

Sarvajanik College of Engineering and Technology, Surat
Electronics and Communication Engineering Department
Re-accredited by National Board of Accreditation, New-Delhi
for
3 years, w.e.f. July 2019



A
Report
on
State Level Project Competition
on
“Digital Electronics”

Date: 29th November 2021

Venue: EC Dept. Laboratories, SCET

Faculty Coordinators: Asst. Prof. Chhaya Suratwala
Asst. Prof. Chintan Panchal
Head of Department: Prof. (Dr.) Nehal Shah

Electronics & Communication Engineering Department, SCET-Surat in association with IETE Surat Sub center along with ESRO- Embedded System and Robotics Club, SCET had organized a one day State level project competition on “Digital Electronics ” on 29th November 2021. IETE Surat Sub Centre has been the sponsoring entity for the prize money to be given to winners. The competition was arranged for the students of 1st ,2nd and 3rd year of any branch across any engineering colleges of the state of Gujarat. There was no registration fee to participate. The event was arranged in offline mode. The objective of technical competitions is to introduce students to real-world engineering situations, to enhance project-management and Design techniques used in industries. Students are encouraged to work on hardware using Combinational/Sequential/CPLD/FPGA. They are allowed to present project in group of two or at max four.

Total 24 groups have registered and 22 groups participated in the event. Many groups registered themselves as spot entry. A group consists of (4-2) students that make total individual students to around 72 participated in the competition. Various projects like AGVM (Automated Guided Vehicle Machine), smart parking management, universal shift register using FPGA, Automatic door lock system, Article Enumeration System, Water Level Indicator , Object Counter, Digital 12hrs clock, Automatic Night light, Electronics dice ,traffic light control were demonstrated by students. The hard work and dedication of the students were reflected in results of the projects they have made. All the projects were evaluated by eminent juries from industry named Mr. Bhaumik Vaidya owner Project, Technoink, Surat having vast experience in the machine learning and computer vision ,digital electronics, Hardware FPGA,CPLD, ML and AI systems. Few EC Dept staff SCET were also present as internal Jury .

List of Winners:

Winners Name	Project Title	Rank
Sarthak Bosamiya, Jhanvi Bhalodia, Jeel Ramani, Harshita Agrawal	Parking Management System	1 st
Deepak Shamsheer, Niket Singla, Aleemuddin Mombasawala, Rahul Agarwal	Traffic light control system using CPLD	2 nd
Neel Khanpara, Ansh Dobariya, Shivang Vyas, Aarya Lokhandwala	AGVM- Automated Guided Vehicle Machine	3 rd
Rishi Joshi, Dhaval Sorathiya, Priyam Kakadiya, Janvi Nariya,	Digital 12 Hour Clock	Consolation

Project “Parking Management System” is demonstrating weather parking at -2,-1 0 is full or have some lot for allotment . That information is displayed outside parking place. Boom barrier on place get operated on the basis of lot for parking .This is demonstrated with the help of servo motor, motion sensor and Flip flops and basic gates. Three groups were announced as winner on 1st, 2nd and 3rd position collectively by both the juries. one consolation winners were also announced. All participants were given e-certificate of participation and winners were awarded with certificate and prizes as which were sponsored by the IETE SCET SB

The day was ended well by taking participants feedback whereby students shared their experience of participation in the competition and were really very happy to gain knowledge in this domain. Participants also insisted to organize such kind of competitions in future also. Overall it was fruitful experience for all participants and coordinators.

Jury 1:

Mr. Bhaumik Vaidya, Senior Software Developer (AI/ML), Mobile Programming LLC. He is an experienced Machine Learning engineer and mentor with over eight years of experience. He has worked extensively on deep learning algorithms for solving computer vision problems. He is a University gold medalist in masters and is now doing a PhD in the acceleration of computer vision algorithms built using OpenCV and deep learning libraries on GPUs. He has mentored many projects in computer vision and VLSI(Very-large-scale integration). He is also working with a startup in development of efficient and scalable solutions using Artificial Intelligence. He has worked in the VLSI domain previously as an ASIC verification engineer, so he has very good knowledge of hardware architectures also. He has published one book titled "Hands on GPU accelerated computer vision using OpenCV and CUDA." He has more than dozen publications in high quality journals and conferences in the field of computer vision and machine learning. He, along with his PhD mentor, has also received an NVIDIA Jetson TX1 embedded development platform as a research grant from NVIDIA.

Participation status college and branch wise:

Year wise

1st	8
2 nd	64
Total	72

Branch wise

EC	57
CO	15
Total	72

College wise

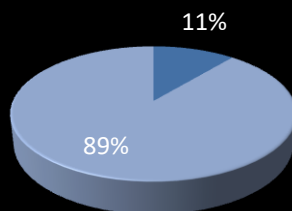
SCET	69
NON SCET	3
Total	72

Group wise

Group of 2	2
Group of 3	4
Group of 4	14
Total	72

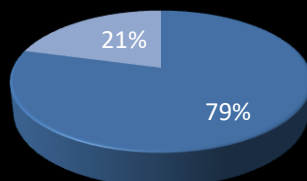
Year wise participation

1st year 2nd year



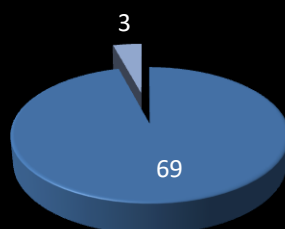
Branch wise participation

EC CO



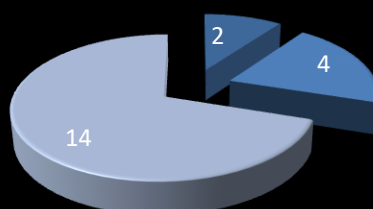
College wise participation

SCET NONSCET

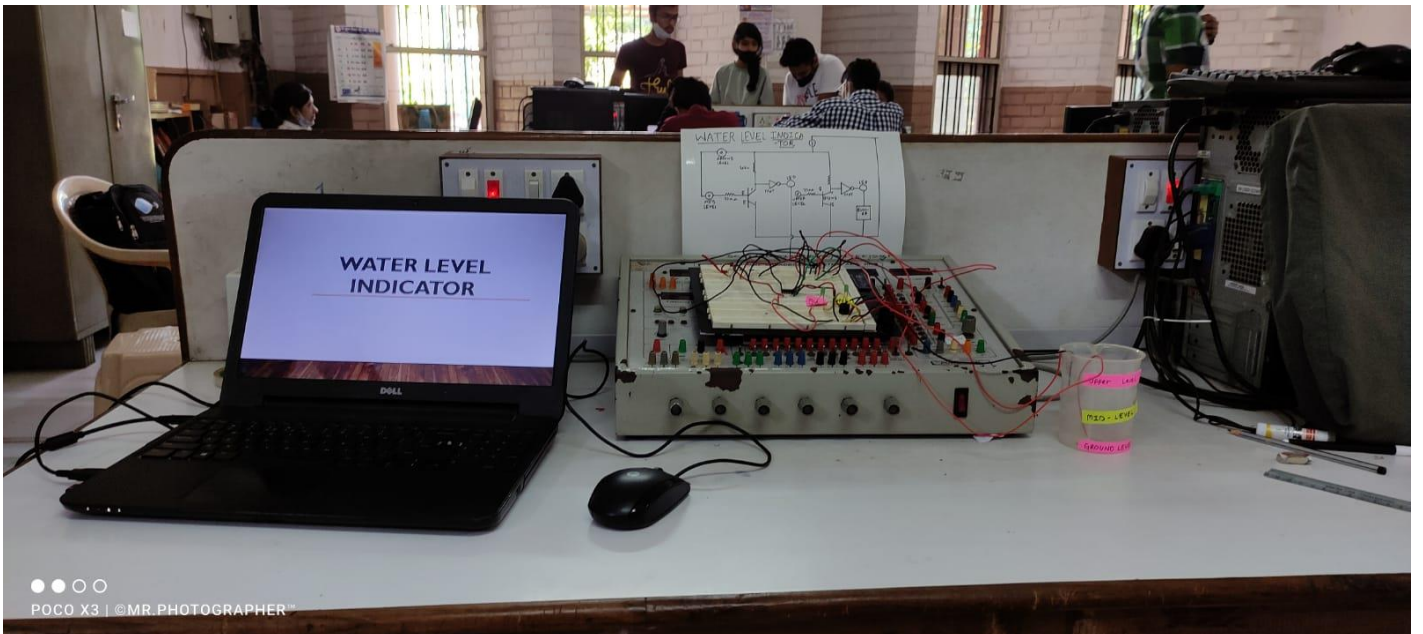


Group Wise Participation

Group of 2
Group of 3
Group of 4



Few Glimpse of the Competition:







State level Project Competition On Digital Electronics

Rules

- Participation in group.
- Group of 2 - 4 students.
- Project components must be managed by students.
- Laboratory resources like power supply bread board, DSO, etc will be provided.
- Strictly based on hardware using Combinational/Sequential.
- CPLD/FPGA board can be used.
- Open for 1st ,2nd and 3rd Year students from all branches.

Organized
by

Electronics and Communication
Engineering Dept,
Sarvajani College of Engineering and
Technology,(SCET)

Date: 29th November 2021

Time: 9 Am to 1 Pm

Venue: Laboratory ,EC
Dept.,SCET

Registration Link

<https://tinyurl.com/m4du2e8>

Registration QR



Prizes

1st : 2000 Rs

2nd : 1500 Rs

3rd : 1000 Rs

(Coordinators)

Prof. Chhaya Suratwala (9727790930)

Prof. Chintan Panchal (9909152281)

(Committee members)

Prof. Neeta Chapatwala (9712993433)

Prof. Dhiren Bhagat (9898299266)

Attendance:

State Level Project competition on "Digital Electronics"								
Date: 29 Nov 2021								
Team No.	Email Address	Team Leader Name	Member	Team Leader Contact	Project Title	College Name	Branch	Year
1	hituseptember@gmail.com	Hiteshree V Varsale	2	9726686055	Nirbhaya	SCET	Other	1st
2	sarthakbosamiya32@gmail.com	Sarthak Bosamiya	4	9904373086	Smart Parking	SCET	EC	1st
		Jhanvi Bhalodia						
		Jeel Ramani						
		Harshita Agrawal						
3	neelkhanpara.ec21@scet.ac.in	Neel Khanpara	4	9824756249	Line follower robot without microcontroller	SCET	EC	1st
		Ansh Dobariya						
		Shivangi Vyas						
		Aarya Lokhandwala						
4	pritamdavda.co20d1@scet.ac.in	Pritam Davda	2	7359487834	Digital Technology	SCET	CO	2nd
		Hetvi Jariwala						
5	ruchitsheta.ec20@scet.ac.in	ruchitsheta.ec20@scet.ac.in	4	6355689903	Traffic light	SCET	EC	2nd
		Hema Sen						
		Maitri Desai						
		Kenil Faldu						
6	roshansah.co20d1@scet.ac.in	Roshan Sah	4	7228845169	Automatic Night light	SCET	CO	2nd
		Nehul Vasava						
		Aniket Patel						
		Y A B Utkarsh Sorathia						
7	parthkunjadiya.co20d1@scet.ac.in	Kunjadiya Parth vallabhbbhai	4	9510554054	Encryption and Decryption with error detection	SCET	CO	2nd
		Vaghani rushal vrajlal						
		Golakiya Akshay Sanjaybhai						
		Baldaniya Jignesh Rameshbhai						
8	ibrahim.ghasia@gmail.com	Ibrahim Ghasia	4	8866685052	LED Race (A B)	SCET	CO	2nd
		Rishil Shah						
		Siddh Mandirwala						
		Dharmil Shah						
9	meetkathiriya.ec20@scet.ac.in	Meet kathiriya	4	8758599684	Clod drinks vending machine	SCET	EC	2nd
		Gautam waitani						
		Shweta patel						
		Viraj kansara						

Sgn
 Sarthak
 Harshita
 Neel
 Pritam
 Ruchit
 Roshan
 Parth
 Ibrahim
 Meet
 Gautam
 Shweta
 Viraj

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Date: 29 Nov 2021

Team No.	Email Address	Team Leader Name	Member	Team Leader Contact	Project Title	College Name	Branch	Year
10	niketsingla.ec20@scet.ac.in	Deepak Shamsheer	4	6359592927	Traffic light control system	SCET	EC	2nd
		Niket Singla						
		Aleemuddin						
		Mombasawala						
11	nimeshkumarsarvaiya.ec20@scet.ac.in	Ayushi bhatiya	4	7575835552	Design and implement a 8-bit universal shift register and show results on an FPGA.	SCET	EC	2nd
		Sarvaiya Nimeshkumar Sureshbhai						
		Nit talavia						
		Hitaxi lethwala						
12	Priyanshigelani.ec20@scet.ac.in	Priyanshi gelani	4	9313245258	No 16 Automatic door lock system. Use a password of 4 digits of the password is matched then the door lock will be open. Which cab be shown using LED.	SCET	EC	2nd
	AB janvishah.ec20@scet.ac.in	Jawani shah						
	kandarpdarji.ec20@scet.ac.in	kandarp darji						
	hetasvibhimani.ec20@scet.ac.in	Hetasvi bhimani						
13	sanskrutipatil.ec20@scet.ac.in	SANSKRUTI PATIL	4	9104120112	Design and implement a Tea+coffee vending machine using verilog program.	SCET	EC	2nd
		Sarangi kothadiya						
		Mohil Jain						
		Soshmita paul						
14	aaryashah.ec20@scet.ac.in	Aarya Shah	4	9979941905	Temperature sensing and displaying using lm35	SCET	EC	2nd
		Harsh Bhadani						
		Ishaq Malam						
		AB Marmik Joshi						
15	hawarmusu1509@gmail.com	Muskan Jhavar	4	7202095213	Smart door system	SCET	EC	3rd
		Abanob Bhanu						
		Saqlain Shaikh						
		Chavi Kothari						
16	smitpansuriya12@gmail.com	Smit Pansuriya	4	8469700661	Password management using 4 bit comparator	SCET	CO	2nd
		Jenish vaghasiya						
		Krishna Bhingradiya						
		Priyanshi kalsariya						

Beetak
Niket
Aleemuddin
Mombasawala
Ayushi
Sarvaiya
Nimeshkumar
Sureshbhai
Nit
talavia
Hitaxi
lethwala
Priyanshi
gelani
Jawani
shah
kandarp
darji
Hetasvi
bhimani
SANSKRUTI
PATIL
Sarangi
kothadiya
Mohil
Jain
Soshmita
paul
Aarya
Shah
Harsh
Bhadani
Ishaq
Malam
AB
Marmik
Joshi
Muskan
Jhavar
Abanob
Bhanu
Saqlain
Shaikh
Chavi
Kothari
Smit
Pansuriya
Jenish
vaghasiya
Krishna
Bhingradiya
Priyanshi
kalsariya

State Level Project competition on "Digital Electronics"

Date: 29 Nov 2021

Team No.	Email Address	Team Leader Name	Member	Team Leader Contact	Project Title	College Name	Branch	Year
17	rishijoshi.ec20@scet.ac.in	Rishi Joshi	4	9016234311	Digital 12hrs clock from logic IC	SCET	EC	2nd
		Dhaval Sorathiya					EC	2nd
		Priyam kakadiya					EC	2nd
		Janvi Nariya					EC	2nd
18	anandsahu.ec20@scet.ac.in	Abhishek Singh	4	84609 32364	Generate a sequence generator which generates the sequence(101).	SCET	EC	2nd
		Meet patel						
		Anish sopariwala						
		Anand Sahu						
19	kashishpatel1262@gmail.com	Kashish Ketankumar Patel	3	7878478971	Article Enumeration System	Dr. S & SS Ghandhy Government Engineering College	EC	2nd
	er.yashpawar@gmail.com	Yash Anilbhai Pawar					EC	2nd
	divyangparekh625@gmail.com	Divyang Dwarakesh Parekh					EC	2nd
20	utsavnavadiya.co20d1@scet.ac.in	Parth Kalathiya	2	8401830803	Object Counter	SCET	CO	2nd
		Navadiya Utsav					CO	2nd
21	deepptel.ec20@scet.ac.in	Deep Patel	4	9327454629	Water Level Indicator	SCET	EC	2nd
	nehanshpatel.ec20@scet.ac.in	Nehansh Patel					EC	2nd
	jeetmehta.ec20@scet.ac.in	Jeet Mehta					EC	2nd
	jaytaneja.ec20@scet.ac.in	Jay Taneja					EC	2nd
22	jillsaliya.ec20@scet.ac.in	Jill Saliya	4	9924745599	Parking Slot	SCET	EC	2nd
		Krishni Modi					EC	2nd
		Nirjara Vasawala					EC	2nd
		Dhanish Sarawagi					EC	2nd
23	devanshthakkar.ec20@scet.ac.in	Devansh Thakkar	4	9033124997	4-BIT MULTIPLIER	SCET	EC	2nd
	khushvipatel.ec20@scet.ac.in	Khushvi Patel					EC	2nd
	aasthapatel.ec20@scet.ac.in	Aastha Patel					EC	2nd
	prathampatel.ec20@scet.ac.in	Pratham Patel					EC	2nd
24	dharमारajardosh.ec20@scet.ac.in	Dharmaraj Jardosh	4	9512494969	4 bit universal shift register	SCET	EC	2nd
	devpatel.ec20@scet.ac.in	dev patel					EC	2nd
	mohitbhatia.ec20@scet.ac.in	mohit bhatia					EC	2nd
							EC	2nd

RATIL
Dhaval
Priyam
Janvi
Abhishek
Singh
Meet
patel
Anish
sopariwala
Anand
Sahu
Kashish
Ketankumar
Patel
Yash
Anilbhai
Pawar
Divyang
Dwarakesh
Parekh
Parth
Kalathiya
Navadiya
Utsav
Deep
Patel
Nehansh
Patel
Jeet
Mehta
Jay
Taneja
Jill
Saliya
Krishni
Modi
Nirjara
Vasawala
Dhanish
Sarawagi
Devansh
Thakkar
Khushvi
Patel
Aastha
Patel
Pratham
Patel
Dharmaraj
Jardosh
dev
patel
mohit
bhatia

Thank You

