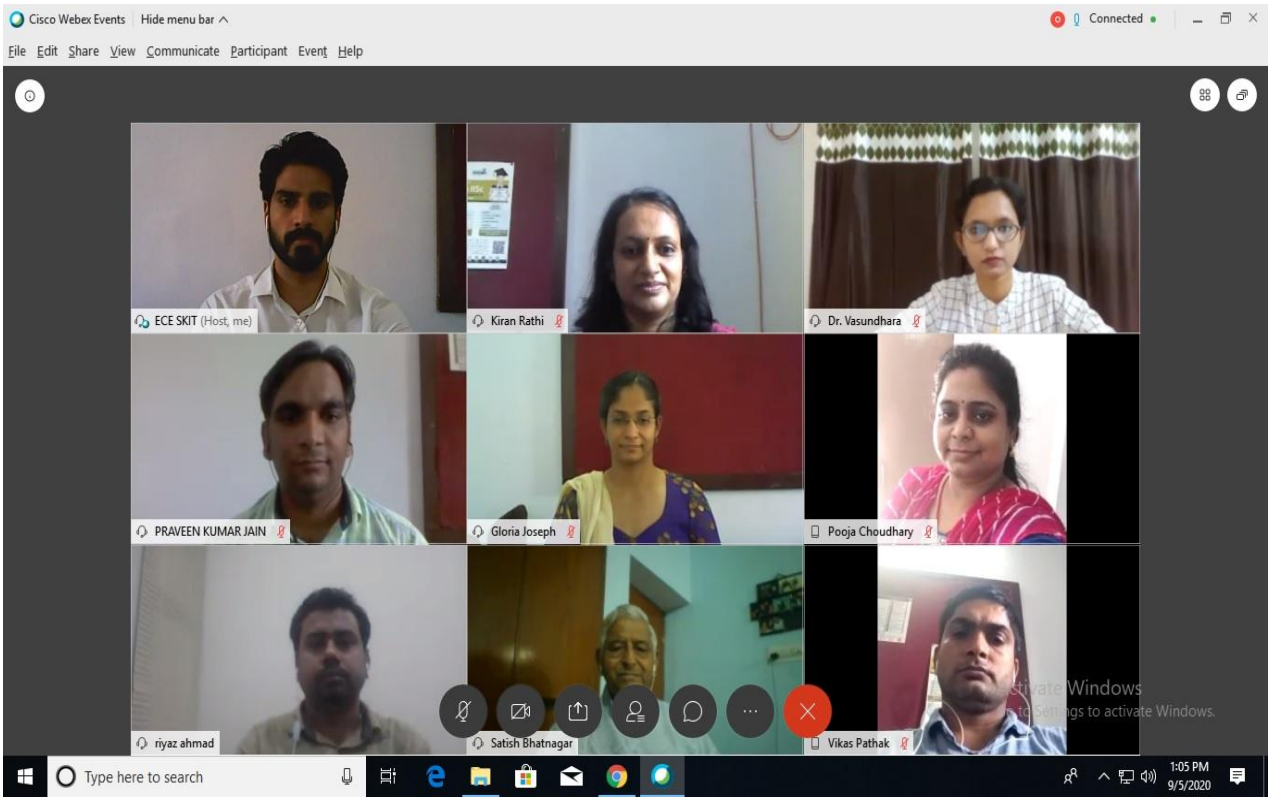
on
5th Sept, 2020
Dr. Vasun



Valedictory

Report of the Event

Faculty Development Program on **Machine Learning and Smart Electronic System (MLSES-2020)** was jointly organized by Rajasthan Technical University, Kota & Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur from 3rd to 5th sept, 2020. This FDP was fully sponsored by RTU (ATU) under Technical Education Quality Improvement Program Phase III (TEQIP-III) and conducted on Webex online platform.

Dr. S. J. Nanda, Asst. Professor, Department of Electronics and communication, MNIT, Jaipur was the honorable guest of the inaugural session of the FDP. The FDP began with the welcome address by Prof. Ramesh Kumar Pachar (Principal SKIT). In the Inauguration ceremony Mr. Riyaz Ahmad, Asst. Professor and RTU event coordinator of this FDP, Prof. S. K. Bhatnagar (Director (Research), SKIT), and Prof. Mukesh Arora (Head, ECE Deptt.), Dr. Praveen Kr. Jain, Dy. HOD, ECE Dept. were also present. Mr. Riyaz Ahmad told the participants about this FDP and then Dr. S. J. Nanda addressed the participants about importance of machine learning and smart electronic system in current scenario and its relation to the engineering stream. 260 faculty members from different institutes of the country have participated in this FDP.

In the first session of the first day **Dr. S. J. Nanda,** Asst. Professor, MNIT, Jaipur delivered an expert talk on Basics of Machine Learning and highlighted its importance in daily life. He also introduced about neural networks, fuzzy systems and various evolutionary computational algorithms. In the second session **Dr. Lava Bhargava**, Professor, MNIT Jaipur, enlightened the participants with the Embedded Systems for Smart Electronics. The day one is ended with the final session of **Dr. Amit M. Joshi**, Asst. Professor, MNIT, Jaipur. He shared his knowledge in the field of Cyber Physical System for healthcare.

Commencement of second day was enthusiastic and informative due to an expert lecture of **Dr. Nithin V. George,** Assoc. Professor, IIT, Gandhi Nagar. He shed light on neural network and fuzzy logic in context of Machine Learning. **Dr. Kuldeep Singh**, Asst.Professor MNIT, Jaipur and **Dr. Trilochan Panigrahi,** Associate Professor, NIT, Goa also shared their knowledge on Introduction to Deep Learning, Wireless Sensor network respectively on the subsequent sessions of Day 2.

Day 3 started with the knowledge enriching session of **Dr. Sitanshu S. Sahu,** Asst. Professor, BIT, Mesra, Ranchi. He enlightens with machine learning in health care. The

session is followed by an expert talk by **Dr. Vasundhara**, Asst. Professor, NIT, Warangal who shed light on Smart Hearing Aids. in the last session of the FDP. It was quite informative session.

The discussed areas are of great benefit for the participants as they are enlightened with the most widely used advance strategies in **Machine**

Learning and smart electronic System. Feedback of the FDP is collected from the participants.

The final report of this FDP was read by Ms. Kiran Rathi Assoc. Prof., Department of ECE, SKIT M & G, Jaipur.

Media Coverage

फैकल्टी डवलपमेंट प्रोग्राम का शुभारंभ

डेली न्यूज, mix रिपोर्टर, जयपुर। जगतपुरा स्थित स्वामी केशवानंद इंस्टीट्यूट आफ टेक्नोलॉजी मैनेजमेंट एंड ग्रामोथन में मशीन लर्निंग एंड स्मार्ट इलेक्ट्रॉनिक सिस्टम पर तीन दिवसीय फैकेल्टी डेवलपमेंट प्रोग्राम का शुभारंभ हुआ। एफडीपी का उदघाटन, डॉ एसजे नंदा (असिस्टेंट प्रोफेसर, एमएनआईटी जयपुर), एवं श्री रियाज़ अहमद इवेंट कोर्डिनेटर आरटीयू, कोटा के द्वारा किया गया। कार्यक्रम की शुरुआत में संस्था के प्रिंसिपल डॉ रमेश कुमार पचार ने अतिथियों का स्वागत करते हुए यह बताया कि एसकेआईटी द्वारा विभिन्न क्षेत्रों में आयोजित होने वाली एफडीपी से फैकल्टी का ज्ञानवर्धन व कार्यकुशलता में बढ़ोतरी होती है तथा छात्र भी इससे लाभान्वित होते हैं। रियाज़ अहमद ने मशीन लर्निंग के वर्तमान परिपेक्ष में उपयोगिता पर अपने विचार व्यक्त किए। डॉ एस जे नंदा ने मशीन लर्निंग को इलेक्ट्रॉनिक सिस्टम से जोड़ते हुए विभिन्न तकनीकी पहलूओं पे चर्चा की जो कि प्रतिभागियों के लिये काफी महत्वपूर्ण रही। उन्होंने ये बताया कि कैसे मशीन लर्निंग तथा आईओटी के उपयोग से आम जीवन सुगम तथा अत्याधुनिक तकनीकी से परिपूर्ण हो गया है। एफडीपी के पहले दिन एक्सपर्ट्स ने कथित छेत्र के विभिन्न उपयोगी तकनीकियों के बारे में चर्चा की और इसी क्रम में जहां डॉ लव भार्गव (प्रो. एमएनआईटी) ने एंबेडेड सिस्टम तथा उसके विभिन्न क्षेत्रों में उपयोगिता पे व्याख्यान दिया वहीं डॉ अमित जोशी (असिस्टेंट प्रोफसर एमएनआईटी) ने साइबर फिजिकल सिस्टम का चिकित्सा के छेत्र में होने वाली प्रयोगों का उल्लेख किया। प्रोग्राम के अंत में डॉ मुकेश अरोड़ा विभागाध्यक्ष ईसीई ने सभी पार्टिसिपेंट्स एवं गणमान्य अतिथियों का आभार व्यक्त किया तथा बताया की इस एफडीपी में देश के विभिन्न इंजीनियरिंग कॉलेज के 260 फैकल्टी ने भाग लिया।

Dear All,
Greetings !!!
Department of Electronics and Communication Engineering, Swa tomi Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur is associate with Rajasthan Technical University is going to organize an RTU(ATU) TEQIP-III Sponsored Three Days Faculty Development Program on "Machine Learning and Smart Electronic System" (MLSES-2020) from 03/09/2020 to 05/09/2020
E-certificate: All registered participants will be eligible to get e-certificate whose attendance is above 80% in all sessions and after submitting feedback form.

Registration Link: https://forms.gle/h2PjDsbZzCryTehBA

Registration Fee: No registration fee required

This FDP will focus on:

- Machine Learning-I
- Embedded Systems for smart electronics
- Cyber Physical system for healthcare
- Machine Learning-II
- Introduction to deep learning
- Wireless Sensor Network
- Machine learning in healthcare
- Smart hearing aids

WhatsApp group link: https://chat.whatsapp.com/HDtlEbx2kX9EcgkbnqY5rB
Google Classroom Code: 7atjn6c
Email id for correspondence: fdpece@skit.ac.in
Note: It is advised to download WebEx and join either WhatsApp group or Google Classroom in the Context of this FDP.

Coordinator MLSES-2020:
Ms. Kiran Rathi
Associate Professor, SKIT Jaipur
9057574362

Mr. Vikas Pathak
Associate Professor, SKIT Jaipur
8503856191

Ms. Pooja Choudhary
Assistant Professor, SKIT Jaipur
8875140140

WhatsApp

Dear All

We are glad to inform that **Department of Electronics and Communication Engineering, Swami Keshvanand Institute of Technology, Management &Gramothan, Jaipur** is organizing an **RTU (ATU) TEQIP-III** Sponsored Online three days Faculty Development Programme (FDP) on ***"Machine Learning and Smart Electronics System (MLSES-2020)"*** **from 03rd September – 05th September 2020.**

The aim of this FDP is to provide an exposure to both basics and recent advances in Machine Learning and smart electronic systems to the teaching and research communities.

This FDP will focus on:

- Machine Learning-I
- Embedded Systems for smart electronics
- Cyber Physical system for healthcare
- Machine Learning-II
- Introduction to deep learning
- Wireless Sensor Network
- Machine learning in healthcare
- Smart hearing aids

The brochure is attached with the mail.

Registration Link: https://forms.gle/h2PjDsbZzCryTehBA

We look forward to your presence and participation.

We request you to give a wide circulation of this e-mail to your contacts

Thanking You
Organizing Team

MLSES-2020

Mail

Assessment

Section 1 of 2

Assignment: RTU (ATU) TEQIP III Sponsored FDP on Machine Learning and Smart Electronic System (MLSES), Sept. 03-05, 2020

You all are required to give the assignment. This is essential for the certificates.

Name *

Short answer text

Email *

Short answer text

After section 1 Continue to next section

Section 2 of 2

MCQ

Please answer all questions. Each question has alloted one mark. There is no negative marking.

What is Machine learning? *

- The autonomous acquisition of knowledge through the use of manual programs
- The autonomous acquisition of knowledge through the use of computer programs
- The selective acquisition of knowledge through the use of computer programs
- The selective acquisition of knowledge through the use of manual programs

Which is not an important branch of computational intelligence *

- Neural Networks
- Fuzzy Logic
- Evolutionary Computation
- Derivative based optimization

Which is not a part of the genetic algorithm process of optimization *

- Chromosome Initialization
- Position Update
- Crossover
- Mutation

Which of the factors affect the performance of the learner system does not include?

- Representation scheme used
- Training scenario
- Type of feedback

In language understanding, the levels of knowledge that do not include? *

- Phonological
- Syntactic
- Empirical
- Logical

When an optimization algorithm has many maxima and many minima it is called as a *

- Multi modal Optimization
- Multi variable Optimization
- Random Optimization
- Uni modal Optimization

Which is not an evolutionary computation based algorithm

- Genetic algorithm
- Genetic Programming
- Differential Evolution

Which flow of genetic algorithm is correct?

- Initialization-crossover-selection-mutation-termination
- Initialization-mutation-selection-crossover-termination
- Initialization-selection-mutation-crossover-termination
- Add option or add "Other"

- ◯ inference engine
- ◯ knowledge base
- ◯ user interface
- ◯ all of the mentioned

A neural network model is said to be inspired by the human brain. The neural network consists of many neurons, each neuron takes an input, processes it, and gives an output. Here's a diagrammatic representation of a real neuron. Which of the following statement(s) correctly represents a real neuron? *

- ◯ A neuron has a single input and a single output only
- ◯ A neuron has multiple inputs but a single output only
- ◯ A neuron has a single input but multiple outputs
- ◯ A neuron has multiple inputs and multiple outputs
- ◯ All of the above statements are valid

In a neural network, knowing the weight and bias of each neuron is the most important step. If you can somehow get the correct value of weight and bias for each neuron, you can approximate any function. What would be the best way to approach this? *

- ◯ Assign random values and pray to God they are correct
- ◯ Search every possible combination of weights and biases till you get the best value
- ◯ Iteratively check that after assigning a value how far you are from the best values, and slightly change the ...
- ◯ None of these

"Convolutional Neural Networks can perform various types of transformation (rotations or scaling) in an input". Is the statement correct True or False? *

- ◯ True
- ◯ False

Which of the following techniques perform similar operations as a dropout in a neural network? *

- ◯ Bagging
- ◯ Boosting
- ◯ Stacking
- ◯ None of these

Which of the following is true about model capacity (where model capacity means the ability of the neural network to approximate complex functions)? *

- ◯ As number of hidden layers increase, model capacity increases
- ◯ As dropout ratio increases, model capacity increases
- ◯ As learning rate increases, model capacity increases
- ◯ None of these

What is the sequence of the following tasks in a perceptron? *

1. **Initialize weights of perceptron randomly**
2. **Go to the next batch of dataset**
3. **If the prediction does not match the output, change the weights**
4. **For a sample input, compute an output**

- ◯ 1, 2, 3, 4
- ◯ 4, 3, 2, 1
- ◯ 3, 1, 2, 4
- ◯ 1, 4, 3, 2

The tympanic membrane separates the ear canal from the _____ *

- upper ear cavity
- lower ear cavity
- middle ear cavity
- inner ear cavity

The human ear responses to vibrations ranging from _____ *

- 20KHz – 20MHz
- 2KHz – 20MHz
- 20Hz – 20KHz
- 2Hz – 2KHz

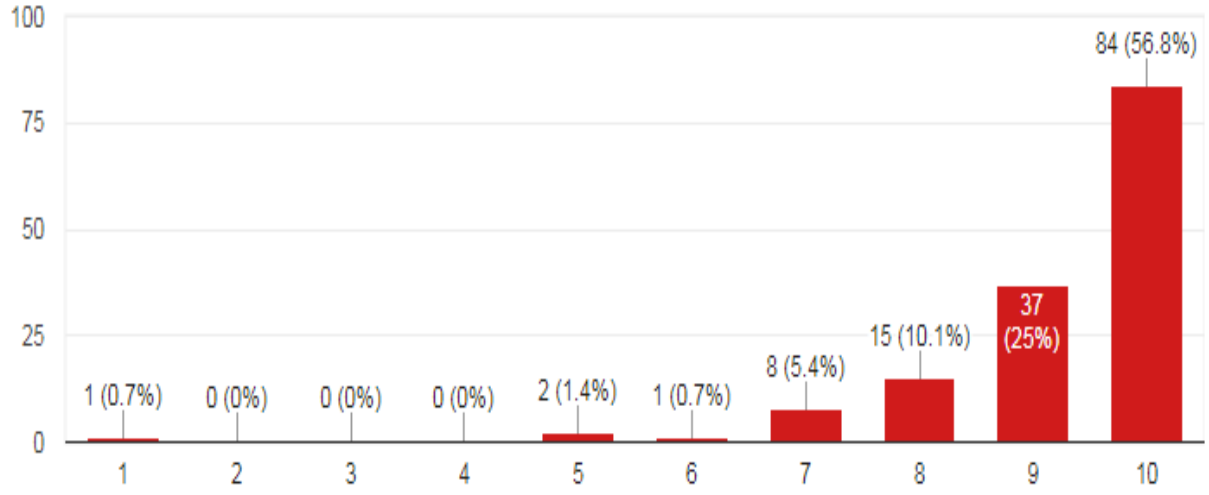
Which of the following is the design in which both the hardware and software are considered during the design? *

- platform based design
- memory based design
- software/hardware codesign
- peripheral design

Feedback analysis of MLSES-2020 FDP

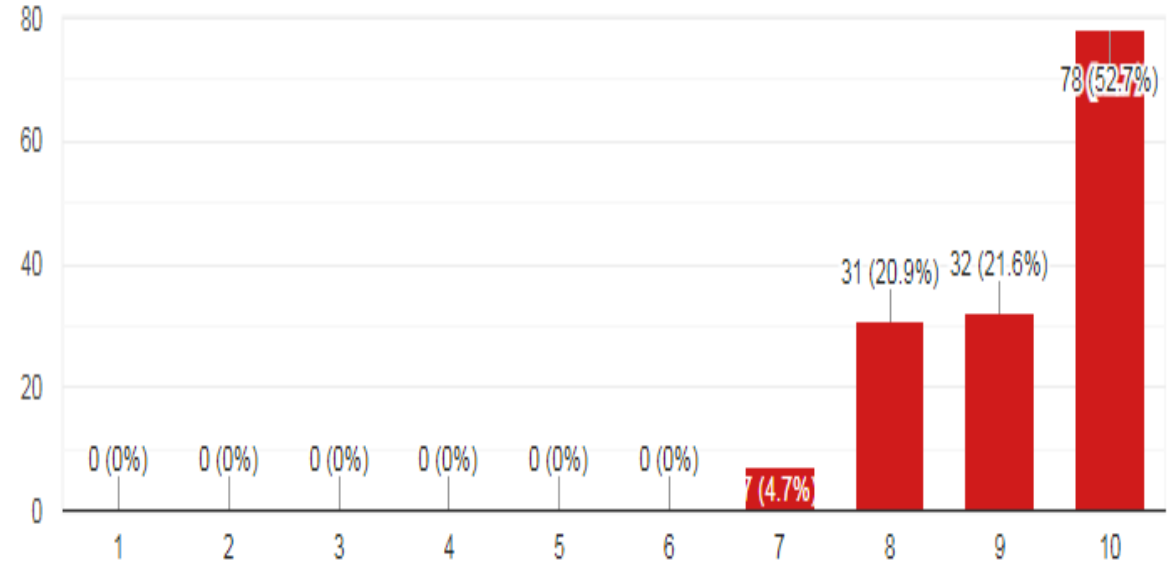
1. Your experience about the course.

148 responses



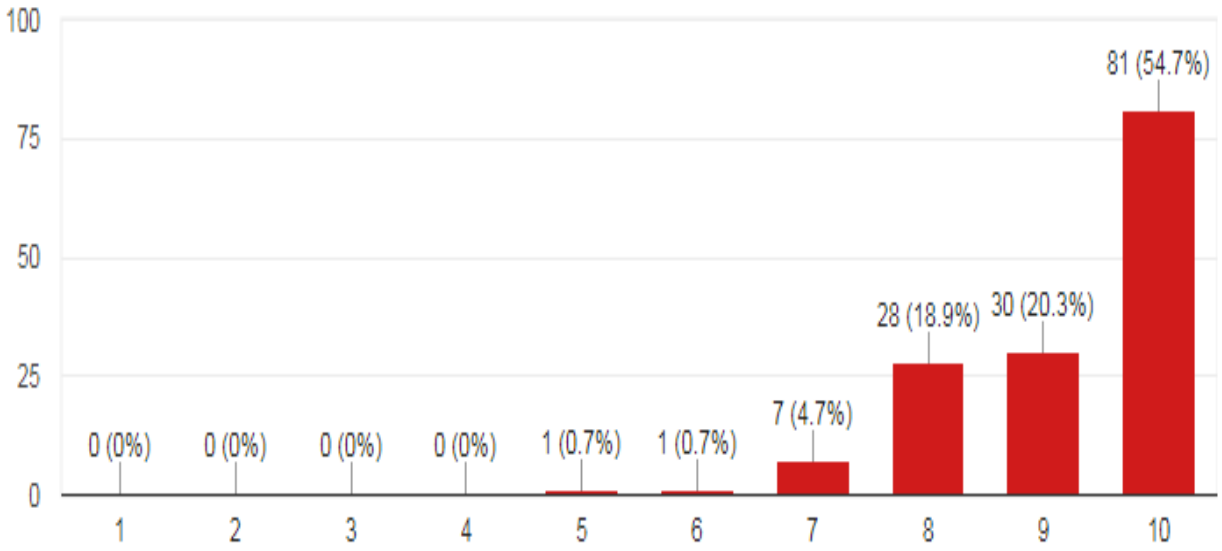
2. Knowledge enhancement.

148 responses



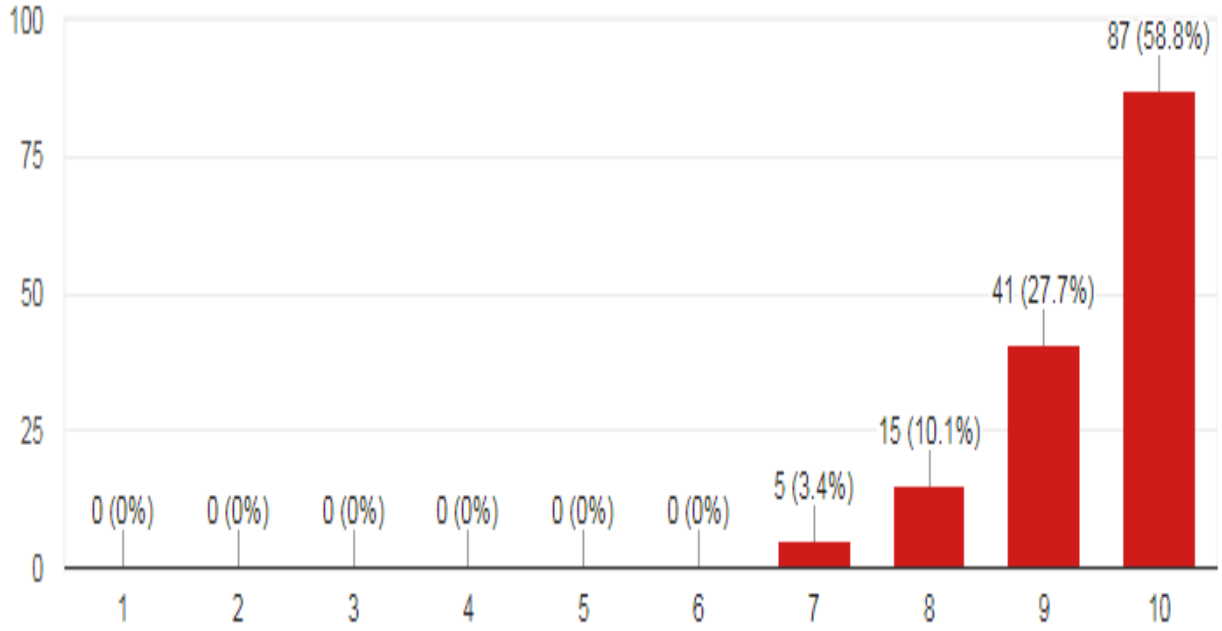
3. Relevancy of topics

148 responses



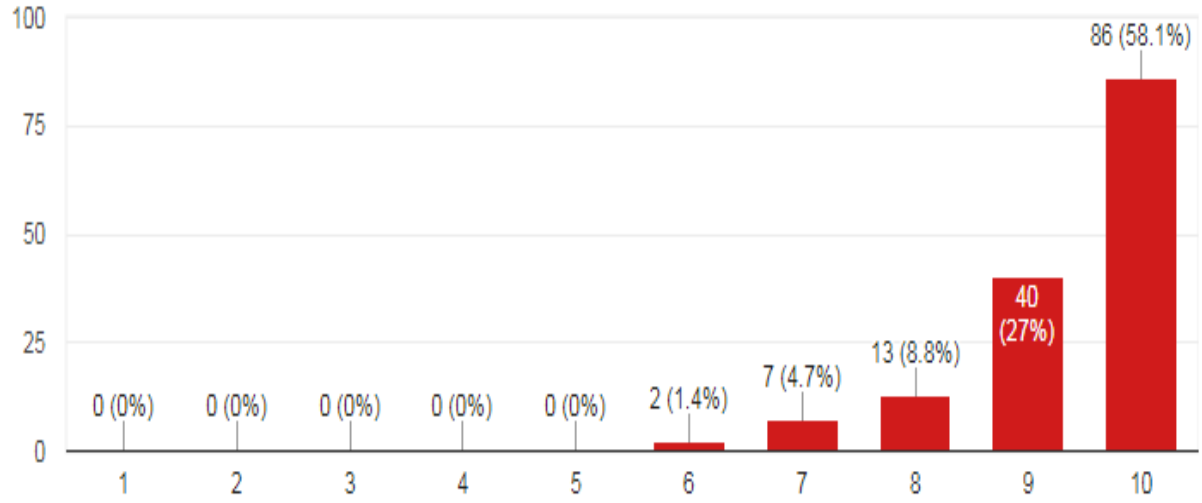
4. About speakers.

148 responses



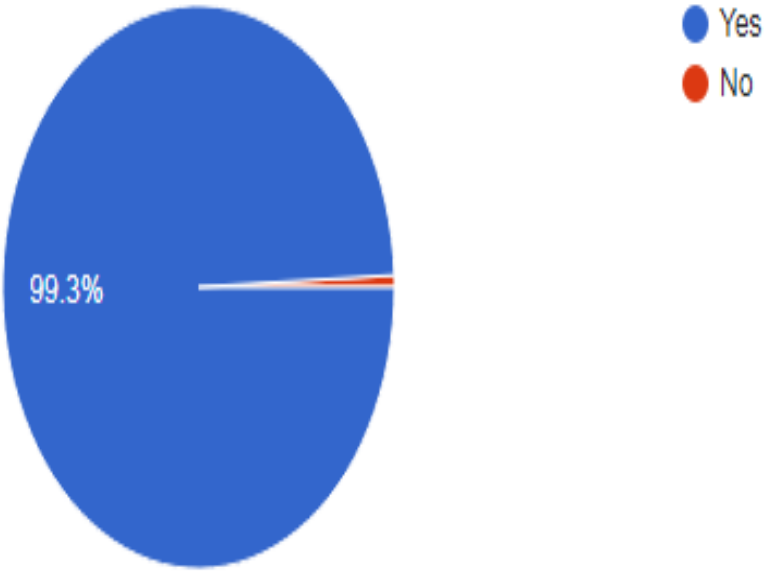
5. General Arrangement

148 responses



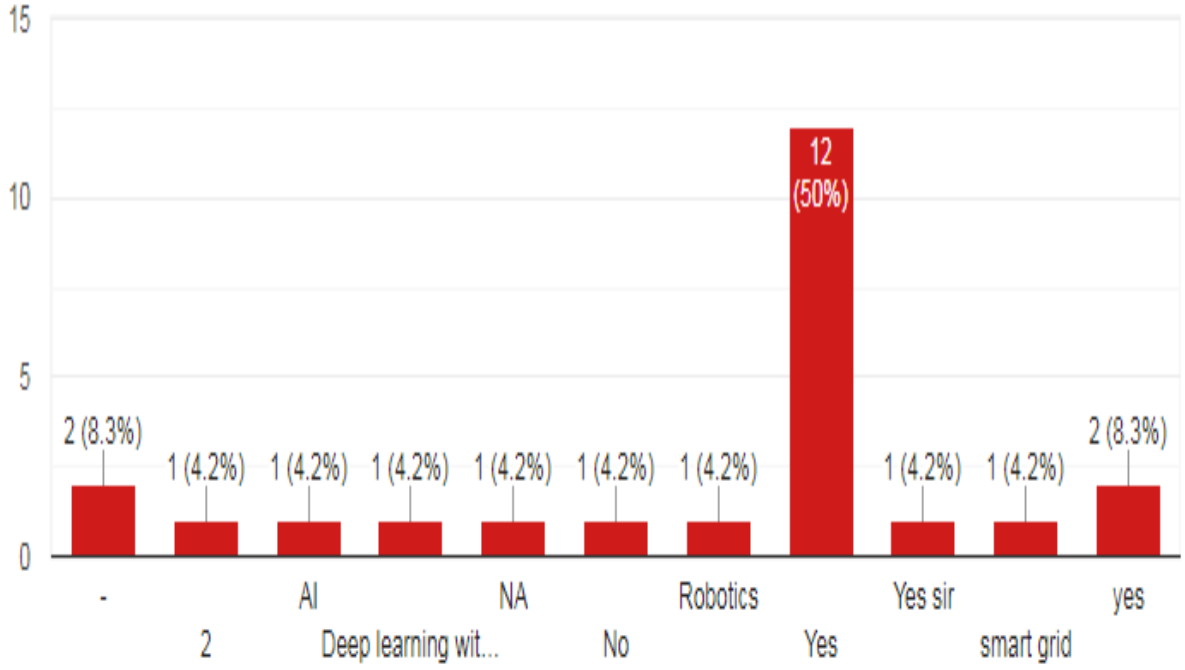
6. In future you want to attend such course at this Institute (SKIT, Jaipur).

148 responses



If No, Please specify. (In future you want to attend such course at this Institute)

24 responses



7. Topic that can be covered in the next course?

148 responses

Machine learning
IOT
Deep learning
Deep Learning
IoT
Artificial intelligence
AI
-
Signal Processing

8. Knowledge gained by the course.

148 responses

Yes
Good
Excellent
Machine learning
good
Excellent
Very good
Very informative
ML

9. Overall experience of the course.

148 responses

Good
Excellent
Nice
Very good
Good
excellent
Very Good
good
Very good

10. Suggestions

148 responses

It was a very informative.
No Suggestions
Make more practical session
share the video recodings
Overall was good
AUTOMATIC PPT SHARING AFTER WEBINAR FOR REVIEW STUDY.
No Thanks
Nice presentation with superb sessions
No any. Thanks.