EMBEDDED CLUB ACTIVITIES 2020-21

List of activities carried out by embedded club members in the year 2020-21 are given as follows

- 1. IEEE YESIST 12 Innovation Challenge Track
- 2. Live interactive session with e-yantra, IIT Bombay
- 3. Working projects developed by embedded club members
- 4. Embedded club website design
- 1. IEEE YESIST 12 Innovation Challenge Track

IEEE YESIST'12 in association with IEEE Nagpur Sub section and Yeshwantrao Chavan college of Engineering Student Branch has organized an Innovation challenge track in which embedded club members have participated and submitted the abstract of the project on **Smart water management** (Aug 10).

The students have participated in the preliminary round against 10 teams and successfully cleared and made it into the finals.



Following students from embedded club have participated in this competition. Apoorva Pardhi Manthan Ingale Rishubh Kumar C Rohit Their participation certificates are attached below





E-yantra team, IIT Bombay has organized an online interactive sessions with the institutes with e-Yantra labs under E-yantra Lab Setup Initiative (e-LSI) to discuss about various learning opportunities using e-Yantra platform. Electronics engineering department having e-Yantra lab have participated in the session on 20th July 2021 with a few faculties and embedded club members. The discussion was useful and students got significant insight about the e-Yantra activities.



Following is the list of the participants attended the interaction

Sr.No	Participant Name	Designation	Email ID
1	Dr.S.S. Balpande	Assistant Professor	balpandes@rknec.edu
2	Prof. Sandeep Pandey	Assistant Professor	<u>pandeys@rknec.edu</u>
3	Prof. Jitendra Zhalke	Assistant Professor	zalkej@rknec.edu
4	Prof. SharmikAdmane	Assistant Professor	admanes@rknec.edu
5	Prof. Rushikesh Deshmukh	Assistant Professor	deshmukhra@rknec.edu
6	Parth Agrawal	Student	agrawalpr@rknec.edu
7	Apoorva Pardhi	Student	pardhias@rknec.edu
8	Anshul Gaikwad	Student	gaikwadaj@rknec.edu
9	RutvikKapse	Student	kapserg@rknec.edu
10	Swastika Baheti	Student	bahetis@rknec.edu

3. Working projects developed by embedded club members

Home Automation System

With this system AC loads can be controlled over the internet. The system is based on ESP8266 and controlling of lamp load can be seen using an actuating relay.



Distance measurement using ultrasonic sensor

A very generic HC-SR04 ultrasonic trans-receiver module is being used for various applications to measure distance with a decent accuracy. This versatile sensor is tested out with two of the most popular hardware platforms viz. Arduino and Raspberry Pi.



Bluetooth Controlled Display Board

The system consists of a dot matrix LED display controlled over a Bluetooth link. Such type of system could be useful as wireless notice boards or token counters in public places. The system is Arduino based and HC05 bluetooth module is used for Bluetooth connectivity. With the help of an Anrdoid App one can send the data to be displayed on the board. The system is installed at the entrance of embedded club.



4. Embedded club website design

In order to keep students updated about the embedded club activities like workshops, projects, events, etc. Embedded club members decided to design a website for embedded club. Because of the content and being regularly updated, this website got popular very fast among the students. This website gave an online identity to the embedded club. The URL for the website is given below https://sites.google.com/view/embeddedclubrcoem/home

