DEPARTMENT OF INSTRUMENT AND CONTROL ENGINEERING
L.D COLLEGE OF ENGINEERING, AHMEDABAD

EDITION 7.0
JULY'21 - DEC'21

DEPARTMENRT OF IC ENGINEERING NEWSLETTER

INSIDE THIS ISSUE:

Principal Message

Dear Students and Faculty Members,

LDCE is moving ahead on many fronts. In this quarter the consistent efforts and hard work of all has resulted in getting accreditation of BE in Instrumentation and Control Engineering and Chemical Engineering. I congratulate and appreciate the efforts of all involved in the process. This is a welcome change as this year we have seen renewed interest in admission to branches like IC, Chemical and EC. In this issue of news letter would like to highlight that IC Department students and faculty had granted one Indian Patent, one design registration published and two design registration filed, I congratulate all Innovators of department. The Online Orientation program for first year students has been done well by all departments and we hope it has made our new aspirants comfortable for online teaching-learning. I wish all the luck to the first year students.

Dr. R.K. Gajjar ,
Principal, LDCE.

Vision and Mission of Institute

Vision : To contribute for sustainable development of nation through achieving excellence in technical education and research while facilitating transformation of students into responsible citizens and competent professionals.

Mission :

- To impart affordable and quality education in order to meet the needs of industries and achieve excellence in teaching-learning process.
- To create a conducive research ambience that drives innovation and nurtures research oriented scholars and outstanding professionals .
- To collaborate with other academic & research institutes as well as industries in order to strengthen education and multidisciplinary research.
- To promote equitable and harmonious growth of students, academicians, staff, society and industries, thereby becoming a center of excellence in technical education.
- To practice and encourage high standards of professional ethics, transparency and accountability

Message From Head of Department

EDITORIAL

Season's Greetings..!!!

It is indeed a pleasure for me to write editorial for the IC Engineering department newsletter. Department is progressing day by day under able leadership of Dr. R.K. Gajjar – Principal, LDCE, dedicated and committed team of IC Engineering faculties as well students. In COVID 19 pandemic has hastened the entire teaching-learning eco-system, but it has also marked an increase in resilience in students and faculty community. All the people associated have tried a lot to bridge the gap between the online and offline education. It has showed us a new way of working and coping up with stuffs, the department activities in the newsletter shows that In spite of pandemic department students and faculties had put efforts in teaching learning process to overcome of limitation of pandemic.

The major event in the current issue of news letter — Department received NBA Accreditation for 3 years. I Congratulate all stack holders of the department for this achievement. Kudos to all faculty and students for their hard work and commitment towards department. On this juncture I would like to thank alumni, parents and employer for their virtual presence and support during NBA visit. This time department organized online Induction and Orientation Program for the batch 2021 and felicitated meritorious students of department. Department students shows their creativity and Innovation by filing patents, 4 paper published by faculties, 51 students got placed in varies reputed Industries, I appreciate support of LDCE placement cell and congratulate all students, this time final year 70 students received their Industrial Projects in 30 companies working in various domain of automation, Process control and related field. Under ISA student section, ISA students team organized various webinars and visit. In this newsletter students creativity in painting, drawing and photography is remarkable. I am quite sure that readers will enjoy various activities covered in this news letter. Please feel free to write for any suggestion we can incorporate in coming volume.

Wishing you very good times.

Dr. Manish Thakker
Professor, Head

Department Vision and Mission

Vision : Provide quality education and research environment for preparing competent Instrumentation and Control engineers to meet the technological challenges of industries and the society.

Mission :

- To impart quality education in the field of industrial automation to match the needs of industries.
- To encourage multi disciplinary research and innovative projects.
- To cultivate technocrats and entrepreneurs with professional skills and ethics.

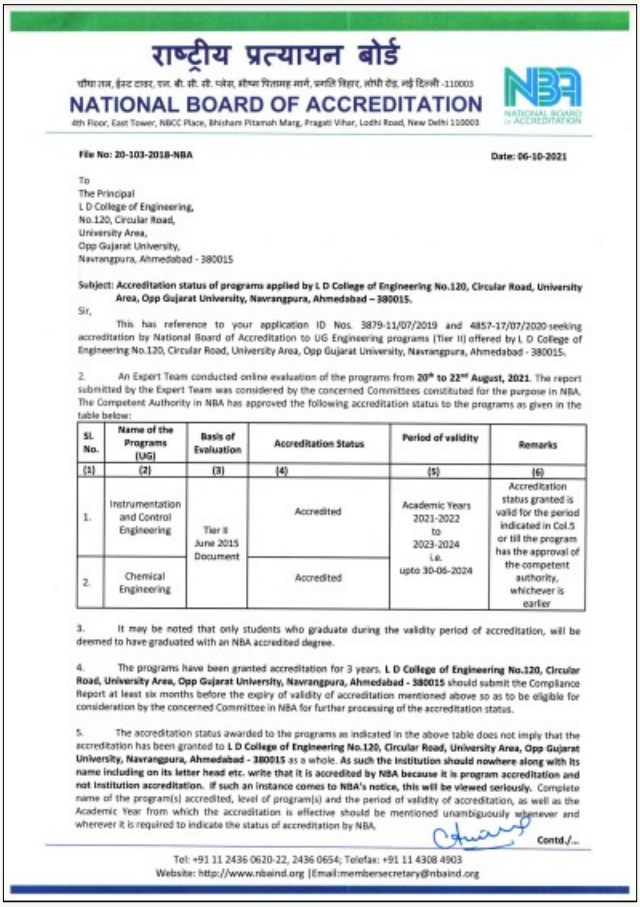
NBA ACCREDITATION

The National Board of Accreditation (NBA) conducts evaluation of programs of technical institutes on the basis of laid down norms. This may include, but not limited to institutional missions and objectives, organization and governance, infrastructure facilities, quality of teaching and learning, curriculum design and review, support services (library, laboratory, instrumentation, computer facilities, etc.) and any other aspect as decided by the General Council and / or Executive Committee of NBA, which will help the graduates produced by the institutions as per industry requirements.

The NBA team visited IC department at the end of August, 2021. It was a 2-day event and was conducted in hybrid mode at our department. The faculties had an online session with the experts of the NBA and also some officials of the NBA visited the department. The NBA evaluator had interactions with faculties and students and also visited department laboratories and facilities available at the department.

Group photo of IC faculty and staff

Visit of Dr.R.K.Gajjar Principal LDCE to IC Dept.



राष्ट्रीय प्रत्यायन बोर्ड

NATIONAL BOARD OF ACCREDITATION

4th Floor, East Tower, NBCC Place, Bhisham Pitamah Marg, Pragati Vihar, Lodhi Road, New Delhi 110003

File No: 20-103-2018-NBA Date: 06-10-2021

To
The Principal
L D College of Engineering,
No.120, Circular Road,
University Area,
Opp Gujarat University,
Navrangpura, Ahmedabad - 380015

Subject: Accreditation status of programs applied by L D College of Engineering No.120, Circular Road, University Area, Opp Gujarat University, Navrangpura, Ahmedabad – 380015.

Sir,

This has reference to your application ID Nos. 3879-11/07/2019 and 4857-17/07/2020 seeking accreditation by National Board of Accreditation to UG Engineering programs (Tier II) offered by L D College of Engineering No.120, Circular Road, University Area, Opp Gujarat University, Navrangpura, Ahmedabad - 380015.

2. An Expert Team conducted online evaluation of the programs from 20th to 22nd August, 2021. The report submitted by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The Competent Authority in NBA has approved the following accreditation status to the programs as given in the table below:

Sl. No.	Name of the Programs (UG)	Basis of Evaluation	Accreditation Status	Period of validity	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Instrumentation and Control Engineering	Tier II June 2015 Document	Accredited	Academic Years 2021-2022 to 2023-2024 i.e. upto 30-06-2024	Accreditation status granted is valid for the period indicated in Col.5 or till the program has the approval of the competent authority, whichever is earlier
2.	Chemical Engineering		Accredited		

3. It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.

4. The programs have been granted accreditation for 3 years. L D College of Engineering No.120, Circular Road, University Area, Opp Gujarat University, Navrangpura, Ahmedabad - 380015 should submit the Compliance Report at least six months before the expiry of validity of accreditation mentioned above so as to be eligible for consideration by the concerned Committee in NBA for further processing of the accreditation status.

5. The accreditation status awarded to the programs as indicated in the above table does not imply that the accreditation has been granted to L D College of Engineering No.120, Circular Road, University Area, Opp Gujarat University, Navrangpura, Ahmedabad - 380015 as a whole. As such the institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is program accreditation and not institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program(s) accredited, level of program(s) and the period of validity of accreditation, as well as the Academic Year from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.

Contd./...

Tel: +91 11 2436 0620-22, 2436 0654; Telefax: +91 11 4308 4903
Website: http://www.nbaind.org |Email:membersecretary@nbaind.org

NBA ACCREDITATION

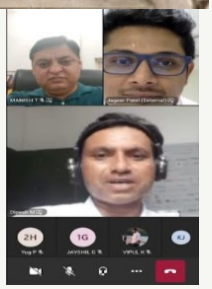
The department students, faculties, Parents, industries associations with department and entire LDCE management, hard work results in receiving accreditation of IC department. The IC department receive accreditation for 3 years up to 30-06-2024. Also, the accreditation would be very beneficial for all the students of the department since it gives recognition to what they have studied for 4 years and serves as a strong proof of the quality of their knowledge.

Glimpse of Lab Visits and faculty Interactions during NBA Visit

FACULTY INTERACTIONS WITH NBA TEAM IN ONLINE MODE

Glimpse of Lab Visits and faculty Interactions during NBA Visit

ORIENTATION FIRST YEAR BATCH 2021



As the corona pandemic was ongoing and considering the Covid-19 guidelines this time the Orientation Program 2021 was arranged online for welcoming the batch of 2021 in the Undergraduate Program of the Department of Instrumentation and Control Engineering. The whole program was arranged on the Microsoft Teams platform. The program started with a warm welcome speech and greeting message for the Fresher's, Followed by the prayer. Then our respected principal, Dr. R.K. Gajjar welcomed the students and shared the history of L.D College of Engineering along with that mam gives a brief idea about the various ongoing activities and achievements of college through a video message. The head of the department Dr. Manish Thakker welcomed the students, addressing them with a motivational speech. Sir advised the students to be dedicated, committed, and focused on academics, along with that sir gave a great message to learn something new each day. Prof. Vinod Patel had given detail about the Training & Placements of LDCE and had also shared some glimpses of placements in the IC department. Dr. Dipesh Makavana had given a brief idea about the sectors in which Instrumentation and Control Engineering is useful and the future possibilities after being IC Engineer. As alumni, Mr. Jagir Patel from Prima Automation welcomed all the fresher and gave an idea about Industrial 4.0 and the possibilities of How IC engineers play an Important role in it.

STUDENT'S ACADEMIC EXCELLENCE

Below is the information of the top three students in their batch in terms of the CGPA obtained. The list is composed semester wise.

8th Semester

Sr. No.	Student Name	CPI
1	Tejwani Rohan	9.42
2	Dey Sarkar Aninda	9.14
3	Patel Mayank	8.97

6th Semester

Sr. No.	Student Name	CPI
1	Yadav Vishal	9.11
2	Joshi Amidhara	8.61
3	Doshi Utsav	8.53

4th Semester

Sr. No.	Student Name	CPI
1	Patnaik Deepankar	9.15
2	Mevada Smit	9.13
3	Jainil Vora	9

2nd Semester

Sr. No.	Student Name	CPI
1	Mishra Vaibhav	9.33
2	Ajudia Raj	9.15
3	Talreja Rinki	9

GTU TOPPER

Congratulations to Mr. Maharsh Thakar
Branch Topper Instrumentation and Control (Applied Instrumentation) - Master of Engineering.

Mr. Maharsh Thakar was awarded with a Gold Medal for achieving Branch topper's place in all over GTU at Convocation of GTU.

STUDENTS'S ACHIEVEMENTS

PATENT GRANTED

A patent was granted to two students from the department. This project was a joint effort of Vishesh Oza & Zarna Raval and guided by our HoD, Dr. Manish Thaker & Prof. Vinod Patel. The project name is "Advanced Data Logger" and is in the domain of Solar energy. It collects data points for energy analysis and also has developed a cleaning mechanism to keep the solar panel clean. The device overall helps to increase the efficiency of the solar panels to increase the production of electricity. ADVANCED DATA LOGGER by SSIP Grantee IC Department students, LDCE has been successfully granted in the Indian patent journal. Their patent application number is 201921051652 which was filed 13 December, 2019. Patent Number- 373537 . The department is thankful to SSIP Eco-System and Principal Madam.

Interesting fact

- The first microprocessor was the Intel 4004, which was introduced in 1971. During the early 1980s very large-scale integration (VLSI) vastly increased the circuit density of microprocessors. In the 2010s a single VLSI circuit holds billions of electronic components on a chip identical in size to the LSI circuit.
- A single integrated circuit chip that could hold nearly all the essential circuits to form a calculator; only the display and the keypad were not incorporated. Surprisingly, this exceptional breakthrough in the field of electronics and communication was rather given a mundane name of TMS1802NC

STUDENTS'S ACHIEVEMENTS

DESIGN PATENT REGIESTERED

ORIGINAL
No. 105379

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE

CERTIFICATE OF REGISTRATION OF DESIGN

Design No. 336956-001
Date 29/12/2020 16:13:52
Reciprocity Date*
Country

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 24-01 in respect of the application of such design by I.V. DISINFECTANT CHAMBER in the name of I. THAKKER MANISH TARACHANDRABHAI, INSTRUMENTATION AND CONTROL DEPARTMENT, L.D. COLLEGE OF ENGINEERING, OPP GUJARAT UNIVERSITY, NAVRANGPURA, AHMEDABAD-380015 2. VASAVADA MIHIR RAMESHBHAI, INSTRUMENTATION AND CONTROL DEPARTMENT, L.D. COLLEGE OF ENGINEERING, OPP GUJARAT UNIVERSITY, NAVRANGPURA, AHMEDABAD-380015 3. DESAI MILAN BALDEVBHAI, INSTRUMENTATION AND CONTROL DEPARTMENT, L.D. COLLEGE OF ENGINEERING, OPP GUJARAT UNIVERSITY, NAVRANGPURA, AHMEDABAD-380015

in pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

Controller General of Patents, Designs and Trade Marks

*The reciprocity date (if any) which has been allowed and the name of the country.
Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years.
This Certificate is not for use in legal proceedings or for obtaining registration abroad

THAKKER MANISH TARACHANDRABHAI, INSTRUMENTATION AND CONTROL DEPARTMENT, L.D. COLLEGE OF ENGINEERING, OPP. GUJARAT UNIVERSITY, NAVRANGPURA, AHMEDABAD-380015

Date of Issue 30/11/2021 14:54:33

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

GOVERNMENT OF INDIA

Controller General of Patents,Designs and Trademarks
Department of Industrial Policy and Promotion
Ministry of Commerce and Industry

Design Application Details

Application Number:	336956-001
Cbr Number:	23800
Cbr Date:	29/12/2020 16:13:52
Applicant Name:	1. THAKKER MANISH TARACHANDRABHAI, 2. VASAVADA MIHIR RAMESHBHAI, 3. DESAI MILAN BALDEVBHAI,

Design Application Status

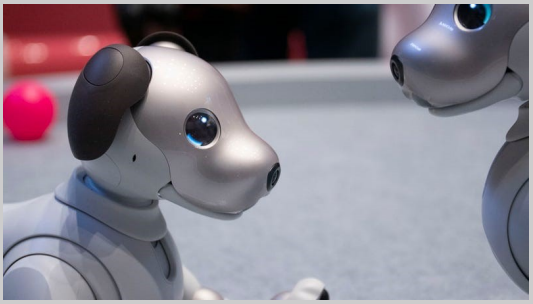
Application Status: Design Accepted and Published, Journal No is 49/2021 and Journal Date is 03/12/2021

Back

Disclaimer: Application status is available for the application filed on or after 1st April 2009 with application no 222230.The information under " Design Application Status" is dynamically retrieved and is under testing, therefore the information retrieved by this system is not valid for any legal proceedings under the Design Act 2000. In case

The patent was filed by a student of Instrumentation department, Milan Desai. It was a design patent. The prototype is named BIOGUARD M20. A device prototype was made. This prototype is fully functional. It is a UV disinfection chamber in which edibles such as vegetables and fruits can be cleaned. Design PATENT is accepted and Published by Patent office India. PoC of this patent is 'BIOGUARD M20' granted under SSIP Cell - L.D.C.E. A notable contribution was also given by our HoD of the department, Dr. Manish Thakkar and Prof. Mihir Vasavada of Electrical Engineering Department.

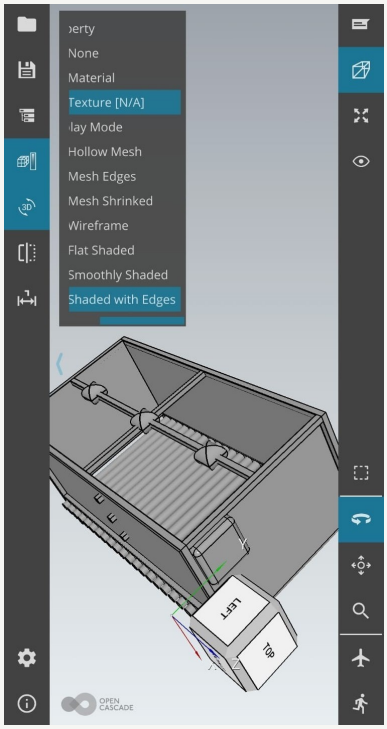
Interesting fact

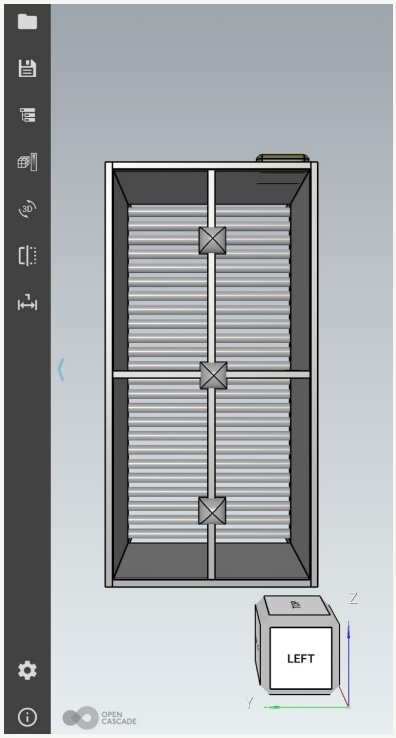


Although real pets are lovable, as per pet-bot developers, they have a few setbacks. Real pets need to be taken care of, such as feeding and cleaning them up. AI pets will be robots that look, feel, and act like a real animal but eliminate such issues faced by owners. It is expected that AI-driven pets will be widely available in the market by 2025. There have been quite a lot of AI pets in the market as well and the market is still growing.. Later, a time will come when people will love these artificial pets more than the real ones.

STUDENTS'S ACHIEVEMENTS

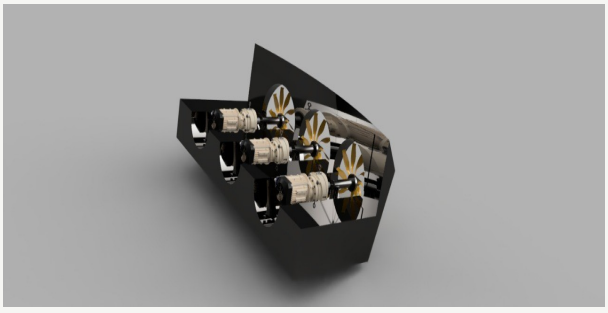
DESIGN PATENT FILED





Herak S Dharsandia, Gaurav Mishra, Kushdip Dadiyala and Sagarikas tudents of 3rd year, participated in a hackathon named as "Eureka 2021" organized by IIT and in a competition named as " Yuva Innovators " The hackathon was themed around creating solutions to problems concerning to natural resources like river cleaning, reducing air pollution, Farming & agriculture etc. The participants have to choose one of the domains for developing the solution. The named them self according the theme as "The Foreseekers" . They have made a prototype under the farming and Agriculture Domain and they were selected in the final round of the event.

PATENT FILED



An inter-department team of students applied for a patent. The patent design proposes to be a source of auxiliary energy in vehicles powered by batteries. The above shown are some of the angles of the designed mechanism. The proposition is such that the fans installed at the front grille will produce torque in the turbine attached to each of the fans. At this stage, we have filed for the full patent with the design patent already granted. The design of the device is made and also the calculations of the energy generated is being simulated and figured out. One of the students of the department, Herak S Dharsandia is part of the team along with Dhruv from Rubber Department and Virat, Nidhi & Rohan from Mechanical department.

PAPER PUBLICATIONS

In this part of the year, four papers were published by the department faculty. Doing Research and publishing papers in reputed journal is an integral part of the innovation. The below highlight some of the published ones —

1. Prof. Vandana V. Patel & Dr. Ankit K. Shah,

Digital multiband filter design with power spectrum analysis for Electrocardiogram signals, 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT),

August-21. pp. 923-927

DOI: 10.1109/RTEICT52294.2021.9573714

2. Prof. Aarti Bokade & Dr. Ankit K. Shah,

"Breast Mass Classification with Deep Transfer Feature Extractor Model and Random Forest Classifier," 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT),

August-2021, pp. 634-641,

DOI: 10.1109/RTEICT52294.2021.9573909.

3. Prof. Manisha Patel & Dr. Nilesh Kalani,

"A Comparative Analysis for Single Person and Multi Person Pose Estimation Using Deep Learning Algorithms, 2021 International Conference on Circuits, Controls and Communications (CCUBE), RNS institute, Bangalore Dated 23-24 December 2021.

DOI: 10.1109/CCUBE53681.2021.9702744

4. Prof. M.T. Thakker & Prof. S. V. Gandhi

"A Decoupler Assisted Optimized Controller Design for Greenhouse System", 2022International Journal of Automation and Control,INDERSCIENCE, 2022.

Available at: http://dx.doi.org/10.1504/ijaac.2022.10041889.

"DON'T FEAR FAILING IN FIRST ATTEMPT BECAUSE EVEN THE SUCCESSFUL MATHS STARTS WITH ZERO ONLY "

- DR. APJ ABDUL KALAM

PROFESSIONAL DEVELOPMENT WORKSHOP ATTENDED BY FACULTIES

As it is a well known fact, to remain relevant in this ever changing world one need to update their existing knowledge and skillsets. And for professors, this is ever more important since they are the ones who will educate the new tomorrow. So, the professors and the teaching staff of the department in order to achieve this objective underwent the relevant trainings and sessions. The information for the same is presented below —

Sr.No	Title	Name of Faculty	Organized by	Duration
1	Robotics and Automation	Prof. Vandana Patel Dr. Ankit K. Shah	GEC, Modasa	20/12/2021 to 24/12/2021

PLACEMENT OF IC ENGG , 2021 BATCH

INSTRUMENTATION & CONTROL ENGG.- PLACEMENT 2021		
Sr. No	**Name of Students**	**Company**
1	JATUS DAVE	AARTI INDUSTRIES
2	NILAY DAVE	AARTI INDUSTRIES
3	RONAK KOTADIYA	AARTI INDUSTRIES
4	DARSHIL MISTRY	AARTI INDUSTRIES
5	VIRAJ PARMAR	AARTI INDUSTRIES
6	RAJKUMAR PATEL	AARTI INDUSTRIES
7	FENIL SAVLIYA	AARTI INDUSTRIES


PLACEMENT OF IC ENGG , 2021 BATCH

INSTRUMENTATION & CONTROL ENGG.- PLACEMENT 2021		
Sr. No	**Name of Students**	**Company**
8	BHAVIK VASOYA	AARTI INDUSTRIES
9	BANSIKUMAR VISAVELIYA	AARTI INDUSTRIES
10	MEET CHAUDHARY	AARTI INDUSTRIES
11	KIRTAN BHATT	AARTI INDUSTRIES
12	VISHAL YADAV	AARTI INDUSTRIES
13	TAPAN CHAVDA	ATUL LTD.
14	RUCHIT SINGLA	ATUL LTD.
15	VISHAL CONTRACTOR	CAIRN OIL & GAS
16	AMIDHARA JOSHI	CAIRN OIL & GAS
17	APURV TALA	DEEPAK FERTILIZER
18	DEEP VYAS	DEEPAK FERTILIZER
19	KASHYAP BHATT	E-INFOCHIPS
20	MAYUR JOSHI	E-INFOCHIPS
21	DOSHI UTSAV	L&T
22	PRASUN CHAKROBORTY	L&T
23	RUCHIT SINGALA	L&T
24	MIRAL MISTRY	L&T
25	PARTH DAVE	L&T
26	NAVNEETKUMAR DUBEY	L&T
27	HIMANSHU JOSHI	L&T
28	KHYATI BHATT	RELIANCE INDUSTRIES
29	JEMMY GADARA	RELIANCE INDUSTRIES
30	DIVYESH GHODADARA	RELIANCE INDUSTRIES
31	HARSH GHODADARA	RELIANCE INDUSTRIES
32	YASHKUMAR HINSU	RELIANCE INDUSTRIES

PLACEMENT OF IC ENGG , 2021 BATCH

INSTRUMENTATION & CONTROL ENGG.- PLACEMENT 2021		
Sr. No	**Name of Students**	**Company**
33	JAYDEEPKUMAR KAVAR	RELIANCE INDUSTRIES
34	MIRAL MISTRY	RELIANCE INDUSTRIES
35	ANIKET PRAJAPATI	RELIANCE INDUSTRIES
36	HARSH SANGANI	RELIANCE INDUSTRIES
37	HARSH TAMBE	RELIANCE INDUSTRIES
38	HARDIKKUMAR VAMJA	RELIANCE INDUSTRIES
39	PARTHKUMAR AHIR	TCS
40	HIMANSHU JOSHI	TCS
41	RONAK KOTADIYA	TCS
42	MIRAL MISTRY	TCS
43	BHAVIKKUMAR RONVELIA	TCS
44	PRASUN CHAKRABORTY	TCS
45	AMIDHARA JOSHI	TCS
46	VISHAL YADAV	TCS
47	JATUSH DAVE	TCS
48	APURVAKUMAR TALA	TCS
49	NEEL THAKKAR	TCS
50	AVINASH KHALASI	WELSPUN
51	TEJASH MAHIDA	LINDE
52	DEEP VYAS	DEEPAK FERTILIZERS

AARTI INDUSTRIES LIMITED

atul

CAIRN

DEEPAK FERTILISERS AND PETROCHEMICALS CORPORATION LIMITED

eInfochips An Arrow Company

L&T

Reliance Industries Limited

TATA

FINAL YEAR INTERNSHIP OF IC ENGG , 2021-22 BATCH

INSTRUMENTATION & CONTROL ENGG.– INTERNSHIP 2021-22		
Sr. No.	**Student Name**	**Industry name**
1	JOSHI MAYURKUMAR ASHOKBHAI	EINFOCHIPS - AN ARROW COMPANY
2	BHATT KASHYAP JAYANTBHAI	
3	CHAVDA TAPAN	DIVYA BHASKAR (DB CORP PVT LTD)
4	DUBEY NAVNEET	
5	PATEL TEJ	
6	YADAV VISHAL	MASIBUS AUTOMATION AND INSTRUMENTATION PVT. LTD
7	PANCHAL DARSHAN	
8	MAHIDA TEJASH	AAVAD INSTRUMENT
9	TAMBE HARSH	
10	GHODADARA HARSH	
11	MISTRY MIRAL J.	
12	DOSHI UTSAV VIJAYBHAI	AMUL INDUSTRIES PVT. LTD.
13	MAKWANA ROHIT	AMEE POWER
14	LAKUM HITESH	
15	RATHOD RAJVIRSINH	
16	VASOYA BHAVIK	SHAKTIKRUPA AUTOMATION
17	NEEL THAKKAR	
18	DARSHIL MISTRY	
19	MOKHIYA YASH	
20	ANIKET PRAJAPATI	SEMITRONIK
21	NILAY DAVE	
22	SHIVAM SADADIYA	
23	KULDIP CHAUHAN	

FINAL YEAR INTERNSHIP OF IC ENGG , 2021-22 BATCH

INSTRUMENTATION & CONTROL ENGG.– INTERNSHIP 2021-22		
Sr. No.	**Student Name**	**Industry name**
24	HIMANSHU JOSHI	NIPPON ELECTRIC
25	MEET CHAUDHARY	
26	KHYATI BHATT	
27	SAVLIYA FENIL	SUNROBOTICS TECHNOLOGIES
28	PATEL RAJ	
29	TALA APURV	
30	SHINGALA RUCHIT	
31	SANGANI HARSH	MASCOT ELECTROTEK
32	POKIYA NILKANTH	
33	VYAS DEEP	
34	DHRUV PATEL	PRIMA AUTOMATION
35	DARSHAN PATEL	
36	UTSAV PANCHAL	SEMITRONIK
37	KEYUR PATEL	
38	PANKAJ SOLANKI	
39	UJJAVAL PRAJAPATI	
40	KHALASI AVINASH	NIS / PEB INFRA
41	PRASUN CHAKRABORTY	
42	VAMJA HARDIK	
43	AHIR PARTH J.	
44	PRAJAPATI ARCHITA S.	AUTOMATION ENGINEERS
45	KORAT BIRJESHKUMAR HARASHUKHBHAI	AXIS SOLUTIONS
46	KOTADIYA RONAK BHARATBHAI	
47	THAKAR RUTVIJ ANANDBHAI	
48	KAVAR JAYDEEPKUMAR DINESHBHAI	AXIS SOLUTIONS
49	HINSU YASHKUMAR PRABHUBHAI	
50	GADARA JEMMY SHANTILAL	

FINAL YEAR INTERNSHIP OF IC ENGG , 2021-22 BATCH

INSTRUMENTATION & CONTROL ENGG.– INTERNSHIP 2021-22		
Sr. No.	**Student Name**	**Industry name**
51	BHAVIK GIRISHBHAI RONVELIA	ISRO
52	GHODADARA DIVYESH MADHUBHAI	AMEE POWER
53	CHAVDA PRATIK JAYESHBHAI	
54	JAYESH BABUBHAI KHER	
55	PATEL MANISHA NATVARBHAI	
56	VIRAJ THAKORBHAI PARMAR	O.N.G.C.
57	PRAJAPATI SAHIL D.	HARIKRUPA AUTOMATION
58	BHATT KIRTAN	SARJAN INDUSTRIES
59	DAVE JATUSH	
60	DAVE PARTH HITESH KUMAR	
61	PINAKPANI SAHA	
62	DESAI MILAN B.	CONSTRUCTION AUTOMATION
63	PANCHAL DHRUV A.	HEALTHCARE
64	BANSIKUMAR VISAVALIYA	AMBUJA INTERMEDIATES PVT. LTD. CHHATRAL-GUJARAT
65	MODI DHRUVKUNAR NARENDRAKUMAR	ZERA INDIA PVT LTD
66	JOSHI AMIDHARA HARSHESH	SUMUL DAIRY
67	RONITBHAI NARSINHBHAI RATHWA	HP AUTOMATION
68	KANZARIYA JAYESH RAMBHAI	
69	MAYUR.K.TANDEL	AMTECH ELECTRONICS(INDIA). LTD
70	GAMIT DHANRAJSINH N	AMUL FED DAIRY

M.E. DISSERTATION

The graduate school of the department also has a very good repute . It has achieved its name by the professors of the department and who have done an excellent job in guiding and producing great research scholars. Below is the list of the students pursuing their masters in the instrumentation & allied domain along with the information of work they are doing towards their degree.

STUDENT NAME: Kher Hardik Rajubhai(200280703002)

DISSERTATION TITLE: Classification of skin disease using image processing

GUIDED BY: Assi.Prof. V.V.Patel

ABSTRACT: Skin disease can be directly diagnosed by visual inspection of dermatologist. Due to advancement of computing device and image processing field, it is possible to run complex computing algorithm and model in lesser time, so it is possible to design model base on image possessing and deep learning. Project is based on deep learning method; deep learning network is trained numbers of time for better accuracy and after validation it is implemented on embedded system. This project can classify common skin disease and this disease can be treated easily with few cares. It can use to assistant medical personal and also in remote area where medical service is not available.

STUDENT NAME: Shubham Kiritbhai Makwana (200280703003)

DISSERTATION TITLE: Early Detection of Brain tumor Using Deep Learning CNN

GUIDED BY: Prof. V.P.Patel

ABSTRACT: According to the last Report of International Association of Cancer Registries (IARC) which is a Global cancer observatory of world health organization (WHO) has reported 28,000 cases in India each year and more than 24,000 people reportedly die due to brain tumors annually. Brain tumor is an expansion of uncommon tissues inside a brain. Mainly brain tumor is classified in two categories that is Benign and Malignant. Our Aim to detect or predict the tumor as early as possible so that it cannot be harmful for patient. In current scenario, Different Machine learning is used for object detection. Here We use Deep Learning CNN Model for early prediction and detection. In that, specifically we will use two most suitable and one of the best architectures which are AlexNet, ResNet and also, we compare them with our manual model in terms of complexity, time and accuracy.

"RESEARCH IS SEEING WHAT EVERYBODY ELSE HAS SEEN AND THINKING WHAT NOBODY ELSE HAS THOUGHT."

- ALBERT SZENT-GYÖRGYI

M.E. DISSERTATION

STUDENT NAME: Rana Viraj Yogeshkumar (200280703006)

DISSERTATION TITLE: IOT Based Driver Alertness System

GUIDED BY: Prof. (Dr.) Tejas Shah

ABSTRACT: Drowsiness is a natural phenomenon in the human body that happens due to different factors. Main cause of road accidents during night is the drowsiness of vehicle's drivers. These common phenomena observed across the Globe has created the social as well as commercial impact in human activity. For non-interruptive and healthy routine of human being, it was quite necessary to avoid drowsy state of the driver. This noble aim has compelled the researchers to deal with the said situation in the way of development of alert system. The different routine remedies and devices have contributed to resolve this issue up to some extent. The research scope is still knocking at the issue. In the same path of resolution to the issue, the Eye Blink Monitoring System (EBM) has been proposed. In the proposed system, the webcam is connected on one gate way of Raspberry pi. This webcam monitors the driver continuously. The eye of the driver is observed and instant alert has been generated in the case of eye closure for more than one seconds. The driver is also equipped with wearable device which provides body temperature, heart beats and other parameters of the person. These parameters and webcam output are sent to base station with versatile GPS for tracking purpose.

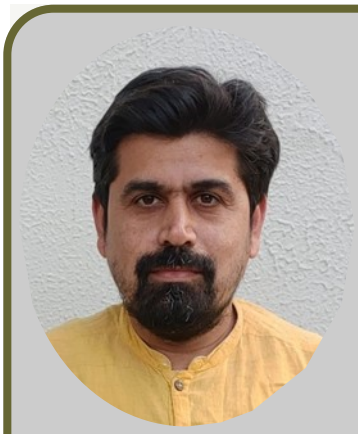
STUDENT NAME: kansara Harshil Rushangbhai (200280703011)

DISSERTATION TITLE: Design of python-based software for industrial manipulator

GUIDED BY: Prof. (Dr.) Dipesh Makwana

ABSTRACT: Manipulator robots are most widely used robots in most of the industries now a days. To control this manipulator, we need a software that can interface to the hardware and communicate with it without any error. Python is being widely used to create scripts which cover different necessities in computational scenario. Graphical User Interface (GUI) is mostly used to develop user interface for software. In python, there are number of ways to develop GUI and tkinter is one of the powerful ways to develop GUI. As robotics continue to become a more integral part of the industrial complex, there is a need for automated systems that require minimal to no user training to operate. The GUI allows users to determine their desired object, which will be picked up and placed by a robotic arm into the target location. The GUI allows users to filter objects based on colour, shape, and size. The filtering along the three parameters is done by employing a Hue-Saturation-Value (HSV) mode colour detection algorithm, shape detection algorithm, size determining algorithm. Once the target object is identified, a centroid detection algorithm is employed to find the object's Centre coordinates. An inverse kinematic algorithm is used to ascertain the robotic arm's joint positions for picking the object. The joint coordinates are forwarded to a microcontroller that sets the arm's joint angle at each position.

M.E. DISSERTATION



STUDENT NAME: Pratikkumar Jagdishbhai Panchal (200280703010)

DISSERTATION TITLE: Design and Development of FFF (Fused Filament Fabrication) Type 3D Printer and its Education Application.

GUIDED BY: Prof.(Dr.) Manish Thakkar

ABSTRACT: FFF (fused filament fabrication) type 3d printer technology is layer by layer material filling technology. 3D printer machine design by major popular 3D design software SOLIDWORKS. ITS structure developed by low wait and high rigidity Aluminum extrusion profile. This type profile free from drilling work, Aluminum extrusion profile reduced time of drilling, machining and laser cutting Engineering process. One prototype model of cartesian and FFF type 3D printer was designed, considering industrial /educational requirement some modification in corporate in new design. The propose work focus on developing modified version of Non-co-centric and non-parallel with perpendicular & FFF 3D printer manufacturing. 3D printer software is open-source platform available for 3D printer. Octa print OS and Mainsail OS available in free from their website, Marlin firmware and klipper firmware is available Open-source for 3D printer controlling. Different type of industries can use of 3D printer for different types of creativity work. Mostly 3D printer used for Education purpose because all types prototype, we can make by FFF type 3D printer. Different type supporting part is designed by SOLIDWORKS and manufacturing in VMC machine.

STUDENT NAME: Kansara Harshit Rushangbhai (200280703012)

DISSERTATION TITLE: Design and Development Of Selective Compliance Articulated Robot Arm For Industrial Applications.

GUIDED BY: Prof. (Dr.) Ankit Shah

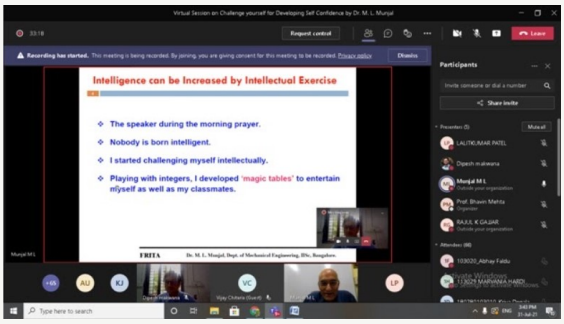
ABSTRACT: Selective Compliance Articulated Robot Arm (SCARA) are among the most significantly used robots in industry due to their inherent rigidity and high accuracy. The design process includes joint design, link design, controller board design as well as selection of mechanical and electrical components. The challenge will be to find out kinematics solution of SCARA manipulator with an eye on keeping cost down. The SCARA robot offers impressive performance in various industrial applications such as material handling and product inspection.

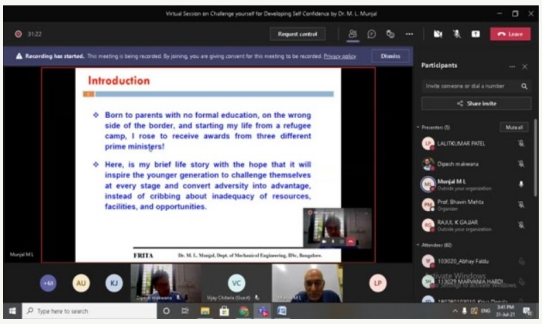
"THE ONE WHO PUTS THE FINISHING TOUCHES ON THEIR LIFE EACH DAY IS NEVER SHORT OF TIME. "

-MARKUS AURILIUS

AZADI KA AMRIT MAHOTSAV

TOWARDS CREATIVE THINKING

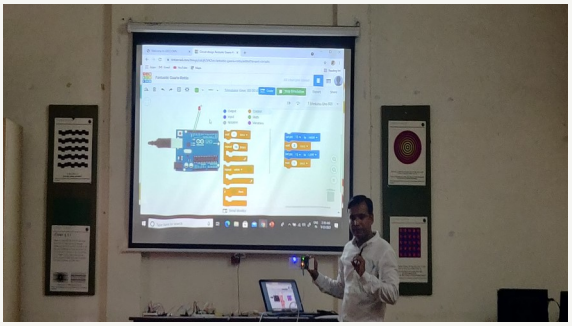




These lectures are based on Dr. Manohar Munjal's life. Born to parents with no formal education, on the wrong side of the border, and starting his life from a refugee camp, He managed to join the Indian Institute of Science, and eventually rose to receive top awards from three Prime Ministers. apart from other recognitions. These lectures are prepared with the hope that they will inspire younger faculty as well as students to challenge themselves at every stage to convert adversity into advantage and develop self-confidence and creative thinking. This, in turn, will improve their career prospects and hopefully, help them in Nation building.

AZADI KA AMRIT MAHOTSAV

HANDS ON ARDUINO : WORKSHOP



The IC department students, faculties of EC department organized handson Arduino workshop at sheth C.N. Vidhyalaya in association with Aarambh E-cell on 23rd September, 2021.

The event started with the introduction of the Arduino board and its working. Then, the basics of interfacing with the Arduino and the simple projects that could be implemented with it were explained. The students all in all enjoyed a lot and it was a fun for them. All the concepts were broken down to their level and that is what helped the students learn more effectively. At the end, Savan sir demonstrated the drone flying awestriking all the students. The event proved to be really helpful for the students which are left out and don't have much of opportunities to learn. All the concepts were very well explained and encouraged them to tinker more with the electronics.

WEBINARS BY ISA– LDCE

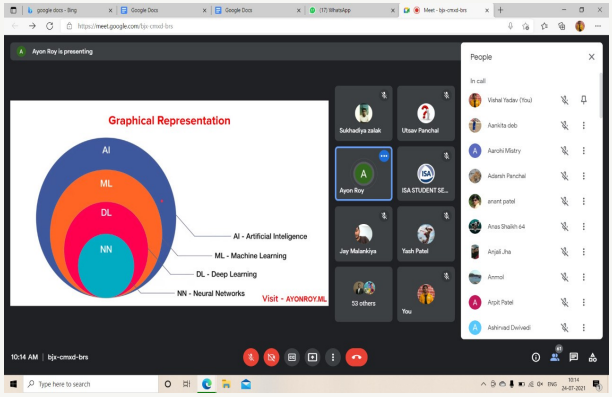
GETTING STARTED WITH MACHINE LEARNING

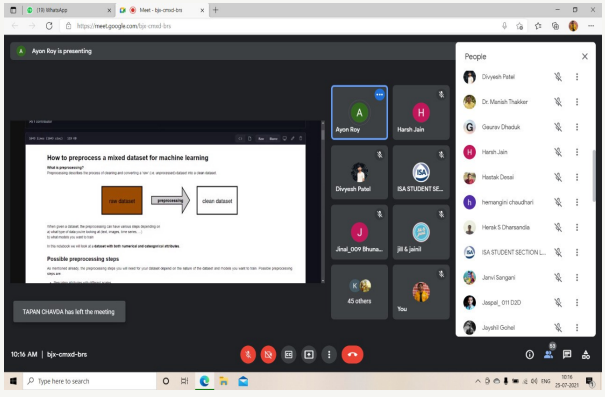
We at ISA, LDCE believe the same and are towards a common goal of imparting quality insights in the field of control, instrumentation and automation as a whole. From time and again, we have been the poll-bearers of the field and will continue to do so. To start the academic year of ISA, we conducted an event that actually symbolized the new beginnings.

The event was on "Getting started with Machine Learning". The machine learning, artificial intelligence has been quite a buzz recently. So, we took this opportunity to demystify this and present the topic for what it really was, especially to the sophomores of the college. It was a very informative session.

The event was taken by Ayon Roy. He is an undergrad student which makes him a perfect person to introduce the subject since he too can relate to the experiences and the cries of the student. However, he has achieved a great feat even at this age with mentoring, judging and conducting 150+ data science related events and is really a data geek. Also, he has established the biggest Kaggle community in India.

The event was organized on the MS-Teams Platform. We had 100+ registrations from the event from various departments of the college. The participants also poured in from other colleges. The session was aimed mainly at all the students who still are not well introduced to the subject. The session would be very beneficial to them.



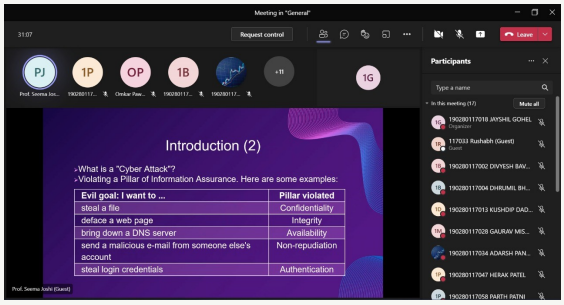


"DON'T TAKE REST AFTER YOUR FIRST VICTORY BECAUSE IF YOU FAIL IN SECOND, MORE LIPS ARE WAITING TO SAY THAT YOUR FIRST VICTORY WAS JUST LUCK."

- APJ ABDUL KALAM.

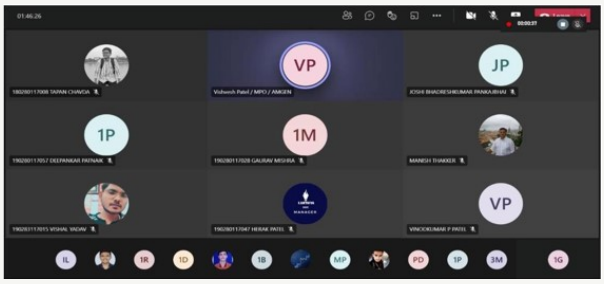
WEBINARS BY ISA– LDCE

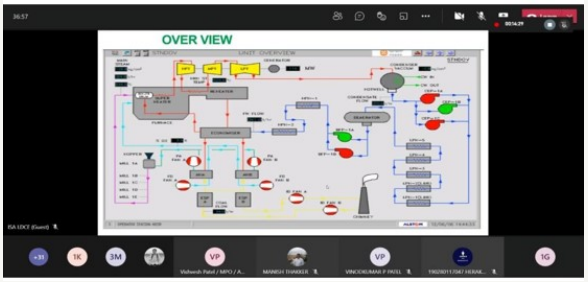
INTRODUCTION TO CYBERSECURITY



A webinar series was conducted by the ISA student chapter to introduce the students the world of cyber security, It was taken by Prof. Seema Joshi, an expert from GTU. It gave a big picture view of the field and gave a chance to students to work on projects as well. On first day, basics of cyber security were covered. On the second day, all the open source tools used in the domain were covered. The event was the best who wanted to peep into what was there in the world of cyber security and the topic covered were quite wisely chosen and covered.

THERMAX EXPERT TALK





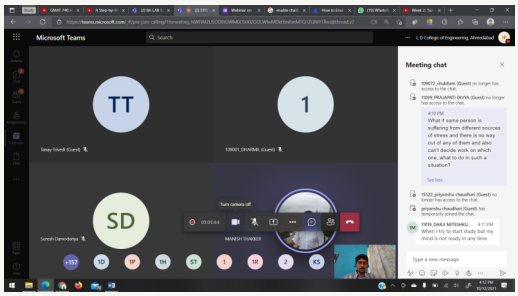
The event was a part of our Alumni talk series wherein we call the pass outs of our college and predominantly of our Instrumentation and Control Department. The establishment of the series is a very thoughtful gesture because it aims to give the students a next-to-real experience which they can most relate to, because the Speakers are none other than seniors This event conducted by ISA, LDCE was taken by our Senior of 2019 batch, Mr. Vishvesh Patel. He has an experience of 2 years working in the Torrent Thermal Power Plant. He gave an overview of the work done by him as the thermal power plant engineer and also the skills required to get a job and make a career in that domain.

"AS LONG AS I LIVE, SO LONG DO I LEARN "

- SHRI RAMKRISHNA

WEBINARS BY ISA– LDCE

WEBINAR ON STRESS MANAGEMENT TECHNIQUES

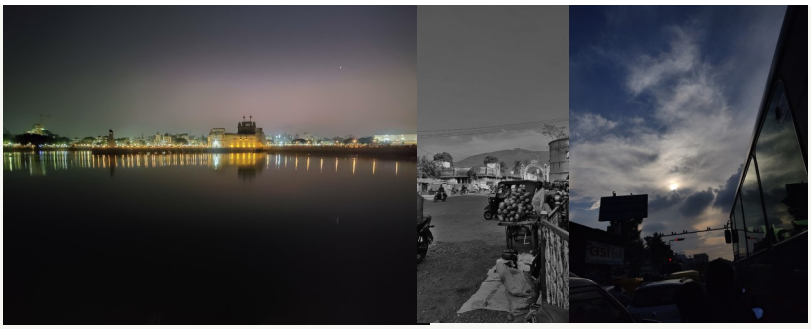


With the increasing pace in our lives, the time that we have for ourselves and self-introspection has been decreasing at an alarming pace. This has caused a lot of problems in our daily lives especially the increased levels of stress. Managing stress and keeping calm is of utmost importance for a startup to succeed. So, the Aarambh E-Cell of L.D.C.E and ISA LDCE took this initiative to solve concerns with stress-related issues and give its participants an overview of the topic, so that they can perform better mentally. Additionally, the world is becoming highly competitive especially for the students and young workers which has taken a huge toll on our thinking and the amount of stress that we accumulate within us. This topic is not only beneficial for the startups but goes a great way to help the college going students.

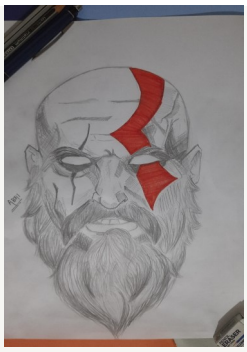
"AS LONG AS I LIVE, SO LONG DO I LEARN "

- SHRI RAMKRISHNA

CREATIVITY BY STUDENTS

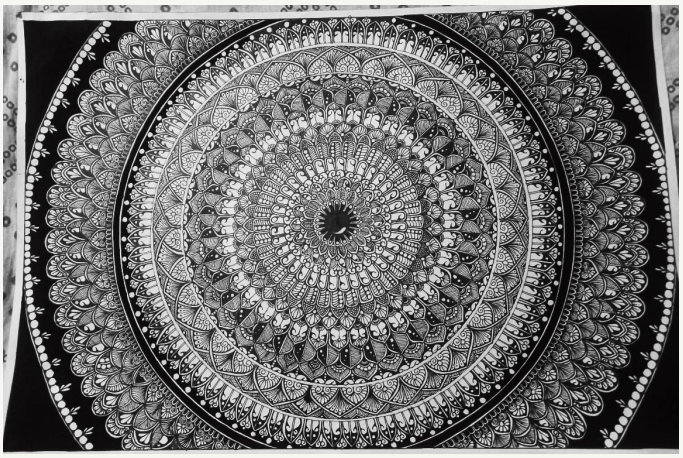


Nature capured by — Devam Bhatt



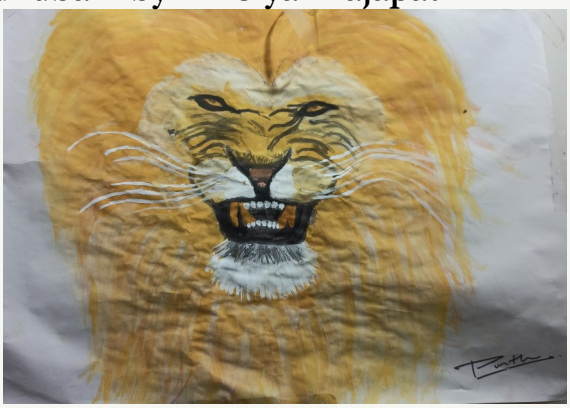
Rage by — Abhinav

Scenery by — Yug Patel



Madhubani by — Siya Prajapati

Creative reality by — Samir Singh



Courage by — Parth Bhatt

"ART IS T NOT WHAT YOU SEE, BUT WHAT YOU MAKE OTHER SEE."

- EDGAR DEGAS

CREATIVITY BY STUDENTS

Butterflies by - Srujal Kanthariya

Sunsetsry by — Arpit Pstel

Colorful Patriotism by — Siya Prajapati

Fragrance by — Akhshar Patodiya

Floral Mountains by — Poojan Bhavsar

"ART IS T NOT WHAT YOU SEE, BUT WHAT YOU MAKE OTHER SEE."

- EDGAR DEGAS

ALUMNI PROFILE

Purvi Sanghvi

(Alumni of Department of IC Engineering LDCE)

Ms Purvi Sanghvi is an alumni of LDCE batch of 1996 with B.E. in Instrumentation and control engineering. She started her career as an instrumentation engineer with Shaival Reality. She worked there for 2 years post which she worked as a lecturer at Sarvajanik College of Engineering and Technology. After a year working as a lecturer, she joined IBM global services and worked there for 14 years handling projects for Siemens, Airtel, Gujarat government among other big ones. Then, in 2015 she worked other arm of IBM working on other IT projects for the company. After working 4 years there, in 2019 she started with the venture named Axis solutions Pvt. Ltd. She is the pioneer in the domain of automation. Also, she has involved herself in a variety of innovations in the automation domain and has been a big contributor to the industry.

DEPARTMENTAL FACULTIES:

Dr. Manish Thakker, Professor and Head IC Dept.

ASSOCIATE PROFESSOR—
Prof. (Dr.) T. V. Shah, Prof. V. P. Patel, Prof. (Dr.) D. H. Makwana

ASSISTANT PROFESSOR—
Prof. M. C. Patel, Prof. V. V. Patel, Prof. (Dr.) A. K. Shah, Prof. H. K. Shastri, Prof. L. S. Patel, Prof. D. V. Raninga, Prof. C. V. Shah, Prof. K. R. Joshi, Prof. U.G. Suhagia, Prof. N.A. Kanani,

LAB ASSIATANT—
Mr. V. A. Patel, Miss M. A. Prajapati

EDITORIAL TEAM:

- Prof. (Dr.) Manish T. Thakker
- Prof. Manisha C. Patel
- Prof. Nidhi A. Kanani
- Mr. Tapan R. Chavda

DESIGN TEAM:

- Mr. Tapan R. Chavda
- Mr. Herak S. Dharsandia
- Mr. Gaurav A. Mishra