# Students' Corner



# **Awards**

## ISA Educational Foundation Scholarship Award



Ms Prapti Bordoloi and Ms Somya Gupta from the Electronics and Instrumentation Engineering department of the Institute of Technology, Nirma University are selected to receive the prestigious ISA Educational Foundation Scholarship Award 2023 of 3000 USD.

## **Best Presenter Award**



Mr. Meet Parmar, PhD scholar presented the research paper titled: "Hybrid Force and Position Control of the KUKA IIWA Robotic Manipulator" at International Conference on Artificial Intelligence, Robotics, Signal and Image Processing (AIRoSIP) 2023 in Yogyakarta, Indonesia on August 2023. He received the Best Presenter award in the same.



# **Dewang Mehta IT Award**

Ms Dipti Sharma, Electronic & Instrumentation Engineering department has emerged as the Winner of the Dewang Mehta IT Award 2023 on August 10, 2023 under the guidance of Dr H. K. Patel.



## Schlarship awarded

Mr. Dhruvil Kamani, a Civil Engineering Student (21BCL048) was selected for an All India level IEI scholarship for the academic year 2021-22. He has received a scholarship of Rs. 14,000/- from the Institution of Engineers of India (IEI), Kolkata under the category of merit cum means based.



# **Best Oral Presentation**

Himandri Zala, Mahek Vyas and Romil Amipara the students of Chemical Engineering Department presented a paper on "An energy efficient and renewable hydrogen production from glycerol over nickel based catalyst doped with different promoters on alumina." and they have been awarded for the best oral presentation at the IMSEEH 2023 conference.



Mr. Haard Shah has been honoured with Excellence in Student Section Leadership Award' from ISA Students' Chapter, Nirma University. This remarkable achievement marks a momentous milestone as it is the first time ever that this esteemed recognition has been bestowed upon chapter on a global scale.





Utkarsh Thumar and Meet Shah from Chemical Engineering Department demonstrated exceptional skills in Inter-Institute Volleyball Competition. Utkarsh, as a spiker, showcased flawless precision, while Meet's relentless play kept the opposition on their toes.



Shruti Mishra, a student of Chemical Engineering Department represented the Institute of Technology, Nirma University at a National level sports competition organized by BITS Pilani, during 21st to 28th September and emerged as the winner of the tournament.





Gunjan Rathi from Chemical Engineering department along with Palak Rathod from Electronics & Instrumentation Engineering Department displayed outstanding performance in the Inter-Institute Carrom Tournament held in November 2023 and emerged as winners.



# Team Arrow @ Maryland, USA



Team Arrow, a part SAE Nirma Collegiate club secured overall 5th position amongst 71 international teams participated at Association for Unmanned Vehicle Systems International (AUVSI) Student Unmanned Aerial Systems Competition (SUAS) 2023 competition held at Maryland, USA. Team won a cash prize of 500 USD and a plaque.



Team competed alongside the prestigious institutions such as Cornell University, University College London, North Carolina University, Virginia Tech, Purdue University and 7 other University of US, University of Calgary, Norwegian University, Istanbul Tech University, King Fahd University, University of Warsaw, Royal Thai Airforce Academy, Military school of Egypt etc.





SUAS Winner Team Group Photo

### The team members:

B.Tech Electrical Engineering: Jatin Vanjara

B.Tech Instrumentation and Control Engineering : Sidharth Mandaliya

B.Tech Mechanical Engineering : Aditya Gupta, Devansh Talati, Rushil

Daruwala, Priyanshi Shah

B.Tech Electronics and Communication Engineering : Vraj Modi, Utkarsh Maheshwari



# **Team Nirma ROBOCON**

Team Nirma Robocon, 10 times National Champion, secured Second Runners up position at DD Robocon National 2023 and also received IHFC Winner award of cash prize of Rs 5000/- at 22nd National Robocon competition held during 15 to 18 June 2023 at Thyagaraj Stadium, New Delhi organized by Doordarshan and IIT Delhi. Team competed with 68 teams from India including IITs and NITs.

#### The team members:

B.Tech Electronics and Communication Engineering : Harsh Chotaliya, Rudra Kasta, Jay Sanchania, and Sumit Ariwala

B.Tech Mechanical Engineering: Arya Kargathara, and Dev Bhagat, Devam Mathia, and Patel Ridham Manojkumar

B.Tech Electrical Engineering: Aryan Parmar, Raj Bambhaniya

B.Tech Instrumentation and Control Engineering: Devanshu Kotwani, Foram Patel, and Het Patel







Robocon 2023 winner team

# **Team Arrow @ Competition SAEISS DDC 2023**



Team arrow participated in SAEISS DDC 2023 competition in micro and regular category. In this competition the teams were given various task such as to carry high payload, have innovation and to make and aerodynamically efficient aircraft within limits of 1.5 kg and 4kg in micro and regular category respectively.





Total 82 teams participated from all-over the India.

Team arrow has been working on this competition since October 2022 which resulted into the glory. Moreover we are thankful to Nirma University for technical, and financial support.

VENUE: RAJLAKSHMI COLLEGE CHENNAI

Date: 21st to 23rd July

Micro Category Best design report 10000 Overall second 45000

Regular Cfd 1st 10000 Design report 2nd



Team Arrow Micro category Team ID:DDC20230175	Team Arrow Regular category Team ID DDC20230174
Team members: 1.Vaibhav Pawar 2.Yug Mevada 3.Ravi Shah 4.Bhavya Radadiya 5.Rahul Patil 6.Shravan Savaliya 7.Rutva Sheth 8.Rishith Vanaliya 9.Monil Ashapuri 10.Dhagash Patel	Team members: 1. Viraj Mujadia 2. Priyansh Fadia 3. Krushan Jain 4. Neel Patel 5. Vijay Vadher 6. Maharshi Kelaiya 7. Tirth Sur 8. Malav Prajapati 9. Achal Doshi 10. Jishan Seta



# **Mechanical Engineering Students' Association (MESA)**

Mechanical Engineering Students' Association (MESA) organized a session of Shri Amol Wagle who is an inspirational speaker and an entrepreneur on the subject "Bond to Lead" on 4th September 2023. Shri Amol Wagle is a well- known international speaker of The Art of Living, he has delivered 50,000+ teaching-training hours and transformed the lives of many top corporate professionals.





Shri Amol Wagle, inspirational speaker



## The NBC Idea Factory's season 8 competition

The NBC Idea Factory's season 8 competition was concluded with a final round at NBC Bearing limited, Jaipur on August 9th, 2023. The competition is focussed on innovative ideas in bearing application and research. Among the participants, two teams from Nirma University Team Atoms (Mechanical Engg.) and Team Pioneers (Mechanical Engg.) stood out, making it to the final round. Team Atoms achieved an impressive milestone, securing the 2nd Runner's Up position. Both the Nirma University teams showcased exceptional innovation, teamwork, and presentation skills among the six finalists. All participating teams were tasked with addressing the central theme "Reducing the roller bearing noise in EVs" This challenge prompted students to explore innovative and practical solutions for this crucial engineering concern.

Here are the members of the respective teams:

1) Team Atoms:

Dev Patel Karthik Gopalakrishnan Vivek Mehtani, Zeal Mecwan

2) Team Pioneers:

Bhavy Kala Ujas Dave Dhruv Kher Harsh Pachauri



#### **Team EESA**

Team EESA conducted an eye check-up event at Bhagwati Vidyalaya School for the school students in collaboration with certified ophthalmologists and optometrists, Dr. Krishnalal K. Patel and Dr. Chaturbhai G. Patel.



Anant Patel and Nirali Chaudhari from Civil Engineering Department presented a paper on Enhancing water security through site selection of water harvesting structures in semi-arid regions: a GIS-based multiple criteria decision analysis. Water Science & Technology, Water Supply 2023;

Raj Birewar, Kshitij Patel and Parul Patel from Civil Engineering Department presented a pape titled "Productivity Analysis of Column Concreting using the Method Productivity Delay Model" at First National Conference on Modern Construction Practices and Management on June 02 & 03, 2023, SVNIT Surat.

To summarize the concepts of the completed unit, Dr Sapan H Mankad in his MTech course "Applied Mathematics for Computer Science" conducted a quiz to check the knowledge of different concepts of that unit, and this activity got a good response from students.



- Nupur Parikh completed the summer internship at Microsoft with a stipend of INR 125,000.00/- per month
- Vrutik Patel completed the summer internship at Microsoft with a stipend of INR 125,000.00/- per month
- Kajal Lochab secured the summer internship at Google, India with a stipend of INR 77,000/- per month
- Aditi received the Runner Up position in EmpowHER A Blog Writing Competition organized by WIE IEEE Student Branch, Nirma University in August 2023
- Riddhi Rajnish Jain secured the Summer Analyst internship at Morgan Stanley from May to July 2023, with a stipend of INR 87,000 per month
- Heli Naik secured the Winner position in the EmpowHer-Blog Writing Competition held on 9 July, 2023
- Kartikay Saxena secured the 2nd Runner Up position in the Global Entrepreneurship Bootcamp event on 7 July, 2023 -10 July, 2023.
- Niraj Chaudhari, Hitesh Mori, Kenil Kaneria and Mihir Patel have won the 2nd Prize in the Hackathon(Tic-Tech-toe '23 at Daiict) during 22nd September, 2023 to 24th September, 2023.
- Alay and Devam published an article titled "Safeguarding the IoT: Taxonomy, security solutions, and future research opportunities" in the Wiley Journal Security and Privacy, November, 2023.
- Mr. Nilesh Kumar Jadav, a Full-Time Ph.D. Scholar under the guidance of Dr. Sudeep Tanwar at the Department of Computer Science and Engineering, Institute of Technology, Nirma University, presented a Research Paper at the IEEE Global Communications Conference (IEEE GLOBECOM 2023) in Kuala Lumpur, Malaysia, which is one of the IEEE Communications Society's flagship conferences dedicated to driving innovation in nearly every aspect of communication.





- Dhairya Jadav published an article titled 'Proxy Smart Contracts for Zero Trust Architecture Implementation in Decentralised Oracle Networks Based Applications' in the Journal Computer Communications in June, 2023.
- Nisarg Patel and Raj Parekh published an article LEAF: A Federated Learning-Aware Privacy Preserving Framework for Healthcare Ecosystem in the Journal IEEE Transactions on Network and Service Management (IEEE TNSM) in June, 2023.
  - Sachi Chaudhary and Shahil Shah published an article Blockchain-Based Secure Voting Mechanism Underlying 5G Network: A Smart Contract Approach in the Journal IEEE Access, July, 2023.
  - Keyur Patel and Chinmay Mistry has published an article A systematic review on performance evaluation metric selection method for IoT-based applications in the Journal Microprocessors and Microsystems, September, 2023.
  - Rushir Bhavsar published an article Classification of Potentially Hazardous Asteroids Using Supervised Quantum Machine Learning in the Journal IEEE Access, July, 2023.
  - Khush Shah has published an article AI and Blockchain-Assisted Secure Data-Exchange Framework for Smart Home Systems in the Journal MDPI, Mathematics, September, 2023.
  - Devangi Hitenkumar Patel and Kamya Premal Shah published an article Blockchain-Based Crop Recommendation System for Precision Farming in IoT Environment in the Journal MDPI, Agronomy, October, 2023.
  - Ali Asgar Padaria and Aryan Alpesh Mehta published an article Traffic Sign Classification for Autonomous Vehicles Using Split and Federated Learning Underlying 5G, October, 2023.
  - Harsh Mankodiya and Priyal Palkhiwala published an article 'Deep Learning-Based Robust Morphed Face Authentication Framework for Online Systems Precision Agriculture' in the Journal Computers, Materials & Continua, October, 2023.
  - Khusi Raval published an article, 'A survey on safeguarding critical infrastructures: Attacks, AI security, and future directions' in the Journal International Journal of Critical Infrastructure Protection, December, 2023.



- Sachi Chaudhary has published an article Blockchain-Based Energy Trading Scheme for EVs Coordination: A Smart Contract Approach in the Journal International Conference on Communications, Computing, Cybersecurity, and Informatics (CCCI), October, 2023.
- Yogi Patel and Shivang Patel published an article 'Blockchain and AI-based Engine Fault Detection Scheme for Autonomous Vehicles' in the Journal International Conference on Communications, Computing, Cybersecurity, and Informatics (CCCI), October, 2023.
- Faizal Kureshi and Dhaval Makwana have published an article 'Blockchain Based Humans-Agents Interactions/Human-Robot Interactions in the Journal Robotic Process Automation', August, 2023.



# Mission Chandra Competition.

Gurjar Dharmik Shaileshbhai, JaiminKumar Gulale, Harshil Kakkad won Prize money of Rs. 15,000/- in Mission Chandra Competition.

# ROBOFEST 3.0 Winner of Stage II



The second stage of ROBOFEST 3.0 was organized at Science City, Ahmedabad during October 2023. Total 12 teams participated in the prototype submission stage and showcased their prototype models to the committee. Total of 11 teams cleared the second stage and won the prizes for the preparations of the working models. The list of winners of the second stage is as follows:

Sr. No.	Name of Mentor	Team Member	Theme	Prize Money Rs.
1	Dr Sachin Gajjar	Nilkanth Kapadia Patil Rahul Burhanuddin Sabuwala Ashutosh Tiwari Vedanti Patel	Fun Robotics	1,00,000/-
2	Darshita Shah	Shivam Soni Sahil Menpara Dhir Gandhi Kajal Lochab Bhavylal Pandya	Hexapod	2,00,000/-
3	Dr. Vijay Savani	Vaibhav Sharma Harsh Panara Ayush Kadia Deep Lad Vedant Rokad	Hexapod	2,00,000/-
4	Prof Darshita Shah	Sourabh Rai Purohit Yash Devanand Sharma Rajkumar Devesh Pareek Tirth Ketankumar Vyas	Rover	2,00,000/-
5	Prof. Vishal M Vaidya	Vatsal Rabadia Ritesh Panchal Vedang Panchal Keyur Desai Param Soni	Rover	2,00,000/-
6	Dr. Akash Mecwan	Dev Bhagat Arya Kargathara Aryan Kalariya Aryan Batra Raj bhingradiya	Rover	2,00,000/-
7	Dr. Akash Mecwan	Kathan Patel Neer Patel Vishwesh Rajput Saket Joshi Sanskruti Gondaliya	Submarine & Underwater	2,00,000/-
8	Dr. Akash Mecwan	Harsh Chotaliya Vivek Sondagar Arya Kargathara Dev Bhagat Dhyey Chavda	Two Wheeled	2,00,000/-
9	Harsh Kapadia	Shivam Bhatia Umang Kathiriya Raj Dalwadi Amisha Mahapatra Teesha Bansal	Others	1,00,000/-
10	Dr. Akash Mecwan	Aryan Batra Dev Bhagat Arya Kargathra Dhananjay Lakhani Dheeraj Agrawal	Others	1,00,000/-
11	Prof. Shruti C Bhatt	Dhananjay Lakahani Pratham Panchal Dharan Shah	Others	1,00,000/-



- The Electronics and Communication Students' Organization organised an event named "Codecook" on October 03, 2023..
- The Electronics and Communication Students' Organization organised an event named "Namkaran" to change the name of E department magazine previously named "Spectrum". The unveiling ceremony of newly named magazine was organized on November 09, 2023.

#### **Blood Donation Drive**

A Blood Donation Drive was conducted on October 30, 2023, on the Nirma University Campus in honor of National Unity Day. NSS Unit School of Technology and ISA Students' Chapter Nirma University worked together with the Civil Hospital in Ahmedabad to make it possible. The blood donation saw an astounding turnout of 283 units of blood donated, which truly stands out as a remarkable achievement. All the donors dedicated their time and efforts to this noble cause. Their selfless contribution played a vital role in saving lives and improving the well-being of those in need. The hard work and commitment of the volunteers played an instrumental role in the success of the event.

#### Charity Drive for the kids of 'Prakash School for Mentally Retarded'

The International Society of Automation Students' Chapter Nirma University organized a Charity Drive for the kids of 'Prakash School for Mentally Retarded' on November 7, 2023. This initiative was carried out for the 17th year in a row. The charity drive was conducted under the supervision of Dr. Himanshu Patel, the Head of the Department and Faculty Advisor, and Prof. Sneh Soni, Faculty Coordinator of the ISA, who provided guidance and support to the team throughout the event.



## ISA Leaders' Meet

The International Society of Automation (ISA) Students' Chapter, Nirma University hosted the ISA Leaders' Meet on September 13, 2023, graced by the esteemed presence of ISA Global President, Mr. Marty Bince. This event was organized under the guidance of Dr. Himanshu Patel, HoD of the E&I Department at Nirma University and Faculty Advisor of the Students' Chapter.

The ISA Leaders' Meet served as a pivotal gathering that brought together leaders from various divisions of ISA-Gujarat, demonstrating the vibrant network. This event offered a platform for profound discussions, unveiling of innovations, sharing of invaluable perspectives, and an immersive tour of our cutting-edge labs, showcasing the university's state-of-the-art equipment. The ISA Leader's Meet was a resounding success that will be cherished by all stakeholders.





- The International Society of Automation (ISA) Students' Chapter Nirma University conducted a workshop focusing on AI Chatbots on 2<sup>nd</sup> September 2023. The workshop was aimed at enlightening students about the growing significance of AI Chatbots in today's technological landscape.
- The International Society of Automation Students' Chapter Nirma University recently conducted a workshop focusing on the UR10e Robotic Arm on 16<sup>th</sup> September 2023. The workshop was aimed at educating students about the uses of robotic arms in various technological fields.
- The International Society of Automation, Students' Chapter Nirma University, organised an event named ABHIVRIDDHI from 27th to 29thOctober 2023. The event was a blend of technology and finance. The event featured a diverse range of workshops like "Robodrive" which offered participants the opportunity to construct gesture-controlled robotic car, an IoT based home automation workshop and "Bullseye" which provided a virtual environment for stock market exploration. The main feature of the event was "BidBots". Also the IoT workshop was successfully conducted by under the guidance of Mr. Sarwam Miyani.





