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A REPORT ON TECHNICAL SEMINAR

♦ **TITLE AND DURATION:** "Fundamentals of Lossless Image and Video Coding" on May 11, 2019.

♦ **SPONSORS & SUPPORTERS:** IEEE Student Branch Chapter

♦ **ORGANIZER(S):** Department of Electrical Engineering, Poornima College of Engineering, Jaipur.

♦ **FLYER / POSTER:**

♦ **PROGRAM SCHEDULE:**

S. No	Activities	Time
1	Registration	07:45 AM-08:00 AM
2	Reporting Time	07:58AM
3	Arrival of Chief Guest	08:00AM
4	Lamp Lighting by- Dr. Anil Kumar Tiwari(Head, EE, IIT Jodhpur) Dr. Mahesh M. Bundele(Director, PCE) Dr. VirendraSangtani(HOD,EE, PCE) Dr. HimaniGoyal Sharma(Branch Convener,IEEE)	08:00AM- 08:05AM

5	Introduction of Chief Guest	08:05AM-08:09AM
6	Technical Seminar on Fundamentals Of Lossless Image and Video Coding By Dr.Anil Kumar Tiwari (IIT Jodhpur)	08:09 AM-10:00 AM
7	Overview of IEEE Student Branch, PCE and Vote of Thanks	10:00-10:03 AM
8	Group Photograph	10:03-10:05 AM

S. No.	Activities	Time	Faculty/Dignitaries
1	Seating of Faculty members, Participants and Students	7:55-08:00 AM	
2	Welcome of Speaker ➢ **Speaker: Dr. Anil Kumar Tiwari (Head, EE, IIT Jodhpur)** ➢ Dr. Mahesh M. Bundele, Principal & Director,PCE ➢ Dr. VirendraSangtani (HOD,EE, PCE) ➢ Dr. HimaniGoyal Sharma (Branch Convener, IEEE)	08:00-08:02 AM	Anchors
3	Felicitation of Dr Anil Kumar Tiwari by bouquets and mementoes	08:02-08:04 AM	Dr. Anil Kumar Tiwari by Dr.Mahesh M. Bundele, Principal & Director,PCE
4	Introduction of Speaker	08:04-08:08 AM	Dr Babita Jain
5	Technical Seminar	08:08-09:45 AM	Dr. Anil Kumar Tiwari
6	Overview of IEEE Student Branch, PCE and Vote of Thanks	09:45-09:47 AM	Dr. Himani Goyal Sharma, Counselor, IEEE Student Branch, PCE
7	Group Photograph	09:47-09:48 AM	Outside CG-05

♦ **DETAILS OF THE EXPERT:**

Dr. Anil K. Tiwari is currently an Associate Professor and Head of the Electrical Engineering Department at Indian Institute of Technology is Jodhpur. Current search has obtained interest M.Tech includes and development Ph.D degrees of from algorithms IIT Kharagpur. For image and video: compression, noise minimization, interpolation, watermarkig, etc. He also has interest in development of affordable health monitoring systems. He has supervised two Ph Ds and about fifteen M.Tech. and M.S. ESIs. Some of his work is heading towards getting converted into startps. He has nearly 50 publications in conferences and Journals of national and international repute.

Dr Anil Kumar Tiwari discussed about the "Fundamental of Loss Image and Video Compression: Methods and Challenges. He discussed about methods to achieve compression for

both Image and Video by reducing redundancy and efficient packing of energy. He also discussed about statistical method of compression and took the example of four symbols and total sample size of 256.From this average code word length was calculated & total number of bits. Different combinations were tested with different code word length. Results at encoding end and decoding side are tested and prediction error was minimized . PDF of Prediction error image is obtained and compared. He also discussed the Least-square based predictors (Feed forward type).He also discussed about some of the popular predictors like Least-square based predictors, Switched adaptive predictors. He also highlighted the main components in the existing lossless image compression methods. He also highlighted about the popular predictors used for image compression & Video compression. Finally keeping the advantages of the low coding and decoding complexity in view, the main objective of research is focused on proposing low cost prediction methods for lossless compression of both - images and video.

♦ **GLIMPSES OF THE SESSION:**

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♦ **FEEDBACK ANALYSIS:**

Technical Seminar Organized by Student Branch of Poornima College Of Engineering, Jaipur (11th, May 2019).			
	Attributes	**Comments**	**No. Of Comments**
Program	**Organizing level**	Excellent	8
		Very Good	7
		Good	6
		Poor	2
	Guests/ Dignitaries	Excellent	16
		Very Good	2
		Good	3
		Poor	2
	Reception & publicity	Excellent	5
		Very Good	7
		Good	9
		Poor	2
The Talk Contents	**Relevance**	Excellent	8
		Very Good	7
		Good	8
		Poor	0
	Depth	Excellent	8
		Very Good	8
		Good	5
		Poor	2
	Interest	Excellent	8
		Very Good	9
		Good	5
		Poor	1
	Importance	Excellent	10
		Very Good	7
		Good	5
		Poor	1
	Understansding	Excellent	5
		Very Good	8
		Good	7
		Poor	3
	Knowledge	Excellent	16
		Very Good	3
		Good	2
		Poor	2
		Excellent	12

The Facilitators	**Preparedness**	Very Good	3
		Good	5
		Poor	3
	Response to participant's questions	Excellent	12
		Very Good	2
		Good	6
		Poor	3
	Delivery	Excellent	11
		Very Good	5
		Good	5
		Poor	2
Overall understanding of concepts		Excellent	5
		Very Good	11
		Good	7
		Poor	7
Duration of the program		Excellent	5
		Very Good	7
		Good	10
		Poor	0
Overall how would you rate this program		Excellent	9
		Very Good	7
		Good	5
		Poor	2
Would you like to work in this direction		Yes	16
		No	7
Would you like to attend similar activity in future?		Yes	20
		No	3
Suggestions		The Practical sessions should also be included	
		Nice startup for information	
		Session should cover basics first	
		Good Gave good knowledge	

♦ **LIST OF PARTICIPANTS:**

S.No.	Name	Category	Organization
1.	Dr. Mahesh Bundele	Director	Poornima College of Engineering
2.	Dr. VirendraSangtani	HOD,EE	Poornima College of Engineering
3.	Dr. HimaniGoyal Sharma	Faculty	Poornima College of Engineering
4.	Awanish Mishra	Student	Poornima College of Engineering
5.	Ashutosh Gupta	Student	Poornima College of Engineering
6.	RajanSehgal	Student	Poornima College of Engineering
7.	ShubhangAgarwal	Student	Poornima College of Engineering
8.	SainiAnkit Suresh	Student	Poornima College of Engineering

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9.	Shreyansh Vijay	Student	Poornima College of Engineering
10.	SiddhantAwasthi	Student	Poornima College of Engineering
11.	TrinalDev Sharma	Student	Poornima College of Engineering
12.	SheetalMeena	Student	Poornima College of Engineering
13.	PranavPratap	Student	Poornima College of Engineering
14.	CharulChasta	Student	Poornima College of Engineering
15.	Vinod Kumar	Attendee	Poornima College of Engineering
16.	Vibhuti Narayan Mishra	Attendee	Poornima College of Engineering
17.	Saurav Kumar	Attendee	Poornima College of Engineering
18.	Amit Mishra	Attendee	Poornima College of Engineering
19.	AmitSaini	Attendee	Poornima College of Engineering
20.	AnimeshGautam	Attendee	Poornima College of Engineering
21.	KeshavGautam	Attendee	Poornima College of Engineering
22.	Nitin Jindal	Attendee	Poornima College of Engineering
23.	AnchalBanwal	Attendee	Poornima College of Engineering
24.	Man Mohan Singh Kalyanwat	Attendee	Poornima College of Engineering
25.	MayankPrajapat	Attendee	Poornima College of Engineering
26.	VaibhavTrivedi	Attendee	Poornima College of Engineering
27.	KuldeepSaini	Attendee	Poornima College of Engineering
28.	Manas	Attendee	Poornima College of Engineering
29.	SakshiAgarwal	Attendee	Poornima College of Engineering
30.	SangamMeena	Attendee	Poornima College of Engineering
31.	SparshAgarwal	Attendee	Poornima College of Engineering

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