

SAMARPAN 2016-2017

SAMARPAN – THE ELECTRICAL & ELECTRONICS CLUB of YMCA University of Science and Technology, Faridabad, has been working with the aim of providing opportunities to enthusiasts and keen learners to go beyond the academic boundaries of the curriculum.

Many workshops and sessions have been conducted in the past on a wide array of topics. For example, in the field of robotics, the following workshops and sessions have been successfully conducted:

Academic Year - 2016

1. **WIRED & WIRELESS WORKSHOP**- The workshop was conducted between September 10-11, 2016 in which 70 students participated.
2. **ENGINEER'S DAY CELEBRATION**-on Engineers Day, Samarpan organized a technical cum fun event on 15 September 2016 at the Lal Chowk, YMCA Faridabad. The event marked registrations of around 150+ students in 30+ teams.
3. **NAAC VISIT**-During the NAAC visit from 13 October 2016 to 15 October 2016, members of the club presented a number of projects like
 - HUMANOID**- an AVR based robot able to speak 'WELCOME TO YMCA' and shake hand with the NAAC members.
 - SPIDER**- A spider programmed on Arduino able to walk.
 - ESCALATOR**-An escalator, which shows the current floor at which it is present, and changes floors just like normal lifts.In addition, many other projects including Arduino based wireless car, solar charger and robot arm.
4. **INDUSTRIAL VISIT**-On October 19, 2016 Samarpan club organized industrial visit to THE GOWELL INDUSTRIES .It was planned for 2nd and 3rd year members. It was fun involving and knowledgeable, all at the same time .The company emphasized on PLC and SCADA and enlightened us with the same.
5. **SESSION 1**: The club conducted a session on PROTEUS on November 5, 2016 in which 30 student's participated.1
6. **SESSION 2**: The club conducted a session on PHOTOSHOP on November 10, 2016 in which 20 students participated.
7. **SESSION 3**: The club conducted a session on RESOLUME ARENA on February 2, 2017 for the club members.
8. **SESSION 4**: The club conducted a session on VIXEN on February 4, 2017 for the club members.
9. **PROJECT SESSION**: Sessions on the basics of robots was conducted on all weekdays, which started from February 3, 2017 on the following topics:
 - Arduino basics L293D
 - Bluetooth module (UART Protocol)

Along with organizing a number of events, the club members have brought laurels to the University by their sterling achievements.

1. Sahil , Saurabh , Gaurav , Manish participated in North zonal of ANVESHAN 2016 – a project based competition organized by Association of Indian universities and got Third position in North Zone.
2. Sahil, Gaurav, Manish participated in E-YANTRA – a project based competition of IIT Bombay and qualified for the zonal rounds for E-YANTRA.
3. Rajat, Saurabh participated in the MANEUVRE – an object picking competition of Techkriti'17 the annual tech fest of IIT Kanpur and got fourth position in zonal.
4. Sahil, Saurabh, Gaurav, Manish participated in Nationals of ANVESHAN 2016 – a project based competition organized by Association of Indian Universities.
5. Vishal, Rohan participated in MAZE SOLVER– a line follower robot based competition organized by IIT Kanpur and got fourth position in zonal.

Academic Year - 2017

SUMMER SESSIONS:

These sessions were organized for 2nd year students by 3rd year. These were conducted during summer vacations 2017.

They covered the following topics:

- Arduino
- Photoshop
- Vixen
- Proteus

Second year students participated in every activity. Learning was done in an interactive manner.

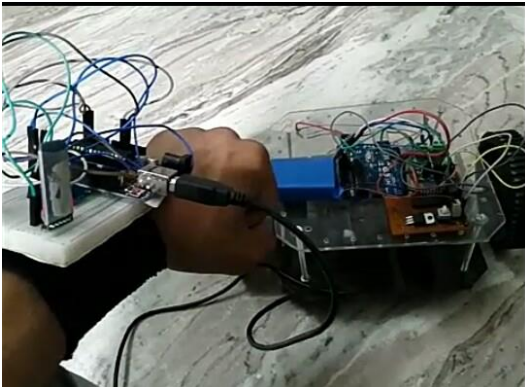




PROJECTS:

Our members prepared projects after the summer sessions, which are listed below:

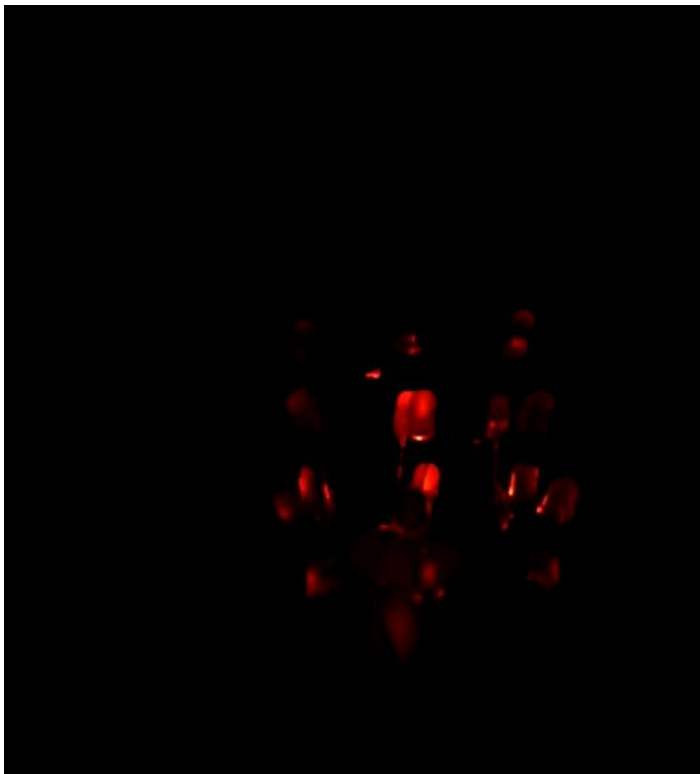
1. Gesture Controlled Robot



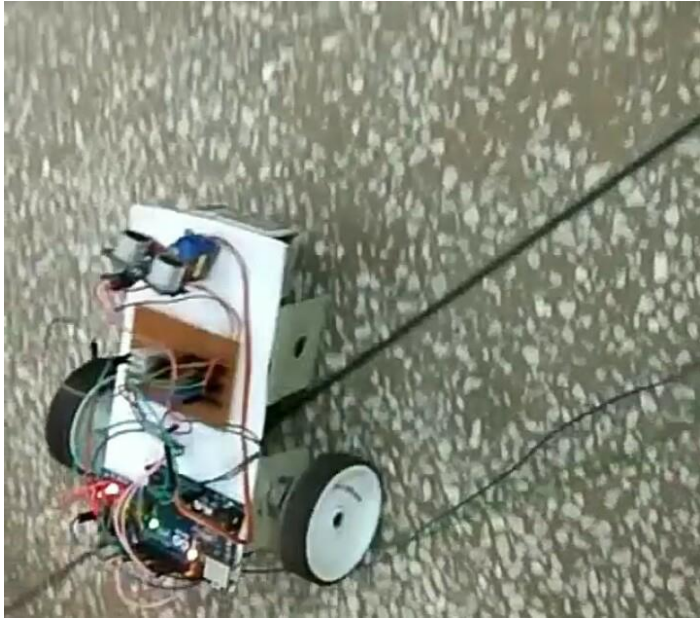
2. Frequency Controlled Leds



3. Led cube



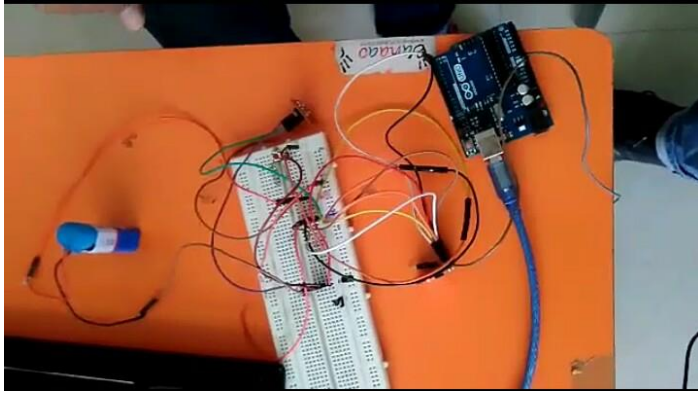
4. Obstacle Avoiding Robot



5. Home Automation System



6. Smart Button (IOT button)



TREE PLANTATION:

On August 4, 2017, YMCA UST organized a TREE PLANTATION DRIVE in the university campus. Samarpan members participated in the event enthusiastically and planted various saplings in the green belt area of the University.



SESSION BY SENIORS:

On August 10, 2017 our senior, Moksh Sir organized a session for 2nd and 3rd year members. He guided how to prepare for jobs, their selection procedures, much more and us about various industrial demands. He shared his knowledge and experiences with us.

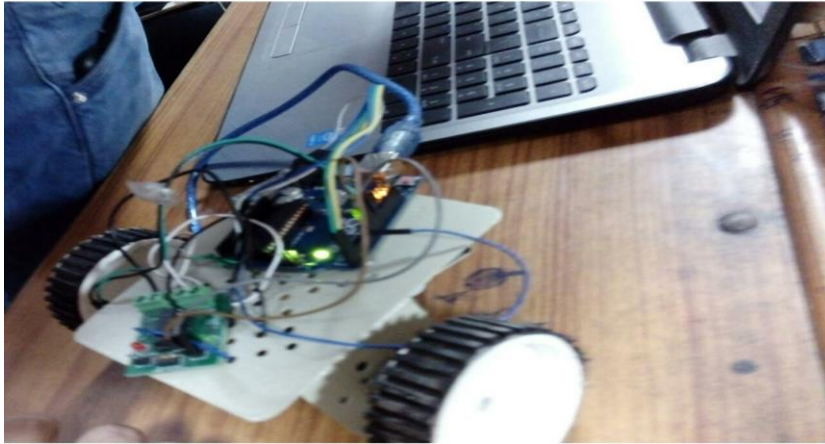


WIRELESS ROBOT WORKSHOP

We conducted a two-day workshop on '*Wireless Robots*', i.e. on 19th and 20th August (Saturday and Sunday). We had got an overwhelming response with more than 75 participants. From basics of electronics, to a wireless robot, we discussed it all. We taught how to make a wireless robot.

On **Day-1**, we covered basics including resistors, capacitors, diodes, transistors, PCB, soldering, overview of embedded systems, microcontrollers and microprocessors.

On **Day-2**, we covered concepts of Arduino, led blinking, motors, serial communication, Bluetooth module and made a robot.



AIR DRUM ON REIZO'17:

On September 16, 2017, we conducted an event 'AIR DRUM'. We used MIDI software and Arduino. Arduino decides instructions from accelerometer and MIDI software produces sound according to the Arduino instructions. Air drum provides the same joy to the drummer just like

normal drum sets. However, it improves one's creativity and virtuosity. We also used lights, which were synchronized with the sound.



OUR - TEAM

