

Report On STTP

# **Artificial Intelligence for Signal Processing Applications (AISPA 2020)**

22-26 Dec 2020

**Sponsored By**



Department of Science & Technology  
Government of Gujarat

**Organized by:**



**Sarvajani College of Engineering and Technology (SCET)**

## GUJARAT COUNCIL ON SCIENCE & TECHNOLOGY

Dept of Science and Technology, Govt of Gujarat

1. **Title of the Programme:** STTP on Artificial Intelligence for Signal Processing Applications (AISPA 2020)
2. **Category:** STTP
3. **Date/s and Duration :** 22-26 Dec 2020 ( Five days)
4. **Venue:** SCET , Surat ( Via Online virtual mode)
5. **Dignitary/s present at inaugural function:**

	Chief Guest	Chair
<b>Name :</b>	Dr. Suprava Patnaik	Dr.Niteen patel
<b>Designation</b>	Professor and Head	Dean of faculty
<b>Name of institute :</b>	KIIT , Bhubneshwar	SCET, Surat
<b>Contact details</b>	suprava_patnaik@yahoo.com	Niteen.patel@scet.ac.in

### 6. Invited speaker / Expert:

Sr.	Name	Name of institute	Contact Details	Topic of lecture
1.	Dr. Suprava Patnaik	KIIT Bhubneshwar	suprava_patnaik@yahoo.com	(1) Introduction and scope of AI and (2) Signalprocessing perspective of AI
2.	Dr. M A Zaveri	SVNIT	mazaveri@coed.svnit.ac.in	Signal/Bayesian estimation using AI
3.	Dr. Suman Mitra	DAIICT , Gandhinagar	suman_mitra@daiict.ac.in	Pattern recognition as basics of AI with applications
4.	Dr. Deepak Joshi	IIT Delhi	Deepak.Joshi@cbme.iitd.ac.in	Signal Processing and Machine Learning for Neuroprostheses
5.	Dr. S. Nanda	MNIT jaipur	sjnanda.ece@mnit.ac.in	Unsupervised Learning Techniques
6.	Dr. Sanjay Chaudhury	Ahmedabad University, Ahmedabad	sanjay.chaudhary@ahduni.edu.in	Big Data Analytics Architecture
7.	Dr. Santosh V	MNIT jaipur	skvipparthi@mnit.ac.in	Change Detection in Unseen Videos

8.	Dr. Hitesh Shah	GCET V V nagar	hiteshshah@gcet.ac.in	(1) Kernel Recursive Least Squares Function Approximation in Game Theory Based Control (2) Reinforcement Learning Frame Work for Energy Efficient Wireless Sensor Networks
9.	Dr. Urvashi Shukla	MNIT jaipur	drurvashishukla@gmail.com	Binary Social Spider Algorithm for Streaming Datasets
10	Prof. Chintan Varnagar	GEC Rajkot	chintan2287@gmail.com	Biomedical image processing
11	Dr. Mita Paunwala	CKPCET , Surat	mita.paunwala@ckpcet.ac.in	UNET based application
12	Dr. Satish Singh,	IIIT Allahabad	sk.singh@iiita.ac.in	Classification : A Data Driven Approach
13	Dr. Nirali Nanavati	Co dept., SCET	nirali.nanavati@scet.ac.in	AI-Birdie : A Case Study of a Deep Neural Network based Application

## 7. Registered Participants list :

Sr. No	Name	Institute	Category	Qualification	Email
1.	TEJAL ARUNBHAI DAVE	Sarvajanik College of Engineering and Technology, surat	Faculty member	Ph.D.	tejal.dave@scet.ac.in
2.	Dhara Parmar	SCET	Faculty member	Masters completed / studying	dhara.parmar@scet.ac.in
3.	Vrunda Ashokkumar Maniya	Skolkovo Institute of Science and Technology, Moscow, Russia	PHd Scholar	Masters completed / studying	vrundamaniya@gmail.com
4.	Divya Maniya	Chhotubhai Gopalbhai Patel Institute of Technology, Bardoli, Gujarat, India	PG/UG student	Undergraduate completed / studying	divyamaniya9@gmail.com
5.	Divya Maniya	Chhotubhai Gopalbhai Patel Institute of Technology, Bardoli, Gujarat, India	PG/UG student	Undergraduate completed / studying	divyamaniya9@gmail.com
6.	JIGAR SONI	GTU	PHd Scholar	Masters completed / studying	jasoni280489@gmail.com
7.	DIGESH SHAH	SIGMA ENGINEERING COLLEGE,MATAR	Faculty member	Masters completed / studying	shahdigesh2@gmail.com
8.	H M Nimbark	GMSC	Faculty member	Masters completed / studying	hmn.academicworks@gmail.com
9.	SATHVARA RAJENDRAKUMAR DAHYALAL	Government Polytechnic Gandhinagar	Faculty member	Masters completed / studying	rajendra07.ec@gmail.com
10.	Dr. Sandipkumar R Panchal	Knowledge Institute of Technology and Engineering	Faculty member	Ph.D.	principal@kitetech.ac.in
11.	Mr. Nishith J. Shahu	Neotech Faculty of Diploma Engineering, Vadodara	Faculty member	Masters completed / studying	learn.nish@gmail.com
12.	Dr. Kaushik H Raviya	OM Engineering College, Junagadh	Faculty member	Ph.D.	kraviya57@gmail.com
13.	Foram M. Gohel	Darshan Institute of Engineering & Technology for diploma studies, Rajkot.	Faculty member	Masters completed / studying	foramgohel@gmail.com
14.	Hansa Shingrakhia	Indus University	Faculty member	Masters completed / studying	Hansashingrakhia.ec@indusuni.ac.in
15.	Hiren Vavaiya	Sarvajanik college of engineering and technology	Faculty member	Masters completed / studying	hiren.vavaiya@scet.ac.in
16.	Kinjal Mistree	C. G. Patel Institute of Technology	Faculty member	Masters completed / studying	Kinjal.mistree@utu.ac.in
17.	Vaidehi Patel	Indus University	Faculty member	Masters completed / studying	vaidehipatel.ce@indusuni.ac.in



18.	Vivek Kudecha	Sunshine Group Of institutions Rajkot	PG/UG student	Masters completed / studying	vivekkudecha21@gmail.com
19.	Dr. Nikisha Jariwala	Smt. Tanuben & Dr. Manubhai Trivedi College of Information Science	Faculty member	Ph.D.	nikishajariwala@gmail.com
20.	P. S. Thanigaivelu	SRMIST	PHd Scholar	Masters completed / studying	pstvelu@gmail.com
21.	Dr. HITESH SHAH	G H Patel College Of Engineering & Technology,	Faculty member	Ph.D.	hiteshshah@gcet.ac.in
22.	TANMAY HITESHKUMAR BHATT	COLLEGE OF Food Processing Technology and Bioenergy, Anand Agricultural University, Anand	Faculty member	Masters completed / studying	bhatt.tanmayh@gmail.com
23.	L.Sutha veni	Sarah tucker college (Autonomous)tirunelveli, Tamilnadu	PG/UG student	Undergraduate completed / studying	suthavenikumar@gmail.com
24.	P.Veni	Sarah Tucker College	PG/UG student	Undergraduate completed / studying	suryaveni2019@gmail.com
25.	Ankur Changela	Indus University	Faculty member	Masters completed / studying	ankurchangela.ec@indusuni.ac.in
26.	Khushbu Maurya	Indus university	Faculty member	Ph.D.	khushbumaurya.ce@indusuni.ac.in
27.	Dr. Jinal H. Tailor	S.S.Agrawal Institute of Management & Technology	Faculty member	Ph.D.	jinal.tailorssa@gmail.com
28.	Dikshan Shah	S S Agrawal Institute of Management and Technology	PHd Scholar	Masters completed / studying	dikshan817@gmail.com
29.	Dr. Vishal Dineshchandra Nimavat	VVP ENGINEERING COLLEGE, RAJKOT	Faculty member	Ph.D.	vishal.nimavat.ec@vvpedulink.ac.in
30.	Veena Jokhakar	Department of ICT , MSCIT, VNSGU	Faculty member	Ph.D.	vajokhakar@vnsgu.ac.in
31.	Dr. Devendra Pandey	Department of ICT, Veer Narmad South Gujarat University	Faculty member	Ph.D.	dgpandey@vnsgu.ac.in
32.	Hitesh Solanki	Robotech pvt ltd	Faculty member	Undergraduate completed / studying	solankihiteshjamnagar@gmail.com
33.	Dr. VISHAL DINESHCHANDRA NIMAVAT	V V P ENGINEERING COLLEGE, RAJKOT	Faculty member	Ph.D.	vishal.nimavat.ec@vbpedulink.ac.in
34.	Abhyuday Shukla	Sarvajanik College of Engineering & Technology	PG/UG student	Undergraduate completed / studying	170420111050.ec17@scet.ac.in
35.	Ajitesh Singh	Sarvajanik college of engineering and technology Surat Gujarat	PG/UG student	Undergraduate completed / studying	aji27798@gmail.com

36.	Sanket Songara	Sarvajanik College of Engineering and Technology	PG/UG student	Undergraduate completed / studying	sanketsongara1111@gmail.com
37.	Nilay Patel	Sarvajanik college of engineering and technology	PG/UG student	Undergraduate completed / studying	patel000nilay@gmail.com
38.	Ketan Khandubhai Lad	GIDC Degree engineering college	Faculty member	Masters completed / studying	ketanlad_18@yahoo.co.in
39.	Dr. Rajnish Rakholia	S. S. Agrawal Institute of Management and Technology	Faculty member	Ph.D.	rajnish.rakholia@gmail.com
40.	Dhruvi Jariwala	Sarvajanik College of Engineering and Technology	PG/UG student	Undergraduate completed / studying	djpcsh@gmail.com
41.	Hiren Pokar	Sarvajanik College of Engineering and Technology	PG/UG student	Undergraduate completed / studying	hirenpokar31072@gmail.com
42.	Jay agarwal	Scet	PG/UG student	Undergraduate completed / studying	jayagarwal235@gmail.com
43.	Maharshi Chevli	SCET	PG/UG student	Undergraduate completed / studying	chevlimaharshi@gmail.com
44.	Ruchita Patel	Sarvajanik College of Engineering and Technology	PG/UG student	Undergraduate completed / studying	ruchitapatel194@gmail.com
45.	Reshma Tharakan	Sarvajanik College of Engineering and Technology	PG/UG student	Undergraduate completed / studying	tharakan.reshma@gmail.com
46.	Hemina Jignesh Bhavsar	S.S.Agrawal Institute of Management & Application	PHd Scholar	Masters completed / studying	heminabhavsar@gmail.com
47.	Vipa Pandya	S.S.Agrawal College of Commerce and Management	Faculty member	Masters completed / studying	vipa.desai@gmail.com
48.	Saiyed Saziabegum Md.Ramiz	S.S.Agrawal institute of Management and Technology, Navsari	PHd Scholar	Masters completed / studying	saziya.saiyed2013@gmail.com
49.	JAYESH MUNJANI	Uka Tarsadia University	PHd Scholar	Masters completed / studying	jayeshc12@gmail.com
50.	Parth Pathak	SCET, GTU	PG/UG student	Undergraduate completed / studying	170420111029.ec17@scet.ac.in

## 8. Program summary

**Short Term Training program (STTP) on Artificial Intelligence for Signal Processing Applications (AISPA)** aimed at cooperative use of two disciplines namely Artificial Intelligence (AI) and signal processing (SP) from later one's (i.e. signal processing ) perspective. AI been visualized as the science of building computational models that exhibit intelligent problem solving behavior and signal processing can

be termed as science of playing with and /or manipulating numeric signals / data to extract meaningful information out of input signal.

Looking experience of In last decade, domain of signal processing (SP) has been benefited and enriched by emergence of in artificial intelligence (AI) and machine learning (ML). These advances have made new tools availability in sub domains like signal estimation, manipulation, classification and prediction. In data analytics, it is possible for further research in dimensionality and data size with the help of layer by layer signal representations, function approximation and signal prediction for nonlinearity as well. These enhancements have led research community to significant improvements in a wide variety of long standing problem domains (e.g., speech processing, vision/video based systems

AISPA invited senior academicians and also active researchers to showcase their recent work at the rapid evolution in ever evolving techniques and application areas. It covered fundamental and theory of signal processing to applications that addressed open questions in various disciplines of ICT including robustness, adaptivity, and performance analysis. Detailed topic wise summary is given in later section.

Sttp on AISPA helped enriching knowledge of all participants and might have enabled them to start, accelerate and conquer their work in near future for overall country wide benefits.

### Detailed Schedule of STTP:

Day 1: (22 Dec 2020 Tuesday) Schedule	
Timings	Details
09:30 - 10:00	Inauguration
10:00- 11:30	Technical session -1 (Dr. Suprava Patnaik, KIIT Bhuvneshwar) • Introduction and scope of AI
11:30 - 11:45	break
11:45- 13:15	Technical session –2 (Dr. Suprava Patnaik, KIIT Bhuvneshwar) • Signal processing perspective of AI
13:15- 14:30	Lunch break
14:30- 16:00	Technical session - 3(Dr. M A Zaveri, SVNIT ) • Signal/baysian esimation using AI
Day 2: (23 Dec 2020 Wednesday) Schedule	
Timings	Details
10:00- 11:30	Technical session -4 ( Dr. Suman Mitra, DAIICT , Gandhinagar) • Pattern recognition as basics of AI with applications
11:30 - 11:45	break
11:45- 13:15	Technical session -5 (Dr. Deepak Joshi,IIT Delhi) • Signal Processing and Machine Learning for Neuroprostheses

13:15-14:30	Lunch break
14:30-16:00	Technical session -6 ( Dr. S. Nanda , MNIT , Jaipur) • Unsupervised Learning Techniques
Day 3: (24 Dec 2020 - Thursday ) Schedule	
<b>Timings</b>	<b>Details</b>
10:00-11:30	Technical session -7 ( Dr. Santosh V , MNIT , Jaipur) • Change Detection in Unseen Videos
11:30 - 11:45	break
11:45-13:15	Technical session -8 (Dr. Hitesh Shah, GCET , V V nagar) • Reinforcement Learning Frame Work for Energy Efficient Wireless Sensor Networks
13:15-14:30	Lunch break
14:30-16:00	Technical session -9 (Dr. Sanjay Chaudhury, Ahmedabad University ) •Big Data Analytics Architecture
Day 4: (25 DEC 2020 Friday ) Schedule	
<b>Timings</b>	<b>Details</b>
10:00-11:30	Technical session -10 (Dr. Hitesh Shah GCET , V V nagar) • Kernel Recursive Least Squares Function Approximation in Game Theory Based Control
11:30 - 11:45	break
11:45-13:15	Technical session -11 (Dr. Urvashi Shukla , Jaipur) • Binary Social Spider Algorithm for Streaming Datasets
13:15-14:30	
14:30-16:00	Technical session -12 ( Prof. Chintan Varnagar, GEC Rajkot) • Biomedical image processing
Day 5: (26 DEC 2020 Saturday ) Schedule	
<b>Timings</b>	<b>Details</b>
10:00-11:30	Technical session -13 ( Dr. Mita Paunwala, CKPCET ,Surat) • UNET based application
11:30 - 11:45	break
11:45-13:15	Technical session 14 (Dr. Satish Singh, Associate professor IIIT Allahabad ) • Classification : A Data Driven Approach
13:15-14:30	Lunch break
14:30-16:00	Technical session -15 (Dr. Nirali Nanavati) • AI-Birdie : A Case Study of a Deep Neural Network based Application



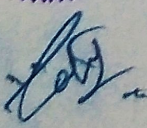


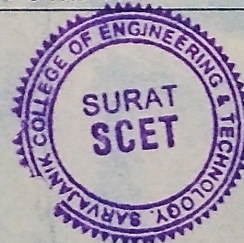
SARVAJANIK EDUCATION SOCIETY  
Sarvajnik College of Engineering and Technology  
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Phone: (0261)2240146-48, Fax: 02612240145  
Website: [www.scet.ac.in](http://www.scet.ac.in), Email: [info@scet.ac.in](mailto:info@scet.ac.in)

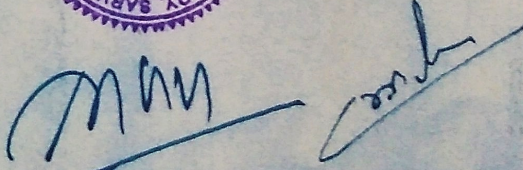
**Income & Expenditure statement for**  
**STTP on Artificial Intelligence for Signal Processing Applications (AISPA)**  
**(22-26 Dec 2021)**

Income			Expense		
Sr.	Contents	Amount	Sr.	Contents	Amount
1	Registration fees (NIL)	0.00		Honorarium to invited resource persons	-
2	Grant receivable from GUJCOST	40000.00	1	Suprava Patnaik (two sessions)	5400.00
			2	Mukesh A. Zaveri	2700.00
			3	Suman Kumar Mitra	2700.00
			4	Deepak Joshi	2700.00
			5	Satyasai Jagannath Nanda	2700.00
			6	SANTOSH KUMAR VIPPARTHI	2700.00
			7	Sanjay Chaudhary	2700.00
			8	Hitesh Bhupendrabhai Shah (two sessions)	5400.00
			9	Urvashi Joshi	2700.00
			10	Chintan R. Varnagar	2700.00
			11	Mita Chirag Paunwala	2700.00
			12	Satish K. Singh	2700.00
			13	Tejal Surti	2200.00
	<b>Total ::</b>	<b>40000.00</b>		<b>Total ::</b>	<b>40000.00</b>



  
Principal



  
Coordinator, AISPA

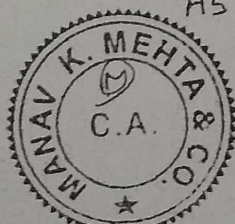


# UTILIZATION CERTIFICATE (Year 2020-21)

Sr.No	Details	Data
1.	Title of the Project / Scheme	: STTP on "AI in Signal Processing Application" (Online Mode)
2.	Name of the Institution/ Organization	: Sarvajanik College of Engineering & Technology
3.	Principal Investigator	: Dr. Maulin Joshi
4.	<b>GUJCOST</b> Sanction Order No & Date of sanctioning the project	: <b>Order No:</b> GUJCOST Seminar grant 3066/2020-21/1503 <b>Date:</b> 7 oct 2020
5.	Amount brought forward from the previous financial year	: NIL
6.	Amount received from GUJCOST during the Financial year 2020-21 (sanction order No. & date as per Sr No. 4 )	: 40000 /- <b>Order No:</b> GUJCOST Seminar grant 3066/2020-21/1503 <b>Date:</b> 7 oct 2020
7.	Total amount that was available for expenditure incurred during the financial year 2020-21 (Sr. 5+6)	: 40000/-
8.	Actual Expenditure Incurred during the financial year ( up to 31 <sup>st</sup> March 2021)	: 40000/-
9.	Balance amount available at the end of a financial year (upto 31 <sup>st</sup> March) (Sr. 7 - 8)	: NIL
10.	Unspent balance refunded, if any (please give details of chq no. & Chq Dt., with Forwarding letter no. & Ltr dt. )	: NIL
11.	Amount allowed to be carried forward to the next financial year (if applicable)	: NIL

Certified that the expenditure of Rs. 40000 /- (Rupees – Forty thousand only ) mentioned against column 8 was actually incurred for Workshop on "Artificial Intelligence for signal processing applications (AISPA) " at E & C Department, Sarvajanik College of Engineering & Technology for the purpose for which it was sanctioned.

Place: Surat



*As per my certificate on even date*

*MNU*  
05/01/2021  
Signature of the Project Coordinator

Signature of Chartered Accountant  
M No: 164129  
Date: 06/01/2021

*[Signature]*  
Signature of Head of the Institution/Organization  
Principal  
Sarvajanik College of Engg. & Tech.  
Surat.



## 12. Photographs during Sessions:

The screenshot shows a Google Meet interface during a presentation. The main window displays a slide titled "Artificial Intelligence" with a line graph showing "Interest over time" for "Deep learning", "Machine Learning", and "Artificial Intelligence" from 1/1/04 to 8/26/20. A Venn diagram on the right shows the intersection of "Art & Cloud Computing", "Machine Learning", "Data Analytics", and "Business Intelligence". The text on the slide states: "As the market is growing with ML applications, the internet is arousing up with trends and related buzzwords." The top bar indicates "Suprava Patnaik is presenting" and "190\_017 Sanket ... and 88 more" are in the meeting. The bottom bar shows a taskbar with various applications and a system clock at 10:10 AM on 22-12-2020.

The screenshot shows a Google Meet interface with a grid of participants. The top bar indicates "GUJCOST STTP - AISPA (2020-12)" and "Meet - GUJCOST STTP - AISPA". The bottom bar shows a taskbar with various applications and a system clock at 10:10 AM on 22-12-2020. The participants are arranged in a grid, with some names visible: "Mukesh A Zaveri", "S", "K", "M", "E", "k", and "S".





REC Dr Urvashi SHUKLA is presenting

STTP  
ON  
ARTIFICIAL INTELLIGENCE FOR SIGNAL PROCESSING APPLICATIONS

Invited Lecture  
on  
Binary Social Spider Algorithm for Streaming Datasets

Dr. Urvashi P. Shukla  
Researcher  
SynMat Soft Solutions Pvt.Ltd

11:49 AM

Activate Windows  
Go to Settings to activate Windows.

ASPA Session-3 (2...  
ASPA Session-3 (...html

Type here to search

REC Chintan Varnagar is presenting

190,858 Just In...  
and 37 more

2:36 PM

Introduction to Medical  
Imaging Modalities

Prof. Chintan R Varnagar  
Assistant Professor  
Government Engineering College - Rajkot  
STTP on Modern Trends in Image Processing in Medical Application  
25 - 09 - 2020

190,858 Sushen Shukla  
S  
Suresh Desai  
Chintan Varnagar

Activate Windows  
Go to Settings to activate Windows.

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ASPA Session-3 (2...  
ASPA Session-3 (...html

Type here to search

Google Meet - GUCOST STTP - ASRA

Salish Singh is presenting

## K - NEAREST NEIGHBOR CLASSIFIER

1-NN and a 3-NN Classifier using 2-dimensional points and 3 classes (red, blue, green).  
The colored regions show the decision boundaries induced by the classifier with an L2 distance.  
The white regions show points that are ambiguous.

Notice that in the case of a 1-NN classifier, outlier datapoints (e.g. green points in the middle of a cloud of blue points) remain small islands of likely incorrect predictions, while the 3-NN classifier smooths over these outlier points, likely leading to better generalization on the test data.

Also note that the gray regions in the 3-NN image are caused by ties in the votes among the nearest neighbors (e.g. 2 neighbors are red, one blue neighbor is green).

the data      1-NN classifier      3-NN classifier

People (29) Chat

Add people Host controls

IN CALL

- Gujarat STTP (You)
- 02\_Munish Bhatia
- 04\_Meet Patel
- 10\_Ramprasad Momb...
- 10\_Nirjaya Vaswani
- 12\_Neha Sen
- 18\_Rahul Agarwal

Activate Windows  
Go to Settings to activate Windows.

Google Meet - GUCOST STTP - ASRA

Nirali Nanavati is presenting

## WHAT IS ORNITHOLOGY?

ORNITHOLOGY

- Ornithology is a branch of zoology that concerns the study of birds.
- It has also been an area with a large contribution made by amateurs in terms of time, resources, and financial support.
- Studies on birds have helped develop key concepts in biology including evolution, behaviour and ecology.

Activate Windows  
Go to Settings to activate Windows.

People (29) Chat

Add people Host controls

IN CALL

- You
- 02\_Munish Bhatia
- Nirali Nanavati

### 13. Session wise posters released on social media:



Electronics & Communication Engineering Department  
(Re-Accredited by NBA, New Delhi for 3 yrs, w.e.f July 2019)



**GUJCOST-DST sponsored five-days STTP on  
AI for Signal Processing Applications  
(AISPA)  
22 - 26 December 2020**



**Dr. Suprava patnaik**  
Faculty member KIIT, Bhuvneshwar

Title of talk  
Introduction and scope of AI

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
(Re-Accredited by NBA, New Delhi for 3 yrs, w.e.f July 2019)



**GUJCOST-DST sponsored five-days STTP on  
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**Dr. Suprava patnaik**  
Faculty member KIIT, Bhuvneshwar

Title of talk  
Signal processing perspective of AI

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
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**GUJCOST-DST sponsored five-days STTP on  
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**22 - 26 December 2020**



Department of Science & Technology  
Government of Gujarat



**Dr. M A ZAVERI**  
**Faculty member SVNIT, Surat**

**Title of talk**

**Signal/baysian esimation using AI**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
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**22 - 26 December 2020**



Department of Science & Technology  
Government of Gujarat



**Dr. SUMAN MITRA**  
**Faculty member DAIICT, Gandhinagar**

**Title of talk**

**Pattern recognition as basics of AI with applications**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
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**GUJCOST-DST sponsored five-days STTP on  
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Department of Science & Technology  
Government of Gujarat



**Dr. Deepak Joshi**

Faculty member IIT, Delhi

**Title : Signal Processing and Machine Learning for Neuroprostheses**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
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Department of Science & Technology  
Government of Gujarat



**Dr. S NANDA**

Faculty member MNIT,Jaipur

**Title of talk**

**Unsupervised Learning Techniques**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**





Electronics & Communication Engineering Department  
(Re-Accredited by NBA, New Delhi for 3 yrs, w.e.f July 2019)



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Department of Science & Technology  
Government of Gujarat



**Dr. SANTOSH V**

Faculty member MNIT, Jaipur

**Title of talk**

**Change Detection in Unseen Videos**

**Coordinators :- Dr. Maulin Joshi & Dr. Chirag Paunwala**



Electronics & Communication Engineering Department  
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**22 - 26 December 2020**



Department of Science & Technology  
Government of Gujarat



**Dr. HITESH SHAH**

Faculty member GCET, V V Nagar

**Title of talk**

**Reinforcement Learning Frame Work for Energy Efficient Wireless Sensor Networks**

**Coordinators :- Dr. Maulin Joshi & Dr. Chirag Paunwala**



Electronics & Communication Engineering Department  
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**22 - 26 December 2020**



Department of Science & Technology  
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**Dr. SANJAY CHAUDHURY**

Faculty member, Ahmedabad University

**Title of talk**

**Big Data Analytics Architecture**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



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Department of Science & Technology  
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**Dr. Hitesh shah**

Faculty member GCET, V V Nagar

**Title of talk**

**Kernel Recursive Least Squares Function Approximation in Game Theory Based Control**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



Electronics & Communication Engineering Department  
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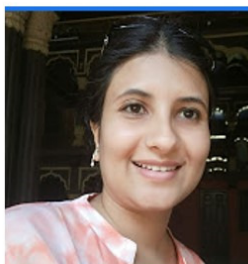


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**Dr. URVASHI SHUKLA**

**JAIPUR**

**Title of talk**

**Binary Social Spider Algorithm for Streaming Datasets**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**



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**Prof. chintan varnagar**

**Faculty Member, GEC,RAJKOT**

**Title of talk**

**MRI and its Advanced Imaging Modalities - from Basics to Application of  
AI in purview of Alzheimer's Disease.**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**





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**DR. MITA PAUNWALA**

Faculty Member, CKPCET, Surat

Title of talk  
**UNET based application**

**Coordinators :- Dr. Maulin Joshi & Dr. Chirag Paunwala**



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**DR. satish singh**

Professor, IIT Allahabad

Title of talk  
**Classification : A Data Driven Approach**

**Coordinators :- Dr. Maulin Joshi & Dr. Chirag Paunwala**



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**DR. NIRALI NANAVATI**

**Title of talk**

**AI-Birdie : A Case Study of a Deep Neural Network based Application**

**Coordinators :- Dr. Maulin Joshi & Dr.Chirag Paunwala**