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R E P O R T of EVENT

"Open Ended Problem Meetup for Innovative Ideas"

On

20th and 21st December, 2024

ORGANIZED BY

IIC CELL SCET

AND R&D CELL - SCET

Event Highlights

The Team

Faculty Coordinator	:	Dr. Utpal Pandya , Dr. Nirali Nanavati, Dr. Tejal Joshi
IIC Cell – SCET	:	Dr. Utpal Pandya, President, IIC-SCET Dr. Dhruti Sharma, Convener, IIC- SCET
Student Coordinators	:	NA

Details of Event

Event Type	:	University / Institute Level Program
Event Platform	:	Sarvajanik College of Engineering & Technology (SCET)
Category	:	IIC - Innovation activity for Quarter – 2 (2024-25) ,R&D Cell Activity for 2024-25
Schedule	:	20,21st December, 2024 ACL Lab, Embedded Lab
Aspirants	:	UG students and faculty of Sarvajanik College of Engineering & Technology, SCET
Accessibility	:	Open to all (Students/Faculty members)
Registered Entry	:	Selected Open Ended Problems were presented
Participated Entry	:	Around 15+ Faculties and 31 OEPs with each group have 2 -6 students.

About the Event

Topic of the Event: Open Ended Problems Presentation and Discussion

Date & Day: 20th, 21st December, 2024

Time: 10:00 AM to 4:00 PM

Venue: ACL Lab, Embedded Lab

Coordinator: Prof.(Dr.) Utpal Pandya, Prof. (Dr.) Nirali Nanavati, Prof. Tejal Joshi

Summary of the Event:

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The concept of the Open Ended Problem was introduced by Dean R&D in 2023. We received a very promising response and we have now a registration of 31 different OEPs wherein faculty mentors and students are working together on different ideas and projects. This meetup was held for the first time in SCET so that the students would get motivation and suggestions from the mentor faculty members present at the event and their OEPs could be evaluated.

The Meetup started with an introduction about OEPs by Dean R&D, Prof.(Dr.) Utpal Pandya. He shared certain interesting examples of innovation and certain statistics about the OEPs encouraging inter disciplinary OEPs as well. Prof. Utpal Pandya also promised that all the students working sincerely on the OEP would be given certificates of appreciation for the same. This was followed by Prof.(Dr.) Nirali Nanavati who discussed how the research and ideation work could be transformed to get tangible results in terms of research papers, patents, startups..

In this meetup for every OEP group, each team member/leader was asked to explain in brief (10 min) the following: the ideas explored/work done till now , the deliverable expected and the research bottleneck that they were facing. All the student groups present, enthusiastically presented their ideas and work they had carried out. Further, the faculty members present gave valuable suggestions and encouraged the students to follow through with their work in the right direction.

The OEP Meetup proved to be beneficial in establishing a conducive research atmosphere and inspiring the student teams. Collaboration and motivation are key components in fostering a productive and innovative atmosphere, especially in research settings. We will continue to have periodic OEP meetups to guide and motivate the student teams.

We extend our sincere gratitude to our honorable principal Dr. Hiren Patel for permitting us to organize this session. His constant support and guidance inspire us to organize such enlightening events for our fellow students and colleagues. We are also thankful to Dr. Utpal Pandya, Dean, R&D for encouragement and support always. We express our sincere appreciation to all the faculty members who enthusiastically volunteered to mentor students for the OEPs.

Sincere thanks to all the student volunteers and attendants for making necessary arrangements for this session. We would also like to thank the R&D cell members for ideation regarding the OEP initiative. Last but not the least, we are very thankful to all the faculties and student participants for their active presence during the session.

List of OEPs presented for 24-25:

S.N.	OEP I.D.	Name of Principal Investigator	Title of the OEP	Name of Student	Location
1	P-1-MM-CO-24-	Dr. Mayuri Mehta	Automated Identification of Lesions of Traumatic Brain Injury	Anika Mehta Srushti Patel	Advance Control Lab - IC
2				Taashna Jariwala Pranavi Mehta	Advance Control Lab - IC
3	P-2-MM-CO-24-	Dr. Mayuri Mehta	Self-supervised learning for 3D light-sheet microscopy image segmentation	Pooja Pandit (ET21BTCO071) ahera Saiyed(ET21BTCO113 raha Sankar (ET21BTCO128	Advance Control Lab - IC
4	P-3-MM-CO-24-	Dr. Mayuri Mehta	boulders from Orbiter High Resolution Camera (OHRC) images using AI/ML techniques	Shreya Patel (ET22BTCO100) Kinya Shah (ET22BTCO117)	Advance Control Lab - IC
5	P-4-MM-CO-24-	Dr. Mayuri Mehta	Weakly Supervised Cell Segmentation in Multi-modality High-Resolution Microscopy Images	Devanshi Trivedi (ET22BTCD134) Shruti Gajera (ET22BTCO120) Meet Jariwala (ET22BTCO046)	Advance Control Lab - IC
6	P-5-MM-CO-24-	Dr. Mayuri Mehta	Kidney and Kidney Tumor Segmentation	kumar Navinchandra (ET23BTC Yashesh Patel (ET23BTCO043) umwarvijay Singh (ET23BTCO05	Advance Control Lab - IC
7	EP-1-NN-CO-24-	Dr. Nirali Nanavati	Dental Implant Identification using AI/ML	Archi Gazdar Pratham Desai Devanshu Mangal	Advance Control Lab - IC
8	EP-2-NN-CO-24-	Dr. Nirali Nanavati	Visual Story Telling using Generative AI	Prerna Gattani Fenil Patel Tisha Tandel Riddhi Patel Aakash Jaiswal	Advance Control Lab - IC
9	EP-2-NN-CO-23-	Dr. Nirali Nanavati	Circular Economy approach for the Surat Textile Market	Ayush Kayasth Virund Raval	Advance Control Lab - IC
10	EP-3-NN-CO-24-	Dr. Nirali Nanavati	Trust and Transparency using Explainable AI in Healthcare Systems	Manan Parekh Parth Patel Anmol Aafre Vaidehi Lad	Advance Control Lab - IC
11	HEP-1-KD-IT-24-2	Dr. Krishna Delvadia	Machine Learning Driven clinical decision support system	Krishna Panwala Chapadia Vansh Shah Parva Heer Mehta	Advance Control Lab - IC
12	HEP-1-KD-IT-24-2	Dr. Krishna Delvadia	Machine Learning Driven clinical decision support system	Bhavya bavisi Prapti mehta Kunj Desai Amaan payak Vidhi doctor Disha bhatia	Advance Control Lab - IC
13	EP-1-MD-IT-24-2	Dr. Mitali H.Desai	Automatic Sarcasm Detection in Code Mixed Data with Emotions	Krishna Patel Moradiya Mili Kuvadiya Dhruvi Sarah Shaikh	Advance Control Lab - IC

14	EP-1-DK-CO-24-2	Dr. Dipali Kasat	AayuBot: The Smart Healthcare Assistant	Satyam Tiwari Jainil Tailor Krish Tejani Aryan Sutariya	Advance Control Lab - IC
15	EP-1-PK-CO-23-2	PI: Dr. Pariza Kamboj I: Prof. Jayesh Chaudl	Automated Chatbot System For Gujarat Medical Services Corporation Limited	Manendra Jadeja Archi Gazdar	Advance Control Lab - IC
16	EP-2-PK-CO-23-2	PI: Dr. Pariza Kamboj I: Prof. Jayesh Chaudl	Design And Develop An Ai-Powered Chatbot For The Technical Education Department	Manthan Lad Preet Jogani	Advance Control Lab - IC

S.N.	OEP I.D.	Name of Principal Investigator	Title of the OEP	Name of Student	Location
1	OEP-1-SB-CO-24-25	Dr. Shabbir Bohra	Electric Vehicle charging for solar powered bike park	Tej Amitkumar Desai Hitarth Nilesh Lekhadia Kenil Pravinbhai Lathiya Dharmi Rajpara	Embedded System Lab - IC
2	OEP-2-SB-CO-24-25	Dr. Shabbir Bohra	Optimal Management of Electric Vehicle charging for solar powered bike park	Smit Manishbhai Prajapati Jainish Ishvarbhai Patel Preya Kalpeshbhai Khalsi Shubham Rana	Embedded System Lab - IC
3	OEP-1-VS-EC-23-24	Dr. Vandana Shah	ElderGuardian: Smart Health & Safety for Seniors	Dhvani Mehulbhai Maktuporia Kuldeep kailashbhai Kevat Archi Pradeep Gazdar Neel Khanpara	Embedded System Lab - IC
4	OEP-1-SD-EC-24-25	Dr. Sarosh Dastoor	AI based Self Driving Car	Pratham Pindiwala Shihab Garasia Om Kumbhare Manasvi Mehta Dushyant Prajapati	Embedded System Lab - IC
5	OEP-2-SD-EC-24-25	Dr. Sarosh Dastoor	Predictive Maintenance of Machine Health and tracking using AR	Preet Shah Hardik Suthar Ronit Rathod Dhairya Prajapati Priyanshi Singh	Embedded System Lab - IC
				Shubham Gupta	

6	OEP-2-MP-IT-24-25	Prof. Mukesh Patel	Intelligent Recommendation System for Graduate Course Selection	Harsh Gharsandiya Yash Mistry Akash Jaiswal	Embedded System Lab - IC
7	OEP-2-MP-IT-24-25	Prof. Mukesh Patel	Intelligent Recommendation System for Graduate Course Selection	Amrit Singh Vit Gupta Aryan Jayvadan Saria Vegad Het Rameshbhai Patel Dev Vinodkumar	Embedded System Lab - IC
8	OEP-1-DS-IT-24-25	Dr. Ketki Pathak	Automated /semiautomated waste management system		Embedded System Lab - IC
9	OEP-2-DS-IT-24-25	Dr. Dhruti Sharma	Question Paper leakage prevention mechanism using blockchain technology	Dev Sadhaiyawala Kuldeep Kevat Dhvani Maktuporia Meet Oza	Embedded System Lab - IC
10	OEP-1-DS-IT-24-25	Dr. Dhruti Sharma	Secure sharing of EHR with role based search mechanism	Anjali Jariwala Aadyaashi Patel Dhyani Shelarki Nupur Adhariya Harshita Katariya	Embedded System Lab - IC
11	OEP-1-AP-IT-24-25	Prof. Ankit Patel	Robust Fall Detection System for Elderly People in Ambient Assisted Living Environment	Meet Ghelani Vaibhav Panchal Dev Ratani Dhruv Gadhethriya	Embedded System Lab - IC
12	OEP-1-TG-IT-24-25	Prof. Tushar Gohil, Prof A	Leveraging Generative AI for Automated Assignment Grading and Detailed Feedback in Academic Institutions	Parth Hathiwala Aakash Jaiswal Viraj S Shah Vishesh V Chaudhari	Embedded System Lab - IC

13	OEP-1-TG-IT-24-25	Prof. Tushar Gohil, Prof	Leveraging Generative AI for Automated Assignment Grading and Detailed Feedback in Academic Institutions	Het Rajpara	Embedded System Lab - IC
				Pranami Patel	
				Nidhi Patel	
				Jay Prajapati	
				Shreya Chopra	
14	OEP-1-UP-IC-23-24	Dr. Utpal Pandya	Volume Measurement of Fluid in Undefined Shape Bottles/ Tank	Jay Patel	Embedded System Lab - IC
				Hiteshree Vanshale	
				Chintan Baraiya	
				Vidhi pathak	
15	OEP-1-UP-IC-23-24	Dr. Utpal Pandya, Dr. Tejal	Portable PUC Machine	Nishant Shah	Embedded System Lab - IC
				Sagar Naidu	
				Aaryaman Mehra	
				Harkirat Sandhu	
				Namya Hekkad	
				Saakshi Champaneria	

Photos :