# **STUDENTS CORNER**

#### **AUVSI SUAS 2022**

71 teams registered for participation in the AUVSI SUAS competition designed to foster and simulate interest in Unmanned Aerial Systems (UAS) technologies and careers and to engage students in a challenging mission. Our developmental team had a total of 27 members from various engineering disciplines, out of which 9 members went to Maryland, USA for the competition.

Team Members	Dept		
Saksham Shah [Captain]	Electrical Engineering		
Dhaval Joshi [Vice Captain]	Mechanical Engineering		
Jemin Mangukiya	Mechanical Engineering		
Priyansh Fadia	Mechanical Engineering		
Viren Singh Dodia	Computer Science and Engineering		
Mayuri Mudaliar	Electrical Engineering		
Shreedhar Shah	Instrumentation and Control Engineering		
Siddharth Mandaliya	Instrumentation and Control Engineering		
Kaushal Bhuva	Instrumentation and Control Engineering		

The team developed various novel methodologies across utility driven domains while focusing on holistic development and considerable societal impact. Arrow was one of the two teams with an Octacopter and was the only Indian multirotor team to design and manufacture its own airframe.



During the mission presentation,
Team Arrow took off with one
timeout. Successfully started
the time autonomous mission
but lost telemetry at the furthest
point on the airstrip, triggering
failsafe and RT-Ling.
Nevertheless, autonomous
mission earned the team a
mission rank of 14.

# Team Nirma won National ROBOCON 2022

Robocon is an international robotics event, organized by Asia Broadcasting Pacific Union (ABU) every year. The ABU member country announces the theme and hosts the international Robocon event every year. India is the host country for the ABU Robocon 2022. A team from every ABU member country participates in the international contest. To decide the national winner, a National Robocon 2022 competition was organized by IIT, Delhi in collaboration with Doordarshan, India at Thyagraj Stadium, New Delhi during July 14 - 17, 2022.

The contest was organized in three stages. In the first two stages, a design document and a preliminary design video were submitted. Out of the 85 participating teams, 43 teams were selected after the first two rounds. Selected 43 teams participated at the National Robocon Contest. Participants from the various colleges across India like IITs, NITs and institutes of national repute participated in the said event.

Team Nirma Robocon is the consistent performer of Robocon since its inception in 2002. Continuing the consistency, team Nirma Robocon has won the national Robocon 2022 contest. This was the 10th victory of Team Nirma Robocon in the national event out of 21 events organized till date. Team Nirma defeated SRM University and Pune Institute of Computer Technology in the league matches. Nirma won against Parul University, Baroda, MIT - WPU, Pune and Government College of Engineering and Research, Avasari in the quarter final, semi-final and final respectively. Team Nirma was the only team, who could complete the entire game in the given time limits.





The Mechanical Engineering Department, Institute of Technology arranged an orientation programme for the first -year students of MTech programme between August 1 to 12,2022. The students admitted to M Tech in CAD/CAM and Design Engineering attended the same in offline (physical) mode. Various technical sessions were arranged for the students in the field of mechanical engineering

# **Team ARROW**

Team Arrow operating under SAE- Nirma collegiate club Attended ADCISS 2022 competition in Chennai. The competition was held from 1st of September to 3rd September by SAE southern section.

The team received 2nd rank in best design report and also same in best innovation for regular class category. Overall, the team stood 6th in both micro and regular class category out of 40 teams in micro class category and 38 teams in regular class category.





Praveg'22



**Inaugural function** 

The Mechanical Engineering Students' Association (MESA) organized "Praveg22" on October 12 & 13,2022 with the theme of "Know Our Forces". The grand event was inaugurated by Air Marshal Vikram Singh, AVSM VSM, Air Officer Commanding in Chief, South Western Air Command, Indian Air Force and Shri K Patel, Vice President, Nirma University.

Following are the activities organized during the mega event.

Advanced Weapon and Artillery exhibition by Border Security Force and Indian Air Force



### Weapon and artillery exhibition by Border Security Force and Indian Air Force

An exhibition of advanced weapon and artillery was organized by Border Security Force and an Induction Publicity Exhibition Vehicle (IPEV) of Indian Air Force with aircraft simulator was positioned at the campus of Nirma University. The exhibition was open for the two days of Praveg22. More than 3000 people including college students, school students and faculty members visited the exhibition.

#### Activities for specially abled students



More than 35 specially abled (hard of hearing) students along with their teachers visited the advanced weapon and artillery exhibition and participated in a drawing competition.

## **Talk Shows**

Four Talk Shows were organized during the two days, with following Guest Speakers



Talk show with Lt.Gen.Asit Mistry (Retd)

## Eminent personalities of Talk Show

- 1. Lt.Gen.Asit Mistry (Retd), PVSM AVSM VSM SM, Indian Army
- 2. Mr.Pulkit Gaur, Chief Technology Officer and Founder, Gridbots Technologies Pvt.Ltd.
- 3. Mr.Anant Ladha, Finance Guru & Youtube Sensation
- 4. Mr.Abhishek Jain, Director & Producer of Gujarati Movies, CineMan Productions

# **Technical Workshops, Technical and Non-Technical Events**



Workshop on subconscious mind

# **Cultural Show**



#### Team Arrow

# **Aerothon 2022**

Team Arrow participated in Aerothon Unmanned Aerial vehicle drone design, build and fly challenge 2022, organised by SAE INDIA, held on 18th and 19th of November 2022.

The competition was divided into two phases.

In the first phase out of 51 teams, 20 teams were filtered out based on their design and in phase two they have to build the drone and complete the mission requirements followed by technical presentation, technical inspection & flight rounds.

The team cleared the phase one amongst the top 20 team across the country and for phase 2 team of 10 members have represented University at S J C Institute of Technology Chikballapur, Karnataka and after drastic efforts team bagged the award for the 'best manual flight mission' with cash prize of Rs. 25,000, by having most accurate payload drops at target.





Aerothon winning team

#### Student's Awards/Achievement/ Publication

Students Ansh Harendra, Atodariya Jayvir, Manav Agrawal from the Chemical Engineering Department received Second Prize as a team "CHEMO-TRI" in National Level QUMICON – CHEM-BLAZE competition on November 13,2022 organized by IIChE-VIT Vellore & IIChE-RGIPT Amethi Uttarpradesh. Aryan Anand has been awarded Best Delegate in Ecosoc representing U.S.A at the Maiden Edition or Ahmedabad Prodigy MUN. held on July 16 and 17, 2022.



Aryan Anand has been awarded Best Delegate in VNHRC at Change Makers' Symposium, 2022 organised by AIESEC in Ahmedabad, held on June 25 & 26 of 2022 at Anant National University.

He has been also awarded as Best Delegate as the Delegate of Denmark in UNHCR in Diplomatic Youth International MUN 2022, August Edition. He also represented China and was awarded the best delegate at HLCC MUN international conference 8th edition 2, September 3& 4, 2022

Jenish Patel received the Best Paper Award / Certificate for presenting a paper on "Comparative Study of Outrigger and Wall-Frame Structural Systems in Steel-Concrete Composite Tall Buildings" during the International Conference on Smart and Sustainable Infrastructure, organized at PDEU, Gandhinagar, from August 23&25, 2022



Shah Khush and Raval Mann both awarded for being the part of the national winning team at VOIS Tech Marathon among the 530 teams that had participated in the hackathon.



Parth Parikh secured runners up position at Shaurya'22 badminton tournament organised by IIM Ahmedabad.



- Naitik Sanghavi Won in the Chess event at SHAURYA 2022, organized by IIM Ahmedabad on November 13.
- Pranshav Gajjar, B.Tech. CSE student from semester VI was selected and completed summer internship at Kyoto University, Japan in summer 2022.
- Taha Firoz ,B.Tech. CSE student from semester VI was selected and he completed summer internship at J P Morgan, London, UK during summer 2022.
- Henil Shalin Panchal, CSE 3<sup>rd</sup> Semester has successfully completed Google Summer of Code'22 at Fortran-lang under the Guidance of Mentors Sebastian Ehlert and Rohit Goswami on September 20, 2022.
- Het Patel, Harshil Tagadiya, Dhruvil Kakadiya a part of team Drop the Bayes Unofficial" from Nirma University, Ahmedabad, Gujarat, India, participated in ICPC (International Collegiate Programming Contest) and secured 91st rank among 2000+ teams in ICPC India 2021 Preliminary Online Round and secured 15th rank among 58 teams in ICPC Kanpur 2021 Regional Round. They were coached by Dr Ankit Thakkar.



Team "DropTheBayesUnofficial" from Nirma University ranked 15th all over India in ICPC Kanpur 2021 Regional Round.

#### Team Details:

Coach: Dr. Ankit Thakkar, Professor, CSE Department Student Members: Harshil Tagadiya Het Patel Dhruvil Kakadiya

# Team: DropTheBayesUnofficial

- Manashri Patel under the guidance of Dr. Madhuri Bhavsar published a research paper titled *Privacy Preservation for Big Data Healthcare Management* in the 2022 3rd International Conference of Intelligent Engineering and Management (ICIEM-2022), London, UK.
- Malani Nimitkumar, Mihir Rana presented research paper in the field of VLSI and Machine Learning in the VCAS conference organized by MNNIT Allahabad on October 14 &16,2023.
- Karan Ladhiya, under the guidance of Dr. Pronaya Bhattacharya, Prof. Deepti Saraswat, and Dr. Mohd Zuhair published a research paper titled *PHBio*: A Pallier Homomorphic Biometric Encryption Scheme in Healthcare 4.0 Ecosystems in the 2022 3<sup>rd</sup> International Conference of Intelligent Engineering and Management (ICIEM-2022), London, UK.
- PG students Kshitij Deshmukh, Avani Jain, Shubhangi Singh, published a research paper titled A Secured Dialog Protocol Scheme Over Content Centric Networks in the 2022 3<sup>rd</sup> International Conference of Intelligent Engineering and Management (ICIEM-2022), London, UK.
- Harsh Mankodiya (19BCE117), and Priyal Pakhiwala (19BCE214), published a research paper titled 'A Real-Time Crowdsensing Framework for Potential COVID-19 Carrier Detection Using Wearable Sensors in Mathematics', MDPI 10(16), 2927
- Tirth Patel and Manish Gupta presented and published a paper titled "Detecting emotions from human speech: role of gender information" at IEEE TENSYMP 2022 organized in IIT Bombay.
- Anjali Agrawal and Dhara Mungra and Ph.D. student Ms. Kinjal Chaudhari co-authored
  the article "Improving the Performance of Sentiment Analysis Using Enhanced
  Preprocessing Technique and Artificial Neural Network" which is published in IEEE
  Transactions on Affective Computing (Impact Factor: 13.99).
- Mr Rajesh Gupta has published a research article entitled "Channel indicator-based intelligent network selection scheme for device-to-device communication" in *Physical Communication*, Elsevier (SCI, WoS, Impact Factor -2.379).

Ms Kinjal Chaudhari has published a research article entitled "Information fusion-based genetic algorithm with long short-term memory for stock price and trend prediction" in *Applied Soft Computing*, Elsevier (SCI, WoS, Impact Factor - 8.263).

Ms Ritika Lohiya (18FTPHDE60) has published a research article entitled "Fusion of statistical importance for feature selection in Deep Neural Network-based Intrusion Detection System" in *Information Fusion*, Elsevier (SCI, WoS, Impact Factor - 17.564).

Dev Patel and Harshil Sanghvi has published a research article entitled "BlockCrime: Blockchain and Deep Learning-Based Collaborative Intelligence Framework to Detect Malicious Activities for Public Safety" in the special issue of **Blockchain Technology Applied in Accounting** for MDPI.

Manav Davawala and Tanmay Joshi has published a research article entitled "Compressive strength prediction of high-strength concrete using machine learning" in Emergent Materials.

Parshav Gajjar and Harshil Sanghvi has published a research article entitled "E-Mixup and Siamese Networks for Musical Key Estimation" in the International Conference on Ubiquitous Computing and Intelligent Infomation Systems.

#### **Activities for Students**

- The orientation Programme for newly admitted students of M. Tech in Construction Technology and Management was organized between August 01, 2022, to August 12, 2022. During the orientation programme, various lectures on Construction Technology, Introduction to Latex, Human Resource Management, Personality Development were conducted. Laboratory hands-on sessions on various software in Project Management, GIS, Revit, and Construction workshop were organized. During the orientation programme, a technical site visit to Science City & Metro Construction of Gandhinagar Ahmedabad Route was planned for the students.
- The orientation Programme for newly admitted students of M. Tech in CASAD was organized between August 01, 2022, to August 12, 2022. Various expert lectures were conducted in the orientation program. During the orientation programme, a technical site visit to Science City & Metro Construction of Gandhinagar Ahmedabad Route was planned for the students on August 10, 2022.
- Students Research Cell, Civil Engineering Department organized a lecture on Standard: Making and Utilization under the "Education Utilization Programme", on 8 September, 2022. Mr. Sai Kaushik Kalle, Scientist -'C'/Deputy Director, Bureau of Indian, Standards, Ahmedabad Branch Office-I, delivered the session. About 90 Students of Semester VII attended the session.
- An Expert Lecture Series in Foundation Engineering for the Civil Engineering Semester-V students and Elective course of Ground improvement Techniques was conducted. The sessions were delivered by Dr Sanjay Kumar Shukla, Associate Professor Civil Engineering Department, Edith Cowan University, Perth, Australia and Adjunct Professor, Civil Engineering Department, SoE, IT-NU. Dr Shukla is Founding Editor-in-Chief, International Journal of Geosynthetics and Ground Engineering, Founding Research Group Leader (Geotechnical and Geo environmental Engineering), School of Engineering, Edith Cowan University, Perth, Australia. Dr Shukla delivered five sessions of 2 hour each which was attended by more than 120 students of the B Tech Civil Engineering. The main topics covered in the sessions were Ground improvement methods, Geosynthetics, Introduction to Deep Foundation, Pile foundation: Capacity of individual pile, pile group, Pile load test.

# Students' Club Activities



To commemorate the 'Foundation Day' of the Chemical Engineering Students Association Club, ChESA Day was celebrated in the Chemical Engineering department on September 7, 2022.





On September 30, 2022 Chemical Engineering Student Association (ChESA) and Indian Institute of Chemical Engineers (IIChE) student chapter under Chemical Engineering department and the Institute of Technology, Nirma University organized events including games and expert lectures for Chemical Department students.







On November 5, 2022, Indian Institute of Chemical Engineers' (IIChE), Chemical Engineering Students' Association (ChESA) & UG Research Cell – Nirma University organised an event "CHEMERGENCE 2022" in which the participants had to either research or review a research paper, then present it to external jury via either presentation or poster.

# "Chem-Sportza: A Sports Event under ChESA



On 22nd November 2022, Indian Institute of Chemical Engineers' (IIChE), Chemical Engineering Students' Association (ChESA) organised an event "Chem-Sportza: A Sports Event", where Volleyball and Badminton competitions were held for the students.







The OrCES club, Civil Engineering Department had organized a celebration for Teachers Day on September 05, 2022. All the students and faculty from the civil department enthusiastically participated in different activities such as dance, drama, singing etc. Students showcased their talent and dedicated their performances for their teachers. The event ended with a beautiful garba performance by board members of the OrCES club.



"OrCES sports fest" provided the stage for all the students of civil engineering to showcase their talent in physical activities. A cricket match between faculty and students was also organized on September 09, 2022. There was a good number of participants and all the players played with great sportsmanship and showed absolute Energy and spirit throughout the event.



Organization of Civil Engineering Students (OrCES), Civil Engineering Department, IT-NU organised its annual tech-fest "NIRMAN'22" on November 11 & 12, 2022 under the theme "Innovation and Engineering". NIRMAN'22 comprised of various technical and non-technical events, workshops, talk shows and Fire Safety Mock Drill.



IEI Students' Chapter, Civil Engineering Department, Institute of Technology, Nirma University organized a knowledge sharing session on "Basics of AUTOCAD" on September 02, 2022 at 04:15 p.m. through OFFLINE mode. The session was conducted by Mr. Shivam Akbari, a student of M. Tech. (CASAD) final year, Civil Engineering Department, IT-NU. A total of 36 participants including UG and PG students of the department attended the knowledge-sharing session.



IEI Students' Chapter, Civil Engineering Department, Institute of Technology, Nirma University organized a technical lecture on "Entrepreneurship in Civil Engineering & Ground Penetration Radar (GPR) Technology". The lecture was conducted by Ms. Silky Agrawal, Founder, Geocarte Radar Technology Pvt. Ltd., Indian Institute of Technology Gandhinagar (IITGN) on September 06, 2022, Institute of Technology, Nirma University. A total of 168 participants including UG students and faculty members of the department attended the lecture.



IEI Students' Chapter, Civil Engineering Department, Institute of Technology, Nirma University organized a knowledge sharing session on "Analysis & Design of Steel Structures using STAAD Pro" on 09th September, 2022 at 04:15 p.m. through OFFLINE mode. The session was conducted by Ms. Heer Shah, final year student of M. Tech. (CASAD), Civil Engineering Department, IT-NU. A total of 32 participants including UG and PG students of the department attended the knowledge sharing session.



National Concrete Quizathon was organised by the Indian Concrete Institute, Students Chapter, Civil Engineering Department on September 15 & 16, 2022.



Association of Computer Engineering Students (ACES) organized online event on August 12, 2022 titled 'Your Day' where Mr. Shivam Patel, Software Engineer-Machine Learning, Google delivered a talk titled 'Computer Science, Youth and Future Scope in Computer Science from Research Perspective' and Mr. Piyush Bhan, Senior Vice President, International Business, Salucro Health Care Solutions delivered talk on 'Technology and Youth'.

- Department of Civil Engineering, Institute of Technology, Nirma University under the Indian Concrete Institute Student Chapter organized an event on August 10, 2022 on Emerging Trends 3D Printing Technology, by Mr. Yogi Gandhi, CEO, US Institute of 3D Printing Technology.
- ISA student chapter, EI department celebrated 'Teacher's Day' on September 5, 2022. Faculty interaction with students took place during the event.
- ISA Students' Chapter EI department organised a Pre-Diwali celebration event for the Mentally retarded students of Prakash School, Ahmedabad on October 11, 2022. The club distributed boxes of sweets among the students, as a Diwali gift. Students collected money as donations to buy Diya's made by the students at Prakash School.

- ISA student chapter, EI department has organized a chess tournament on the occasion of Foundation Day on October 3,2022. Faculty members, Head of Department and many students were present during the session.
- ISA student chapter, EI department organized an Orientation Programme webinar series from August 5-8, 2022. This webinar series featured well-known Nirma University graduates as speakers from a wide-range of professions to guide the students on their career paths. The series assimilated topics ranging from pursuing Masters in India and abroad to being an entrepreneur to applying for job applications.
- International Society of Automation Students' Chapter Nirma University organised an event named TECHNOPHILIA'22 on November 28 and 29 which was perfect amalgamation of socio-technical events under guidance of H. K. Patel who is faculty adviser of this student chapter and HoD of Electronic and Instrumentation engineering department at Institute of Technology, Nirma University. It included robotic workshops like "RoboSpree," which taught the participants how to operate a robotic manipulator arm, and "RoboKarts," where participants had the opportunity to assemble a robotic car and control it using the gyroscope of a mobile phone. Then group-building activities including "Treasure Hunt," in which all players collaborated to find the game's "treasure," and "Drum Circle" in famous artist Rujul Vora conducted the evening and students were filled with zeal and thrill by the vibe. The exclusive talk show "Tea with Techies" was presented at the TECHNOPHILIA event. Here, contestant of famous TV show "Shark Tank India" like Shani Pandya Founder of 'Power tree', Founder of 'Torchit electronics Pvt. Ltd.' Huni Bhagchandani, Rutvij Dasadia who is founder of 'Booz scooter' and Devansh Shah founder at 'EVamp tech (MobiLane) Pvt. Ltd.' were invited to share their life's success stories and inspire the students.

#### **NCC ACTIVITIES**

NCC Har Ghar Tirangaa

**NCC Kargil Day** 

NCC Unity Day





# PLACEMENTS AT INSTITUTE OF TECHNOLOGY

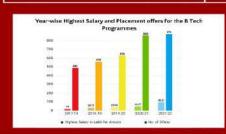


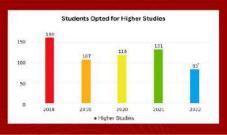
All UG program NBA accreditated

#### **TOP RECRUITERS**



Stream	Student Registered	No of Placement offers	Highest Salary (LPA)	Average Salary (LPA)
Civil	69	48	13.53	5.75
Chemical	70	64	13.53	6.13
Mechanical	127	135	13.66	5.12
Electrical	134	147	13.66	6.08
Electronics & Communication	122	101	22.99	8.85
Instrumentation	51	45	13.66	6.46
Computer Science & Engineering	287	268	50.16	9.59





iiicell@nirmauni.ac.in

+91 79716521411, +91 7971652000

tttps://technology.nirmauni.ac.in/

( Location

The Industry Institute Interaction Cell (III Cell), Institute of Technology, Nirma University Sarkhej Gandhinagar Highway, Ahmedabad, INDIA - 382481