



# REPORT

on

## INFOPIXEL CLASH

Organised By  
IEEE SCET SB, IEEE SPS SCET SB, IEEE CS SCET SB

### EVENT DETAILS:

**Event Type:** Competition

**Event Mode:** Offline

**Event Date:** 29<sup>th</sup> March 2025 (Saturday)

**Event Venue:** EC-AV Hall, E&C Department, SCET

**No. of Attendees:** 108

**Event Accessibility:** For Registered Participants

**Faculty Coordinator:** Prof. (Dr.) Chirag Paunwala

Prof. (Dr.) Ketki Pathak

Prof. Neeta Chapatwala

Prof. Chintan Panchal

**Student Coordinator:** Hardik Suthar

Manasvi Meha

Dushyant Prajapati

Jiya Shah

## EVENT POSTER



**SARVAJANIK COLLEGE OF ENGINEERING  
AND TECHNOLOGY  
ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT**

# INFOPIXEL CLASH

**STATE LEVEL PROJECT COMPETITION**



**29<sup>th</sup> March 2025**

**Registration fees  
₹50 per person**



**EC AV Room**

**Exciting Prizes**



**10:00 AM to 1:00 PM**

**Team of minimum 2  
and maximum 4**

**Faculty Coordinator:-**

**Prof. Dr. Chirag Paunwala(HOD)**

**Prof. Dr. Ketki Pathak**

**Prof. Neeta Chapatwala**

**Prof. Chintan Panchal**



**Register Here**

**Student Coordinator:-**

**Manasvi Mehta**

**Hardik Suthar**

**Dushyant Prajapati**

**Jiya Shah**

## Introduction:

The "**InfoPixel Clash**" competition was successfully organized in **offline mode** on **29th March 2025 (Saturday)** at the **EC-AV Hall, Electronics & Communication Department, SCET**. The event attracted **108 enthusiastic participants**, providing them with an opportunity to showcase their skills in **Image and Video Processing** and **Information Theory Coding**. The competition was open to **registered participants only**, ensuring a focused and engaging experience. The event was graced by a distinguished jury panel, including:

1. **Dr. Vipul Mistry** – A PhD in Image Processing from UKA Tarsadia University and an M.Tech in Communication Systems from NIT Surat, Dr. Mistry contributed his deep expertise to the evaluation process.
2. **Dr. Sunil Kumar** – An esteemed academician with over 18 years of experience in teaching, research, and project management, currently serving as an Associate Professor at Auro University, Surat.

With a highly competitive environment and expert evaluation, **InfoPixel Clash** successfully fostered **technical excellence, problem-solving skills, and innovation** among participants.

## Event Highlights:

*InfoPixel Clash* was an exciting and intellectually enriching competition that offered participants a platform to explore and demonstrate their skills in **Image and Video Processing** and **Information Theory Coding**. Students engaged in hands-on problem-solving through a diverse range of real-world projects, such as **Car license plate Detection, Deep Steganography, Image Inpainting, Helmet Detection, and Pest Detection in Smart Agriculture**. These projects reflected a strong blend of creativity, analytical thinking, and technical expertise.

The event was evaluated by a distinguished panel of experts, including **Dr. Vipul Mistry** and **Dr. Sunil Kumar**, who provided constructive feedback and fair assessments. Projects such as **Error-Resilient Image Transmission, Face Detection with Privacy Blurring, and Automated Solar Panel Detection using YOLOv8** stood out for their innovative approaches and practical relevance.

With an impressive turnout of **108 participants**, the event fostered strong engagement, collaboration, and healthy competition. Projects like **Driver Drowsiness Detection, Skin Disease Classification, Handwritten Digit Recognition, and Garbage Classification using Deep Learning** highlighted the diverse applications of image processing and machine learning in solving real-life problems.

Top-performing teams were recognised for their exceptional efforts and impactful solutions. At the same time, all participants gained valuable exposure to cutting-edge tools and concepts in areas like **signal compression, error correction, and AI-driven image analysis**.

*InfoPixel Clash* successfully created an atmosphere of innovation, learning, and technical excellence, leaving a lasting impression on everyone involved.

## Participants and Projects

Sr.No.	College Name	Team Name	Title of Project
1	SCET	The Codeless Men	Car Licence Plate Detection
2	SCET	Culers	Deep Steganography: Secure Information Hiding in Digital Media
3	SCET	Team Charlie	Robust Image Steganography with DWT and LDPC: Secure Data Hiding Under Noise Using Shannon-Fano Encoding"
4	SCET	Team innovators	hybrid image compression using huffman coding and hamming coding
5	SCET	Team ParityPioneers	LDPC Code for error correction in image transmission
6	SCET	PixelNcode	Moving object detection
7	SCET	MediVision	Lossless image compression using different encoding algorithm for various medical images
8	SCET	Huffman Hiders	Image Steganography Using LSB Substitution and Huffman based Compression
9	SCET	Error free vision	Basic Image segmentation for Object Detection with error correction in a Autonomous System
10	SCET	V <sup>2</sup> SR	Image Inpainting
11	SCET	Fusion force	Error-Resilient Image Transmission for Medical or Satellite Imaging
12	SCET	Team YUVAL	Simulating Image Transmission Over a Noisy Channel with Python
13	SCET	Pixel Protectors	Tamper Detection and Error Resilience in Fingerprint Images Using SSIM, ORB Feature Matching, and Hamming Code
14	SCET	The Pixels Wizards	Robust Multimedia Communication System with Source and Channel Coding for Error-Resilient Transmission
15	SCET	QR Ninjas	Barcode and QR Code Image Processing with Error Resilience
16	SCET	The Filter squad	Image stitching for AR and VR with source coding compression
17	SCRT	KAVI	FUNDAMENTALS OF DIGITAL IMAGE PROCESSING
18	SCET	Patil Tanvi .D.	image segmentation
19	GEC	SignAura	SignAura: smarter sign recognition with CNN

	Bharuch		
20	GEC Bharuch	Resolution Rebels	Single Image Super Resolution using CNNs
21	GEC Bharuch	Gec Bharuch	WEED DETECTION SYSTEM
22	GEC Bharuch	INTELLECTUAL PARADOX	Leveraging YOLO11 for High-Precision Gender Classification
23	GEC Bharuch	DDD Team	Driver Drowsiness Detection
24	GEC Bharuch	MotionMinds AI	Vehicle Type Classification
25	GEC Bharuch	Privacy Protectors	Face detection and privacy blurring using YOLOv5
26	GEC Bharuch	AGROVISION AI	A Step Towards Smart Agriculture : Deep Learning-Driven Pest Detection in Indian Cotton Farming
27	GEC Bharuch	The Visualizers	Fake Currency Detection Using Matlab
28	GEC Bharuch	Reverse	Automated Solar Panel Detection Using YOLOv8: A Deep Learning Approach for Efficient Renewable Energy Mapping.
29	GEC Bharuch	TEAM	Helmet Detection for two wheel riders on road
30	GEC Bharuch	The Pixelatrix	Handwritten Digit Recognition
31	GEC Bharuch	Trash-AI	Deep Learning-Based Automated Waste Classification System Using Image Detection for Sustainable Waste Management
32	GEC Bharuch	Pixel Pioneers	Garbage Classification
33	GEC Bharuch	Tech Titans	Skin Disease Detection

## Winners:

POSITION	TEAM NAME	COLLEGE	NAME OF MEMBERS	PROJECT TITLE
1st	V^2SR	SCET	Vishwa Shekhadia	Image inpainting is used to restore old photos
			Ruchi Singhi	
			Vani Shekhadia	
			Sulaxana Pandey	
	The Filter squad	SCET	Jiya Shah	Image stitching for AR and VR with source coding compression
			Aashvi Narang	
			Kunjan R Gajre	
			Rajnidhi Gupta	
2nd	SignAura	GEC Bharuch	Shaikh Md Zaid Zubed Akhtar	SignAura: Smarter sign recognition with CNN
			Patel Jainil Sunilbhai	
			Moghe Krishna Prashant	
			Patel Palak Maheshbhai	
	Reverse	GEC Bharuch	Mehvish Shaikh	Automated Solar Panel Detection Using YOLOv8: A Deep Learning Approach for Efficient Renewable Energy Mapping.
			Vohra keyan	
			Garasiya Hasanali Jamir	
			Patil Nakul	
3rd	The Codeless Men	SCET	Ronit Tarunbhai Rathod	Car Licence Plate Detection
			Manan Ashokbhai Tarsariya	
			Dilkhush Yash	
	MediVision	SCET	Diya Patel	Lossless image compression using different encoding algorithms for various medical images
			Afreen Amroliwala	
			Devanshi Jethwa	
Consolation	Patil Tanvi .D.	SCET	Patil Tanvi .D.	Image Segmentation
	Pixel Pioneers	GEC Bharuch	Hindiya Parth B	Garbage Classification
			Krupa Chokhaliya	
			Shah Jaineet Prafulbhai	



## Event Glimpses:



























## **Participant Engagement:**

The "InfoPixel Clash" competition kept participants actively engaged through challenging problem-solving rounds, real-time jury interactions, and strategic teamwork. With 108 enthusiastic competitors, the event fostered a high-energy and intellectually stimulating atmosphere. Judges provided feedback, assessed solutions on accuracy and innovation, and encouraged peer learning and technical excellence, making it a truly competitive and rewarding experience.





## સ્કેટ કોલેજમાં રાજ્યકક્ષાની INFOPIXEL 2025 સ્પર્ધા યોજાઈ

ધબકાર પ્રતિનિધિ, સુરત, તા. ૦૩  
સાર્વજનિક કોલેજ ઓફ  
એન્જિનિયરિંગ એન્ડ ટેકનોલોજીની  
ઇલેક્ટ્રોનીક્સ એન્ડ કોમ્યુનિકેશન  
શાખાએ IEEE Signal  
Processing Society અને  
IEEE Gujarat Sectionના  
સહયોગથી INFOPIXEL  
2025નું સફળ આયોજન કર્યું હતું.  
આ એક રાજ્ય કક્ષાની સ્પર્ધા હતી,  
જેમાં વિવિધ સંસ્થાઓના વિદ્યાર્થીઓ  
અને સંશોધકોને ઈમેજ પ્રોસેસિંગ,  
ઇન્ફર્મેશન ટેકનોલોજી અને  
કોડીંગના આધુનિક ક્ષેત્રોને અન્વેષણ  
કરવાની તક મળી. આ ઇવેન્ટમાં  
૧૦૦થી વધુ ઉત્સાહી સ્પર્ધકોએ લાભ  
લીધો, જેમાં રાજ્યભરની વિવિધ

સંસ્થાઓના વિદ્યાર્થીઓ સામેલ હતા.  
જયુરીમાં શૈક્ષણિક અને  
ઉદ્યોગજગતના નિષ્ણાતોની સેવા  
લેવામાં આવી, જેઓ સ્પર્ધાની  
તકનીકી અને વ્યાવસાયિક  
વ્યાખ્યાનોનું સમતુલ્ય મૂલ્યાંકન કરતા  
હતા.

INFOPIXEL એ નવા  
એન્જિનિયરો, સંશોધકો અને  
ટેકનોલોજી ઉદ્યમીઓ માટે તેમની  
કુશળતા રજૂ કરવાની ઉત્તમ તક પૂરું  
પાડી. ખાસ કરીને ઈમેજ પ્રોસેસિંગ,  
જે AI, મેડિકલ ઈમેજિંગ અને  
ડિજિટલ ફોરેન્સિક્સમાં પ્રગતિ લાવી  
શકે, તેમજ ઇન્ફર્મેશન થીયરી અને  
કોડીંગ, જે સુરક્ષિત અને અસરકારક  
ડેટા ટ્રાન્સમિશન માટે મહત્વપૂર્ણ છે,

જેવા વિષયોને આવરી લેવાયા.  
સ્પર્ધામાં નવીન સમસ્યા ઉકેલવાની  
પ્રત્યાસો, હેન્ડસ-ઓન પ્રદર્શન અને  
જુદા જુદા પડકારો સામેલ હતા, જેના  
કારણે સ્પર્ધકોની વિશ્લેષણાત્મક અને  
તકનીકી કુશળતા વિકસવા પામી.

આ સ્પર્ધાએ માત્ર તકનીકી  
ઉત્કૃષ્ટતાને જ પ્રોત્સાહન આપ્યું  
નહિ, પણ વિવિધ સંસ્થાઓના  
વિદ્યાર્થીઓ માટે શાન અને  
સહયોગની નવી તકો ઊભી કરી.  
INFOPIXEL 2025 એ  
સિગ્નલ પ્રોસેસિંગ ટેકનોલોજીઓ  
પ્રત્યે વધતી રસ અને કોમ્યુનિકેશન  
& ડિજિટલ ઇન્ટેલીજન્સ ક્ષેત્રમાં  
ભવિષ્ય ઘડવા માટે મહત્વપૂર્ણ  
ભૂમિકા ભજવી.

Dhabkar - 04-04-2025

## સાર્વજનિક એન્જિનિયરિંગ કોલેજમાં સ્પર્ધાનું આયોજન



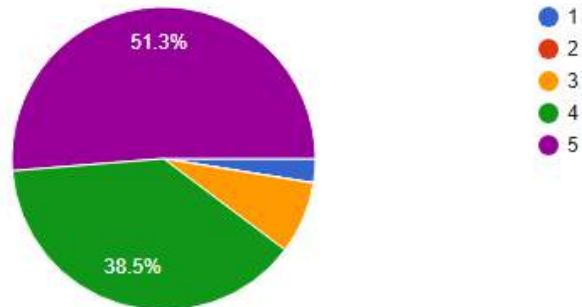
સાર્વજનિક કોલેજ ઓફ  
એન્જિનિયરિંગ એન્ડ  
ટેકનોલોજીની ઇલેક્ટ્રોનીક્સ  
એન્ડ કોમ્યુનિકેશન શાખાએ  
જેઘઘ સિંગલ પ્રેસેસિંગ સોસાયટી

અને જેઘઘ ગુજરાત સેક્શનના સહયોગથી INFOPIXEL 2025નું સફળ  
આયોજન કર્યું હતું. સ્પર્ધામાં વિવિધ સંસ્થાઓના વિદ્યાર્થીઓ અને  
સંશોધકોને ઈમેજ પ્રોસેસિંગ, ઇન્ફર્મેશન ટેકનોલોજી અને કોડીંગના  
આધુનિક ક્ષેત્રોને અન્વેષણ કરવાની તક મળી હતી. જેમાં ૧૦૦થી વધુ  
ઉત્સાહી સ્પર્ધકોએ લાભ લીધો, જેમાં રાજ્યભરની વિવિધ સંસ્થાઓના  
વિદ્યાર્થીઓ સામેલ હતા. જયુરીમાં સ્પર્ધાની તકનીકી અને વ્યાવસાયિક  
વ્યાખ્યાનોનું સમતુલ્ય મૂલ્યાંકન કરવા શૈક્ષણિક અને ઉદ્યોગજગતના  
નિષ્ણાતોની સેવા લેવામાં આવી હતી. INFOPIXEL નવા એન્જિનિયરો,  
સંશોધકો અને ટેકનોલોજી ઉદ્યમીઓ માટે તેમની કુશળતા રજૂ કરવાની  
ઉત્તમ તક પૂરું પાડી શકે તેવા વિષયોને આવરી લેવાયા હતા.

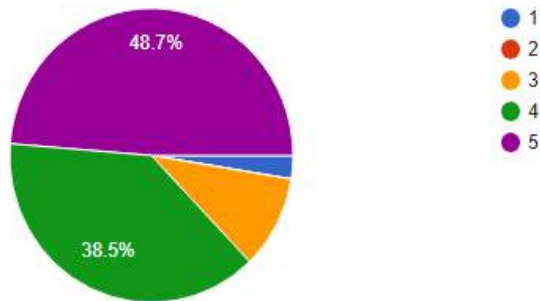
Sandesh - 04-04-2024

## Feedback:

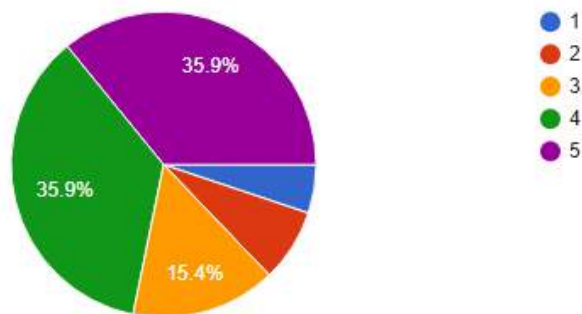
How well was the event managed and organized?  
(1 being the lowest and 5 being the highest)



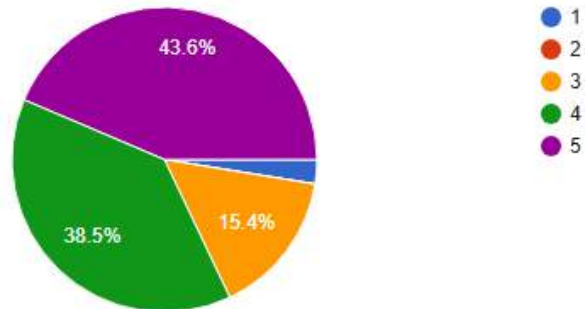
How would you rate the hospitality and arrangements for Participants?  
(1 being the lowest and 5 being the highest)



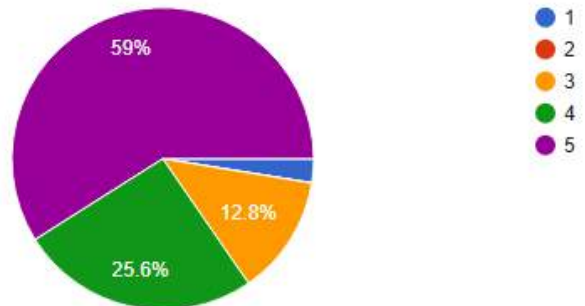
How would you rate the jury's performance and fairness?  
(1 being the lowest and 5 being the highest)



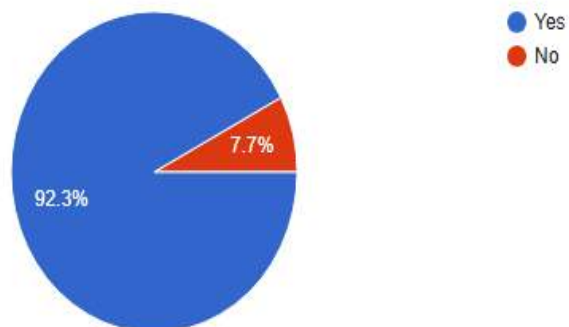
Was the faculty involvement in the event adequate?  
(1 being the lowest and 5 being the highest)



Was the Student Volunteers involvement in the event adequate?  
(1 being the lowest and 5 being the highest)



Would you be interested in participating in similar events in the future?



## **Conclusion:**

The "*InfoPixel Clash*" competition, organized under the banner of IEEE SCET SB, IEEE SPS SCET SB, and IEEE CS SCET SB, successfully provided participants with a platform to apply their technical knowledge, enhance problem-solving skills, and tackle real-world challenges in Image and Video Processing and Information Theory Coding. With 108 enthusiastic participants, expert evaluation by Dr. Vipul Mistry and Dr. Sunil Kumar, and a highly competitive atmosphere, the event fostered innovation, teamwork, and learning. The competition concluded on a high note, reinforcing the IEEE SCET SB's commitment to fostering technical excellence and knowledge sharing among students.

## **Report Compiled by:**

**Hardik Suthar**, Event Coordinator

**Manasvi Mehta**, Event Coordinator