



Dear Friends,

Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar (DA-IICT) is known for its commitment to excellence, and constantly reinventing itself in terms of academic programs and research. Its vibrant campus offers students challenging academics based on current research and plenty of sport, cultural, and organizational activities.

Students of DA-IICT thrive and excel in the competitive professional environment with access to state-of-the-art research facilities, rigorous instituteindustry collaborations, and interdisciplinary research opportunities. We introduce the third issue of our Newsletter, which will cover news and events from January to June 2022. We believe in continuous development. Let me now provide you with a brief report on the activities of the Institute this period. Our continued focus on providing better education and conducting high-quality research is despite the challenges that arise. I especially want to congratulate the students who received gold medals for their respective courses.

I report with grief that we have lost one of our distinguished senior staff members, Shri Soman Nair Executive Registrar in June. We extend our heartfelt condolences to his family. May his soul rest in eternal peace.

Sincerely, **Prof K. S. Dasgupta** Director, DA-IICT





Obituary

Shri Soman Nair, our Executive Registrar passed away in June 2022. We mourn his loss deeply. With dedication, compassion, and kindness Mr. Nair led the administrative duties at DA-IICT since 2012 as Executive Registrar. He was always approachable and accessible to students, parents, staff and faculty members alike. He was soft-spoken and always found time to look into any issue that was brought to his notice. The DA-IICT community will deeply miss his warm persona and his smiling countenance. Our prayers are with Mr. Nair's family; may they be provided with the strength to bear this loss.

NEW FACULTY RECRUITMENTS



Prof. Arpit Rana joined the institute as an Assistant Professor in August 2021. He completed his PhD in (Computer Science) from Univ. College Cork, Ireland



Prof. Ayan Palchoudhuri joined the Institute as Assistant Professor in February, 2022. He did his PhD (Electronics and Electrical Communication Engineering), IIT Kharagpur.



Prof. Manish Kumar joined the institute as an Assistant Professor in July 2021. He completed his PhD in (Electrical Engineering) from IIT Patna



Prof. Sreeja Rajendraran joined the institute as an Assistant Professor in October 2021. She completed her PhD in (Electrical and Electronics Engineering) from Birla Institute of Technology and Science, Pilani, Dubai Campus



Prof. Nalin Kumar Sharma joined the institute as an Assistant Professor in December 2021. He completed his PhD (Electrical Engineering) from IIT Delhi



Prof. Rachit Chhaya joined the Institute as Assistant Professor in February, 2022. He holds a PhD (Computer Science), from IIT Gandhinagar.



Prof. Tathagata Bandyopadhyay joined the institute as a Distinguished Professor in December 2021. He has 37 years of experience. He completed his PhD in (Statistics) from University of Calcutta, Kolkata



COVID RESPONSE

While constrained by the current Covid-19 pandemic, the Institute continued to provide academic rigor within those confines without altering academic standards. After the quarantine period, the students who needed advanced computing for their studies were granted permission to stay on campus. Students could access electronic resources remotely via the Resource Center, which follows all Covid guidelines.

NEW ACADEMIC PROGRAMMES

DA-IICT continues to make forays into newer territories pertinent to undergraduate and postgraduate education. At the postgraduate level, a new academic programme has been introduced: M.Sc. (Agriculture Analytics). The program will be offered jointly by DA-IICT, Anand Agriculture University and The Indian Institute of Remote Sensing (IIRS) Dehradun. This program is targeted at science and engineering graduates. A multi-disciplinary program of agriculture and data analytics, the course will introduce students to concepts of data analytics, viz. descriptive, predictive and prescriptive, in agriculture and will empower the students to eliminate speculative farming and usher in the age of predictive agriculture.

ADMISSIONS FOR 2022-23

Preparations for the 2022-23 admissions began in March 2022, with the release of advertisements in regional/national dailies covering the entire country. The admissions were also announced on the web site of the Institute and by means of posters, brochures and social networking sites. The admissions and counseling were carried out using an online system. Admissions are currently underway, and the process will conclude in August 2022.



LECTURES



DA-IICT Lecture Series (DLS) Talk by Prof. Vivek Bohra (IIIT-Delhi) on 22-Apr-2022 Exploring Light Based Communication for Next Generation Vehicular, Indoor and Underwater Networks

Abstract: Light based communication systems is a new communication paradigm which has been proposed recently to meet the capacity and safety requirements for next generation communication networks. They discuss the application of this paradigm in vehicular, indoor as well as underwater wireless scenarios. Specifically deliberate the pros and cons of applying light based communication architecture for V2X communication vis-à-vis conventional RF based DSRC framework. Sharing some of the preliminary analytical, simulation and measurement results obtained by our research group in this direction.



DA-IICT Lecture Series (DLS) Talk by Prof. Sumit Darak (IIIT-Delhi) on 27th May, 2022 Multi-armed Bandits for Wireless Networks: Introduction, State-of-the-art Works and Potential Research Directions

Abstract: Multi-armed bandits (MAB) are popular online machine learning algorithms widely used for real-time decision-making without the need for prior training. They have been widely used for online advertisement selection to increase the number of clicks, clinical trials to identify best drugs, news personalization, decision making in financial markets and resource selection in wireless networks, internet of things (IoT) and robotics. The focus of this talk is introduction to MAB algorithms and their applications in wireless networks. Discuss on current state-ofthe art works from algorithms as well as architecture perspectives followed by potential research directions.

CONFERENCES / WORKSHOPS

System Design Flow on Zynq using Vivado a National Level Workshop was organized in the physical mode at DA-IICT from 28th to 29th June 2022 on the topic: System Design Flow on Zynq using Vivado by CoreEL Technologies. Xilinx Vivado is the industry's first graphical IP flow with modular design which enables efficient use of resources with dynamically reconfigurable properties. Vivado design suite provides implementation tools with significant advantages in runtime and performance which help designers accelerate the implementation phase of the design cycle. The workshop was highly beneficial for students, researchers and faculty working in the field of VLSI System Design. challenges in solving them. Secondly, we try to answer how differential equations arise naturally in modeling real world problems viz. biological, epidemiological, social psychology, etc. in the present scenario. Finally, we connect the subject with its emerging applications, especially the use of Machine Learning (ML) and Quantum Computing (QC) in solving differential equations. Hence, this online workshop is meant to provide the foremost interdisciplinary colloquium for experts and young researchers to present and discuss the most recent innovations in the emerging areas of differential equations.



Workshop on Emerging Areas in Differential Equations and Real-World Applications (EADERWA) 30th May 2022

The subject of differential equations is the natural goal of elementary calculus, and, most importantly, it is the source of ideas and theories for studying the change in the real world. Several questions naturally arise:

"What is a differential equation? How do differential equations originate and what do they represent? When encountering with a differential equation, what does one do with it, how does one do it, and what are the conclusions of such a pursuit?"

These questions signify three major aspects of the subject: Theory, Methods, and Applications. Therefore, in this workshop, first we introduce the basic aspects of the differential equations and



Summer School on Shape Modelling Hosted by DA-IICT Gandhinagar (online) 14/06/2021 - 25/06/2021

DA-IICT hosted the ACM Summer School on Shape Modeling. The school focused on the mathematical and Computational aspects of Shape modeling, with several applications. The content was delivered by faculty members from DA-IICT, IIT Madras, IIT Bombay, IIIT Delhi, and industry experts from Dassault Systems India and InterDigital France.



CONFERENCES / WORKSHOPS

15th Innovations in Software Engineering Conference (ISEC 2022) hosted by DA-IICT, 24-26 February 2022

Innovations in Software Engineering Conference, ISEC (formerly known as India Software Engineering Conference) is the annual conference of iSOFT, the India chapter of ACM SIGSOFT (isoft.acm.org) under the umbrella of ACM India. The 15th edition of the conference was held at DA-IICT Gandhinagar, India. ISEC brings together researchers and practitioners from across the world to share the results of their work. The goal of the conference was to provide a forum for researchers and practitioners from both academia and industry to meet and share cutting-edge advancements in the field of software engineering.

> ISEC 2022 General Chairs: Saurabh Tiwari, DA-IICT Gandhinagar Sanjay Chaudhary, Ahmedabad University.



UPCOMING EVENT



MoU signed between Jan-June 22

| NO. | MoU |
|-----|-------------------------------|
| 1 | Anand Agricultural University |
| 2 | ISR, Gandhinagar |
| 3 | TCG Crest |
| 4 | IIPH Gandhinagar |
| 5 | NID, Ahmedabad |

STUDENT ACHIEVEMENTS



Pratham Dhruv, Daksh Trivedi - BTech (ICT) students published a research paper titled "The Study of Supply chain in vegetable crops in two districts of Gujarat: Anand and Gandhinagar.



Ronak Jethava from B.tech-ICT 2019 batch and currently in my 3rd year. He was one of the candidates from 100 finalists who competed in the HackWithInfy 2022 grand finale.



Nemin Shah BTech (ICT)) student, published a research article in IEEE Communication Letters. The title of the research paper is 5G and machine learning.



Ankit Kumar BTech (ICT) student published a research paper titled "Development of an accurate cheque reader based on comparative study of various methods of digit recognition". This is a comparison between various machine learning models for decision-making was performed to find the best which model for an accurate cheque reader.

A VERY BIG CONGRATULATIONS TO THE GOLD MEDALIST

| STUDENT ID | STUDENT NAME |
|------------|----------------------------|
| 201601202 | Jogi Yash |
| 201601416 | Rutvik Shah |
| 201811001 | Nanavati Tilak Digantkumar |
| 201812001 | Akshay Jain |
| 201812003 | Shah Romil Hemendra |
| 201814004 | Prathamesh Vinay Siddhesh |
| | |

PROGRAM

B Tech (ICT) B Tech (Honours) ICT with Minor CS M Tech (ICT) M Sc (IT) M Sc (IT) M Des (CD)



SYNAPSE

Students of DA-IICT successfully organized one of Gujarat's most distinguished college fests, Synapse, after two long pandemic years.Synapse is organized during the month of February March by the Synapse committee of DA-IICT every year and attracts thousands of people from across the country.

The 4 day fest witnesses quality participation from various institutes in numerous events. This technocultural festival not only presents a plethora of opportunities and a great platform for the young talent of India but also hosts various artists during the ProNights. The 2022 fest had a different journey on its own.

With all the ups and downs that everyone was facing and the unpredictability of the pandemic situation, there were many challenges to overcome. But the versatile committee members still managed to pull off the entire fest in a fortnight! Synapse 22 hosted Shilpa Rao and Gajendra Verma. The master Vanmoon keeps the audience moving with the beats.

The amazing standup comedian Jaspreet Singh refrained the laughter from everyone's face to fade away. The Festive vibe was kept up throughout the day by various fun events and competitions. from western dance -(Footloose) to cultural dance -(Naach), from singing - (Raaga N Rhapsody) to (Battle of Bands), from Coding - (Code Mutants) to gaming battle -SyanoCubix and Battledrome, from Street Play to movie making: (Conceive), from designing: (Strokes of Genius) to the fashion festival:-(Rampage), Synapse has it all.



PLACEMENT

DA-IICT completed its final placement for 202122, the highlights of the Placements are a total of 443 offers were made. The highest CTC recorded on campus this year was Rs 52.5 lakhs per annum and the highest average CTC/ salary figure stood at 13.61 lakhs. The compensation offered to DA-IICT grads for under graduate and post graduate programs has been on an upward curve over the last few years, For the first time, 4 top companies, Google, Microsoft, Sprinklr and De Shaw shared the Day I slot of placements and collectively made 36 offers to final year and 62 offers to pre-final year students.

Several companies offered noteworthy roles to students from various programs. Some of the roles included Software Development Engineer,Full Stack Developer, UX Designer, R&D Engineer,Data Scientist, Associate Technical Consultant,Application Developer, Software Development Engineer, etc. A total number of 140+ companies participated in the placements process.

The list of recruiters at DA-IICT every year spans leading corporates as well as reputed start-ups from diverse areas. Many of the participating companies are repeat recruiters, who have been encouraged by the performance of DA-IICT alumni at their respective organizations. Here is an indicative list of companies participating in placements 2022:





CAMPUS EVENTS

DA-IICT Freshers' Sports Weekend 2022 22nd January 2022, The Sports Committee had organized Freshers Sports Weekend for BTech, MDes, MScIT, MTech, and PhD batches. This new version of Freshers Sports Weekend included games like Valorant, Clash Royale and BGMI. From the main events we also organized several fun events like "Smash Cart", "Stumble Guys" and "Rocket League" which took place on the Sports Committee's Discord Server.



UX/UI and Basics of Designing 06th June 2022 Mr. Sahil Shah is a graduate of DAIICT, a TEDx speaker, and well known on social media platforms like LinkedIn. He conducted the offline hands-on session. He established several Companies like Hungrito and Netsavvies Media Co. Over the last 8 years, he has been involved in UI/ UX. In addition to his presentation about UI/UX, he also discussed the journey that he has taken as an entrepreneur and startup founder.



Manual Robotics Workshop 05th April 2022

After two years, this was the first offline event. Large number of students participated in the event, and they were grouped into fives, allowing them to meet & interact with each other. During the workshop, the participants built a bot from its basic components and competed in an exciting race. Everyone who participated in the workshop was given a demonstration on how to build cars without any prerequisites. They also showed their creativity in uniquely designing the cars and finally testing them on the race track.



DA-IICT Battlegrounds Mobile India Tournament 05th February 2022

The Student Sports Committee organized one of the most requested games in the series - BGMI, for BTech, MDes, MSc IT, MTech, and PhD batches. The winner of the game awards with an exciting prize.



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