ELECTRONICS AND TELECOMMUNICATION DEPARTMENT

Electronics and Telecommunication Engineering
TEESA

WHAT IS ELECTRIC VEHICLE?

SIGN LANGUAGE TRANSLATOR

SMART CITIES : NEW FUTURE

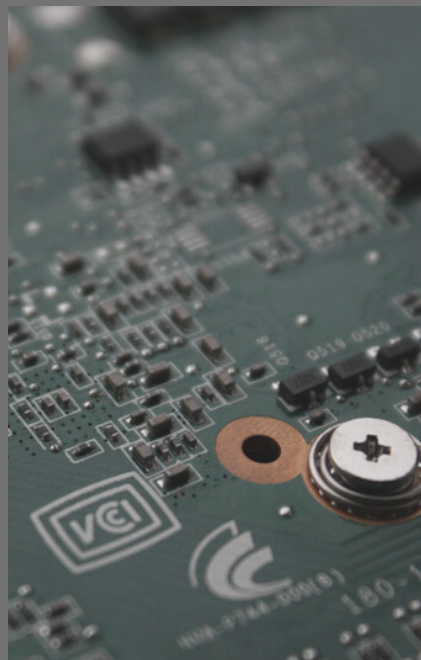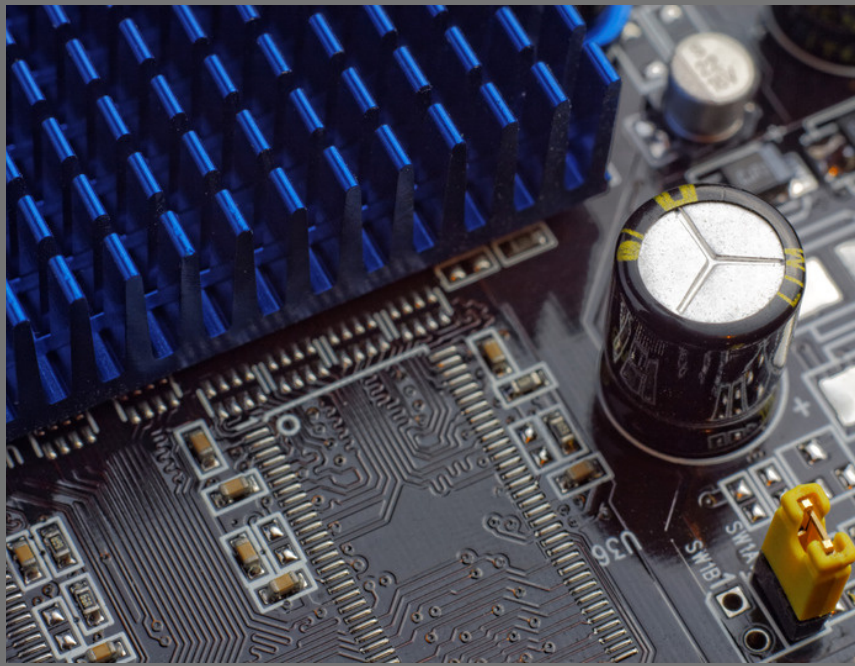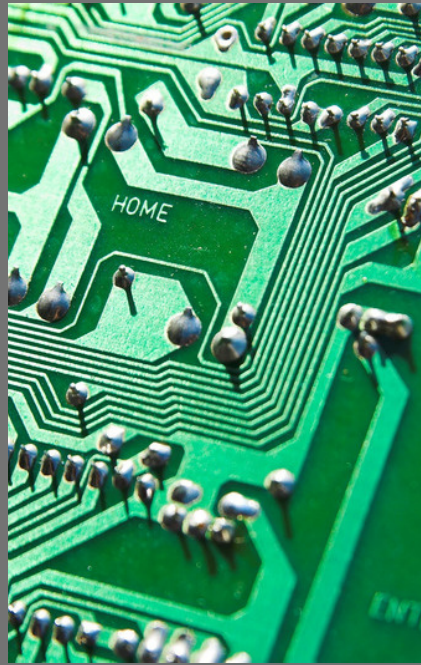### TEAMS DURING QUARANTINE
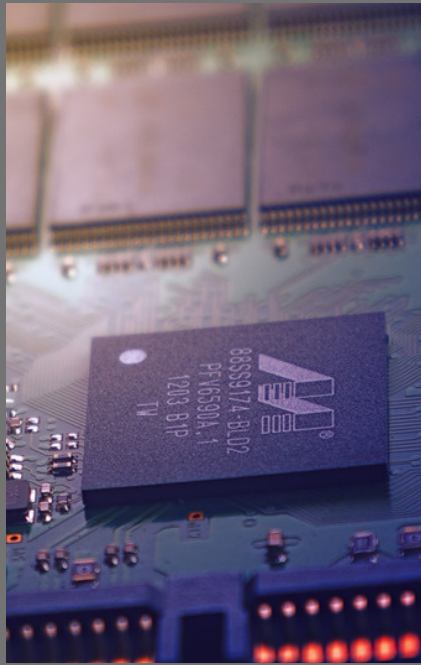
FOURTH EDITION

2020-2021

E-MAGAZINE

REACH US AT:

FOURTH EDITION

E - M A G A Z I N E

ABOUT DEPARTMENT

Department of E&TC had started U.G. Course B.E.(E&TC) in 1986 with sanctioned intake of 40 and enhanced to 60 in 1996. Department also runs full time Post Graduate Course M.E. (EC) and well equipped Recognized Research centre leading to Ph.D. (Electronics Engineering). Part time BE (E&TC) and part time ME (EC) are also run to give opportunity to working graduates and diploma holders. The department has well qualified and dedicated faculty with an average teaching experience of these faculty members is more than 20 years. Dept. has e-learning facility, wherein course material is uploaded on server. It is made available for students as 24x7 asynchronous activities to assign various tasks like group assignment/project. IIT Kharagpur Video Lectures are also available in the department as learning resource. NPTEL video lectures are available on e-server of the department and students have their own access to use this as independent learning.

VISION

Excellence in Electronics Engineering Education and Research & Development

MISSION

1. Impart learning oriented education and equip students with strong foundation enabling for continuing education in Electronics Engineering field
2. Educate students through state of art technologies to meet the growing challenges of the industry.
3. Encourage students for analytical, creative thinking and innovative research
4. Foster moral and ethical practices in the interest of human values

HOD'S DESK

The department of Electronics and Telecommunication Engg. has always strived to keep pace with the global technological updates in the ever-changing world of transformations. The department organized various training programs, workshops to ensure the technological upbringing of the students. Some of the technical activities organized by the department in the academic year 2020-21 are as follows :

Prof. S. R. Hirekhan
Head Of Department

Faculty research presentation (overseas)

i) The ARAMBH Club is coordinated by Prof. Nilima Kolhare and Prof.Dr. V.R. Ratnaparkhe. Students of ARAMBH Club have presented the proposal of GECA Student Satellite ' SHUNYA' to ISRO on 28 May 2020, in an online meeting. The satellite is supposed to monitor atmospheric conditions. It has been a very cordial discussion with ISRO scientist, received valuable inputs, suggestions from them, and best wishes for future efforts, endeavors.

ii) Department has organized a one-month TEQIP-III sponsored training program from BSNL for Third Year Students from 15 Feb. -12 Mar.2021. Around 75 students participated in the same. The students were exposed to the state-of-the-art technological aspects of voice, data communications, currently being implemented by BSNL. Prof. Dr. S.D. Bharkad has coordinated the activity.

Training Programs/Workshops organized :

i) Hardware Deployment and IoT Implementation on MATLAB & Simulink

ii) ART Contest on occasion of the World Earth Day

iii) Arduino & Proteus workshop

iv) Artificial Intelligence and Machine Learning

v) Expert session on the preparation of GATE (Graduate Aptitude Test in Engineering)

TEESA COORDINATOR'S DESK

Electronics and communication engineering student's association (TEESA) is the student association of the E&TC department. It is an association formed by the students to create a platform wherein they can plan, organise various activities for the overall development of the students. TEESA has been at the forefront in organising activities like the Inaugural session of the council. Teesa week:

Prof. S. S. Agrawal
TEESA Faculty Advisor

In this various co-curricular and technical activities are scheduled technical workshop virtual campus Decides the role and activities of students in institute activities i.e wings, antarang, Espirito.This pandemic has hit us hard but our Electronics and communication engineering student's association (TEESA) during these times organise various online events keeping the spirits uplifted. TEESA has been forefront in organising various activities like yoga , PCB workshop, Arduino workshop, proteus workshop. I wish all the best to the students and appeal them to ensure participation in all these events being organised in forthcoming future.Your honest feedback is always needed and helps us to make e-magzine more fruitful.

WHAT IS ELECTRIC VEHICLE

An electric vehicle (EV) is one that operates on an electric motor, instead of an internal-combustion engine that generates power by burning a mix of fuel and gases. Thus, such as vehicle is seen as a possible replacement for current-generation automobile, in order to address the issue of rising pollution, global warming, depleting natural resources, etc. Though the concept of electric vehicles has been around for a long time, it has drawn a considerable amount of interest in the past decade amid a rising carbon footprint and other environmental impacts of fuel-based vehicles.

BEVs can be charged at home overnight, providing enough range for average journeys. However, longer journeys or those that require a lot of hill climbs may mean that the fuel cells require charging before you reach your destination, although regenerative braking or driving downhill can help mitigate against this by charging the battery packs.
There are two basic types of EVs:
all-electric vehicles (AEVs)
and plug-in hybrid electric vehicles (PHEVs).

  AEVs include Battery Electric Vehicles (BEVs) and Fuel Cell Electric Vehicles (FCEVs). In addition to charging from the electrical grid, both types are charged in part by regenerative braking, which generates electricity from some of the energy normally lost when braking. Which type of vehicle will fit your lifestyle depends on your needs and driving habits.

---Zoha Shaikh
(TE ENTC)

SMART CITIES : NEW FUTURE

A smart city is a municipality that uses information and communication technologies (ICT) to increase operational efficiency, share information with the public and improve both the quality of government services and citizen welfare.

Several major characteristics are used to determine a city's smartness. These characteristics include:

- a technology-based infrastructure;
- environmental initiatives;
- a high functioning public transportation system;
- a confident sense of urban planning and
- humans to live and work within the city and utilize its resources.

Smart cities use a combination of the internet of things (IoT) devices, software solutions, user interfaces (UI) and communication networks. However, they rely first and foremost on the IoT. The IoT is a network of connected devices -- such as vehicles, sensors or home appliances -- that can communicate and exchange data. Data collected and delivered by the IoT sensors and devices are stored in the cloud or on servers. The connection of these devices and the use of data analytics (DA) facilitates the convergence of the physical and digital city elements, thus improving both public and private sector efficiency, enabling economic benefits and improving citizen's lives.

Budding example: Samsung Smart city near Seoul(South Korea).

---Aman Parate
(BE ENTC)

Team EDC

"I have no special talents. I am only passionately curious", Albert Einstein.

E - Cell of GECA has always been serving as a beacon light for proliferating the young minds of our institute with different disciplines in diverse fields and succoured students realizing their true potentials, passion in life and entrepreneurial spirits.

Even pandemic wasn't an exception for it. Where over the past two years, the Pandemic completely changed our lives, while the environment began to heal, people were caged indoors. But, our team realized that the only way to ensure potency during lockdown was to pass through it rather than passing over it. So, with the determination of team members, EDC was successful in organizing different webinars, workshops, online certification courses, Ideathons and the list goes on. Though these were challenging times, EDC's dedication towards supporting students in keeping themselves on track was second to none.

Informative webinars by eminent personalities were arranged from diverse spheres of education.

There were webinars on "Business Model Canvas" and "Innovation and Digital Ecosystem" by Surendra vaidya Sir. There was a session on "10 days Online Certification Course on Skill Development and Entrepreneurship" by Narendra Shendge Sir.

We were able to manage a webinar series on "Government policies and Taxation" where the speaker was Medha Pande Ma'am. There was a session on "Introduction to Economy and Economics" by Medha Kulkarni Ma'am and Dr Smita Dixit Ma'am.

Then, we arranged a webinar series on "Sales and Marketing" by Pallavi Bharaske Ma'am. Nonetheless, A workshop series 'Illuminate' was undertaken in collaboration with IIT Bombay.

We also arranged a Minor-Degree Certification course on "ENTREPRENEURSHIP DEVELOPMENT". There was a session named "Theories of Entrepreneurship" by speaker Raman Karde sir.
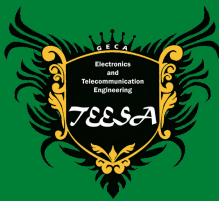
One webinar of "Marketing Strategy for a small business" by Namrata Kamatkar ma'am. Also, one on "Entrepreneurship: Accelerating the transition from idea to innovation!" by Mukesh Ashar Sir. Last but not least, we also moved to social media, so that more students will get to learn about our club, and we posted different challenges such as "Tagline Challenge", in which the one who suggests the best tagline for EDC will be awarded amazing prizes.

For the past 4 years, we have been thriving with a vision to promote entrepreneurship and create a platform that enhances the entrepreneurial culture in the region. And there is no looking back now. EDC targets to help the development of India's entrepreneurial ecosystem by enabling interaction between its major component, spanning student entrepreneurs with market leaders and support them by providing necessary resources such as seed funding, mentoring, consulting and networking. For which our biggest achievement was setting up Ankur Incubation Center. EDC is more like an asset for those who have big dreams but need wings to fly. We are those wings.

#Just a step away.

Team Aryans

For the past nine years, Team Aryans Racing, a team of students of different disciplines from Government College of Engineering, Aurangabad has participated in the SAE Baja design challenge. The goal of this competition is to apply technical engineering skills to a hands-on project by designing and building an off-road racing vehicle. This team competes against top engineering students across India and the world.

SAE Baja is an intercollegiate design competition run by the Society of Automotive Engineers (SAE). Teams of students from colleges all over India design and build small off-road racing vehicles and compete against each other at annual conferences. By simulating real-world design scenarios, students learn the necessary skills that will help them become successful engineers and successful professionals.

Amidst this pandemic situation, due to nationwide lockdown, competition changed its face to complete virtual type. This situation challenged the team members to work from their homes remotely, but whatever the situation is, the team was determined and started working according to the conditions to face the never before experienced scenarios. The design work started remotely via digital channels for meetings and discussions. We didn't stop here, we arranged a virtual recruitment drive to continue this knowledge transfer process to the next faces of the team. We were unstoppable and to continue this decade-long legacy, our team participated for the 2021 Virtual event.
2020

TEAMS DURING QUARANTINE

The first stage of the competition concluded on 13th December, 2020 and our team continued its glorious streak by achieving 5th Rank all over India. Pandemic introduced new challenges in the second leg of competition including Virtual Dynamic Events through real life simulation software IPG from Germany. Team is working on the new challenges and will make sure to seal the title this year.
Team Aryans Racing now has shaped the legacy and become a frequent name among table toppers in the competition.

"We remain heirs of a LEGACY, heirs of a DREAM"

#RoarAryans

Team Cybrotics

of Government College of Engineering, Aurangabad, is a group of robotics enthusiasts who have been fabricating robots since 2010. We have been participating in ABU- Robocon, an International Robotic Contest for the last 9 years. Every year, we
fabricate a robot to meet the demands of the given problem statement and complete all the tasks assigned to it.

The club aims to technically strengthen the students by integrating their skills in the various fields of Engineering & technology, to cope up with the highly competitive environment. In the Year 2019, Team Cybrotics of our college won the "MATLAB Simulink Contest" held along with Robocon Competition with the highest score and got the cash prize of Rs35000. In the Main Competition which was held at IIT-Delhi on 16th June Team Cybrotics achieved All India Rank 7th.

The onset of Covid brought almost halt to the activities of the club due to the ongoing restrictions. But as soon as the Robocon theme was introduced, the team members were back on their feet. It also marked the beginning of planning and strategizing on virtual platforms. During the Covid, the team was busy in research, prototyping and analysing the data through CAD, MATLAB and other resources. The fabrication and development of robots got badly affected due to the restrictions but at the same time providing us with enough time to organize plans of execution/action.

Currently, we are finalising the Robots for the competition based on our data. The team is looking forward to sharing the knowledge and experiences with students through the virtual workshops with the main objective being the submission of a detailed design paper/report for stage 1 of Robocon.
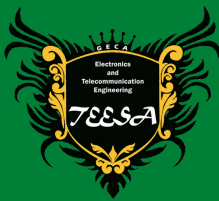
The competition is getting more challenging with each passing years ultimately leading to further innovation.
As a student,the team always trying to learn from our surrounding and keep ourselves updated with the advancements.
Even in the COVID times, the team is active as it was previously.On a brief note, the Team Cybrotics have come along a long path.A path that is exhausting but exhilarating
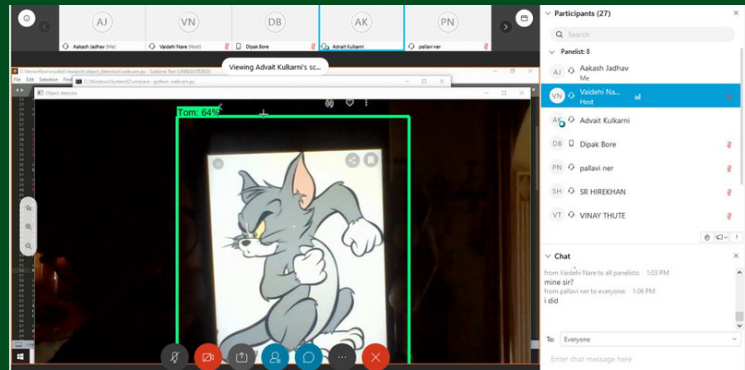
WORKSHOP

FIVE DAYS STUDENT WORKSHOP CUM CERTIFICATE COURSE ON AI & ML

The Five Days Student Industrial Training Workshop on Machine Learning was organized by the department of Electronics and Telecommunication to increase awareness among student about Machine Learning and its future aspects using Artificial Intelligence. Students were also taught how to use Tensorflow, Its application and visual studio. Under this workshop students were assigned a task in which they had to do image processing to detect an object.

OM AT HOME
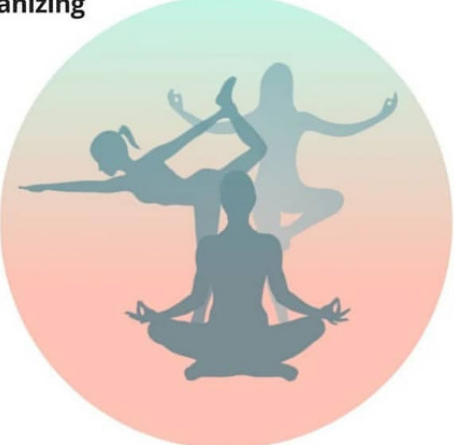
Om at home was organized by the Department of Electronics and Telecommunication under TEESA(Student Council). This program was conducted online considering the lockdown situation. The sole intention of the program was to make the students aware of the physical and mental health benefits of Yoga and to bring discipline in their unhealthy lifestyle. It helped ample number of students to relief the stress which they had .

MATHWORKS

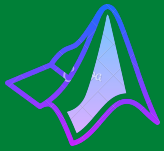The Main motive behind this workshop was to give the students a unique way to learn technology using a practical approach and relief from their monotonous schedule. The workshop gave an insight into Industry 4.0. i.e. introduction to IoT Technology. Combining software with Hardware to control appliances is an essential part of IoT Technology. In the Workshop students were taught to use Things peak Platform , MATLAB Software and Esp8266 NodeMCU is an open-source Lua based firmware and development board specially targeted for IoT based Applications.

GOVERNMENT COLLEGE OF ENGINEERING AURANGABAD
TEAM CYBROTICS AND TEESA PRESENTS
WORKSHOP ON
HARDWARE DEPLOYMENT AND INTERNET OF THINGS IMPLEMENTATION ON MATLAB SIMULINK
GUEST SPEAKERS
1) PRANAV LAD, TECHNICAL EVANGELIST MATHWORKS , PUNE.
2) DEBANAND SINGDEO, TECHNICAL EVANGELIST, MATHWORKS , PUNE.
IN COORDINATION WITH MathWorks
DATE : 3RD MARCH 2021
TIMING: 11AM TO 1PM
VENUE: ONLINE LIVE AT WEBEX
A QnA SESSION IS ALSO ARRANGED FOR ANY

BSNL TRAINING

"BSNL- Connecting Geca"
Looking for an internshipin these pandemic times is quiet a task , but don't worry cause the internship by BSNL is just the right place for you !

Internships are important because you need to get some practical world knowledge before you enter the companies and also its a must for your degree . Earlier people used to manage to get a internship from various companies but now due to covid , companies don't allow any visits. So we are left with only the online learning option .Will you get an internship that teaches you the practical things ? heyy ! theres a good news for us ..because the ' TEQIP ' body of our Institution is providing us with an internship from BSNL which is a firm that has everything to do with the telecom industry .
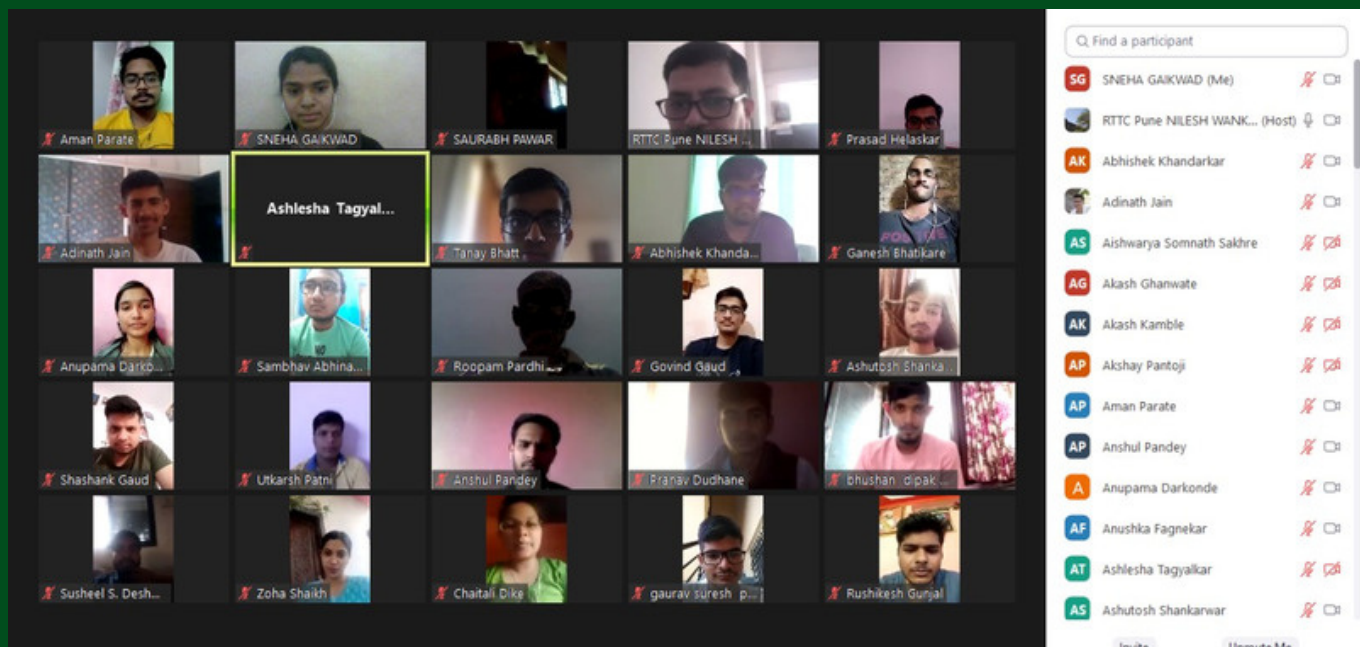
Recently , Mr Nitin Bawaskar , a representative of BSNL along with our institute Professor Dr. S.D. Bharkad ma'm headed the task of conducting internship in our college . Nitin Sir and his team from BSNL i.e. Bamane Sir , Sanjay Sir , Sakhlikar Sir and Wankhede Sir , each one of them have an experience of say close to 20-25 yrs in the telecom industry . Now one can imagine when people with such a vast experience when they come to teach us , how much valuable knowledge they can share with us via the internship.

    This internship is nothing short of a golden-eggs laying hen given to us by our college and we can bring the most out of it by participating thoroughly in it and later enjoy the fruits earned from it .
By Adinath Jain

WORKSHOP

Arduino and Proteus Workshop

The Workshop on Arduino and Proteus was organized by the Department of Electronics & Telecommunication department under TEESA to give an introduction about the basics of Arduino and Proteus to first-year Students of Government College of Engineering Aurangabad. Because of the pandemic Covid-19 the workshop was organized online on the Webex platform. In the two days workshop first-year students were taught about Operations performed on Arduino, installation of Arduino and proteus, Significance of proteus in electronics. Coordinator shown them live video of hardware connection and how it works, and also shown them live projects on proteus software.
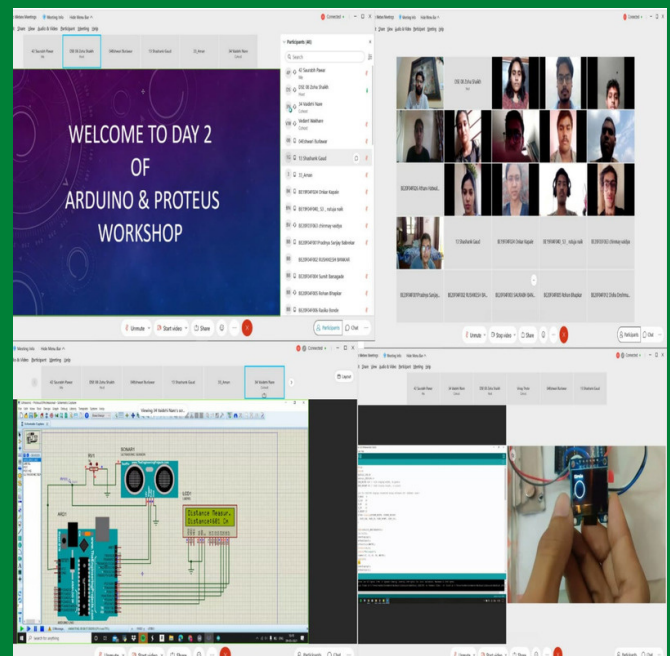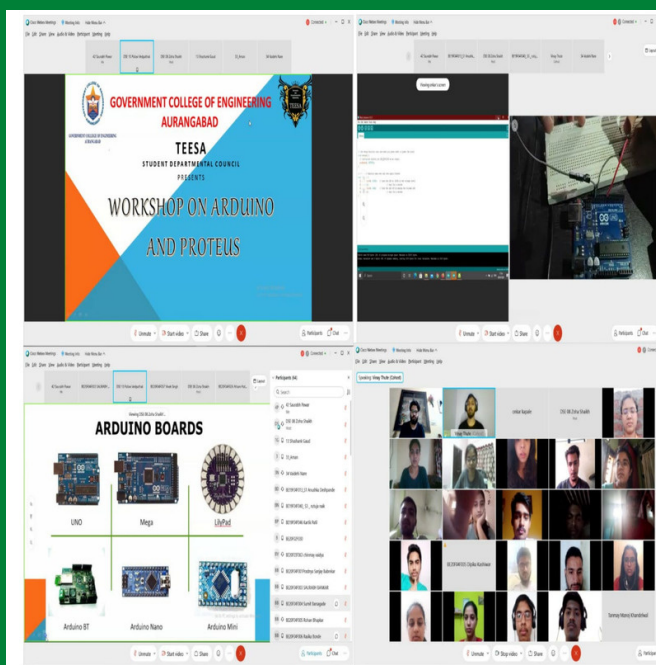
MAKE IN GECA

The event "MAKE IN GECA"was organized by the Department of Electronics & Telecommunication under WINGS 2020 .The motive of the event was to make a prototype of the participant's idea in 24 hours.This event was selected to improve their knowledge regarding implementation of an idea within a given deadline and also create awareness about self-development. It was a technical event whichwas focused and arranged to help the participants test their knowledge and project making skills.

This year under 'WINGS 2020',the eventwas organized 21st and 22nd January.The event was open for all the students. 6 teams were finalized for this event.The winners were awarded with cash prize worth Rs.70,000.

TEESA WEEK 2019-20

LIST OF EVENTS HELD IN TEESA WEEK 2019-20

- Chess tournament
- Art mela
- Treasure hunt
- Virtual campus
- bollyblaster
- Technobuzz
- Swachha bharat abhiyan

ENGINEERING EXPO

Every year , electronics and telecommunication departments holds engineering exploration exhibition for first year btech students from year 2018.Every students doing undergraduation course in college has to take this course and perform an real life problem solution making task and demonstrate in exhibition in front of whole college. Every year different projects come up and innovating solution keep on increasinng which catches everybody's attraction. The exhibition is popular and gets special attraction not only in college but also gets its article published in newspaper too.

Art Competition

The Art competition is non-technical event organized by Department of Electronics and Telecommunication. Art competition was organized on 22th April 2021 on occasion of "World Earth Day". Due to pandemic condition this contest was held on online platform. Students of Government College of Engineering Aurangabad have participated in this competition. Main Purpose of this Event was In this current pandemic condition everyone is bored of this lockdown . So in this condition to encourage all the students towards their skills this contest was organized by TEESA .This Event enhance their way of thinking towards nature and represent it on the paper through their drawing.

Winner Drawings:

1.Anisha Gawari

2. Shashank Gaud

3. Shraddha Sontakke

# Heart Disease Detection System by ECG Signals

Concept:

The irregular rhythm of heart causes cardiac disorders. This irregular heartbeats or abnormal PQRST values From ECG is the cause of patient undergoing a sudden heart attack.

In this project, we detect disorders of heart from ECG signal. The proposed system acquires ECG signal and extracts the parameters like PQRST to detect heart abnormalities and The proposed system has been designed using Arduino application software and MATLAB.

Fast and simple techniques have been employed to extract ECG parameters and detect cardiac disorder. We have used simple filters to remove noise from ECG Signal. From the clean ECG, it is easy to extract important ECG parameters using threshold method. Signal analysis obtained using MATLAB. After successful extraction of the ECG parameters, a comparison is done with the normal ECG parameters. Any mismatch will indicate abnormality in the current ECG.
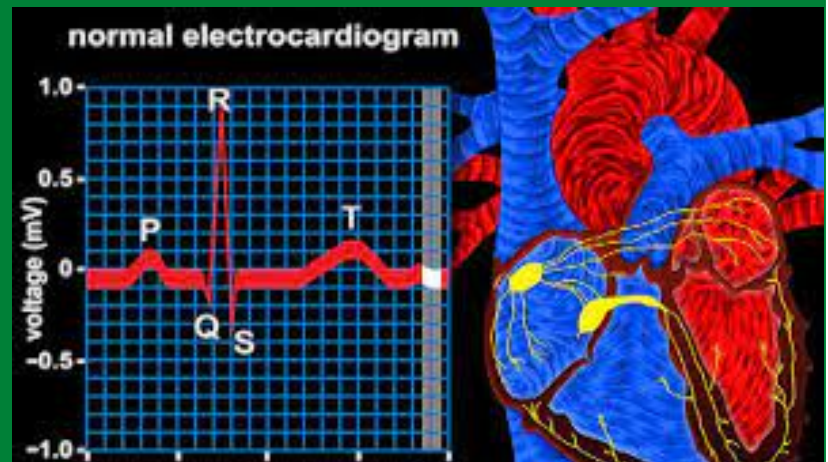
Renukadas Bharswadkar (BE16F04F054)

Pawan Kapure (BE16F04F018)

Shubham Kshirsagar (BE16F04F024)

SIGN LANGUAGE TRANSLATOR

Concept :

Mute people can't speak and normal people don't know the sign language which is used for intercommunication between mute people. From literature survey so many researchers have done a lot of work in gesture recognition based on Gestures are in line with people's habits of communication. In this project, Image processing is used for hand gesture recognition for mute people. Hand gestures also known as sign language, will be converted into voice for mute people. Image processing is used for hand gesture recognition in this system. Using camera to get images of hand, and then preprocess those images by color splitting, morphological processing and feature extraction. At last, the template matching is used to realize the hand gesture recognition. The recognized image is processed by the hardware and converted to voice.

The application will translate the movements of a finger that is demonstrated to be translated into an alphabet letter. This research will develop a sign language interpreter application on a mobile device to make it easier for everyone to communicate with the Deaf.

However, some hand gestures (alphabets) such as K, M, Q, U, X, H, P, S, T have
not been translatable because they have a more dominant range of other approaches to the HuMoments alphabet.
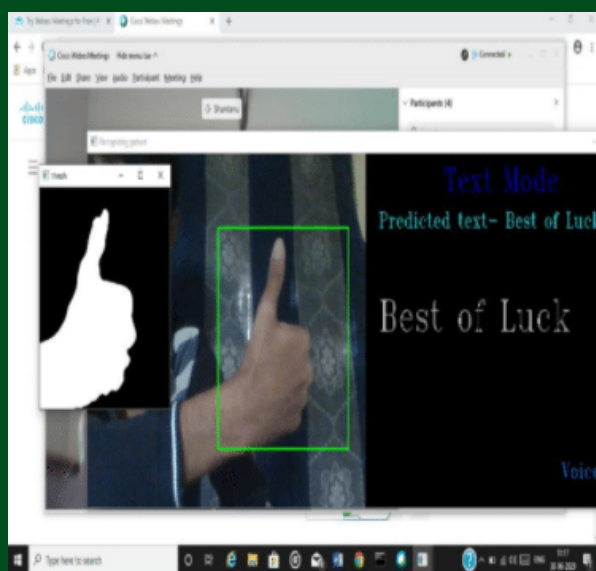
TEAM MEMBERS:-
Vaibhav Jadhav BE16F04F013
Onkar Kokate BE16F04F021
Shantanu Sonavane BE16F04F045
Renuka Petkar BE17S04F011

Digital Chessboard

Concept :

The digital chessboard is a portable chess set which able to record the games and save it in Portable Game Notation (PGN) Format in a client's computer. It is a player vs player model. Another type of model is player vs computer model. There are various chess websites, which can process the .pgn file and produce a chess diagram. Move type is determined using number of frame change.According value of frame change a final output string of players move is recorded.The real situation of the chess game is also displayed on the computerscreen using softwaredeveloped. With integration between the chessboard, microcontroller, chess clock and developed software, the result shows a cost effective electronic chessboard compared to the existing electronic chess set, which would be affordable to the most chess players.

DEVELOPED BY:-
Haridas Bhujang
Sachin Vijay Jite
Gaurav Tanaji
Gawali

TEAM CYBROTICS

ABUROBOCON is an international Robotics event, started in 2002 and organized under the aegis of Asia Pacific Broadcasting Union. In India, National level round is organized by Doordarshan and MIT Academy of Engineering (Alandi).

Team ROBOCON of institute has been participating in the event since 2010. There are 30 students in a team; students of E&TC, Mechanical, Electrical and few CSE participants.

In first year itself, the team won the 'Best Rookie Award' for best debut. Since then, the team has made steady progress, winning 'Best Innovative Design Award' and bagging 8th rank year 2015.

In 2019: They came AIR 7.

ENTC MEMBERS: Anshul Pandey,Vyankatesh Mahamuni,Malhar Garje, Anupama Darkonde,Eshwari Burlawar,Pranav Dudhane,Advait Kulkarni,Manisha Mahajan,

TEAM ARYANS

Team Aryans of Govt. College of Engineering Aurangabad has a good legacy in making ATV's. Vehicle includes different systems as rollcage, suspension, steering, transmission, drivetrain, brakes, data acquisition, etc. Static structural analysis and topology optimization of components is performed on different CAE software's as Hyperworks, ansys, etc. Industry standards are employed in every aspect to maintain the quality and standardize the records. Special Efforts was made on developing a vehicle with superior ergonomics and high-ranking performance.

In 2017-18 ,Team Aryans were 1st Runner ups at BAJA-SAE India (Ropar) and winner of Suspension Traction and Acceleration event, winning cash prize of Rs. 2 lakhs, also participated in International events held at Oregon, USA.

In 2020: They came AIR 2.

ENTC MEMBERS:Atharva Bagad, Tilottama Kodam,Ram Shingane

TEAM AARAMBH

Team Arambhis an active group in space and astronomy related activities of Government College of Engineering, Aurangabad. The team aims to build and launch a student satellite,
SHUNYA. The team has young enthusiasts, who want to explore the space and indeed help the mankind.
Team AARAMBH aims to build a cubesat satellite and launching it with collaboration of ISRO for ocean monitoring.

ENTC MEMBERS: Aman Parate, Roopam Pardhi, Saurabh Katare, Hariprasad More,Gopal Tidke,Nimesh Land,Vaidehi Nare,Dhiraj Ahire,Onkar Kulkarni,Vinay Thute,Samruddhi wadgaonkar,Vikrant Pachbhai,Mayuri Yerme

E-CELL (ANKUR)

The Entrepreneurship Development Cell of Government College of Engineering, Aurangabad is a non-profit students organization that aims to help individuals to realize there full potentials and manifest the Latest entrepreneurial spirit. World requires innovators and thinkers which doesn't opt for job but want a change in the society by breakthrough ideas leading our millenial generation with more employment. With a vision to promote entrepreneurship and create a platform which enhances the entrepreneurial culture in the region.

ENTC MEMBERS: Saurabh katare, Zoha Shaikh

TEAM CATALYST

Catalyst is an annual magazine from our college. It is a team of students from various disciplines who come together to create an amalgamation of various activities,events, achievements, student articles, guest interviews, etc. The magazine acts as a mouth-piece for the college and all the work undertaken throughout the year. With themes like 'Make in India', '#WHY?', 'I to We', we take socially relevant ideas as our backdrop and produce something which makes a lasting difference among the students.

This year's 2021 theme, 'Phoenix', also aims to do the same.

ENTC MEMBERS:Tanay Bhatt, Koyna Sengupta

TEAM KALARPAN

Our's college's Cultural Drama Team has been participating in Firodiya Karandak since last 4 years and every year has been like a milestone in a journey to perfection.

The most remarkable attribute of the students that they made set completely made by iron , with each frame weighing 300 kg.It was huge challenge for the teams to abide the rules ,which clearly states that each teams can take maximum 15 minutes to arrange the set and even this was achieved by the team through sheer determination and top-notch teamwork.Also in the year 2020 team Kalarpan reached in the finals of Firodya.

ENTC MEMBERS: Pallav Waykos ,Pratik thombre,Ashit kharat,Prathamesh deokar,Pradeep bochare ,Govind renge,Rutuja Naik,Nikhil

STUDENT ACHIEVEMENTS

2018-19

- Anand Parande :
  winner in Tantrotsav :-D. Y. Patil college of engineering, akurdi, pune .
  Event : The burning cars
- Rajdeep Diwedi :
  Paper presented at IJSER 2019
  Title: Solution for gauss circle problem for integer value of R and it's application
  Title: Paper Reduction in OFDM By Addition.

- Rajdeep Diwedi ,Tejas Deshpande, SangameshPatil : Paper presented at IJIRT 2019 Title: Portable Real Time Water Quality Monitoring System
- Tejas Deshpande : Participation in DST & Texas Instrument India Innovation'
- VarunKulkarni : Runner up : Circuit Fixer, Agnitio JNEC Aurangabad.

2019-2020

- Apurwa Chaudhari, Komal Jogdande, Komal Bhale, Yash Katariya,Dhiraj Kundhare, Mayur Patil: Qualified for 2nd round in Smart India Hackathon ((Ministry Of KPIT)
  Title: Automatic Pothole Detection While Driving
- Amruta Solanke , Pratiksha Udgirkar,Komal Yerme, Swati Shinde , Piyusha Jawanjal , ashwini neel : Qualified for 2nd round in Smart India Hackathon (Ministry of Ayush)
  Title: Automatic Decoction Vending for Making AyurvedicKadhaOr Medicine
- Apurwa Chaudhari ,komal jogdande : paper presented. Student Innovation, Start-Up and Ecosystem Conference
  Title: 1. Digital Fuel Level Indicator for Power Cars
         2. Automatic Glaucoma Detection Using Fuzzy Logic.
- Apurwa Chaudhari, Komal Jogdande, Mayuri Johare, Amruta Solanke, Ashwini Neel, Arti Dahitule : Qualified for 2nd round : Smart India Hackathon (Ministry of Railways)
  Title: Digital Fuel Level Indicator for Power Cars
- Aman Parate,Tanay Bhatt,Roopam Pardhi,Sanjana,Atharva Bagad,Shreyas Chele:Qualified for final round of Smart India Hackathon.
  Title:Healthcare and Biomedical

STUDENT ACHIEVEMENTS

- Pratiksha Udgirkar ,Pradyumn Jakate, Akanksha Pawar : 1st prize in Paper presentation in wings.
- Gayatri Pawar,Puspak Walunj, Rahul Padol : 2nd prize in Paper presentation in wings.
- Aman Parate,Tanay Bhatt,Roopam Pardhi,Atharva Bagad,Shreyas Chele: DST & TEXAS INSTRUMENTS India innovation challenge-QUATERFINALS.
- Tanay Bhatt,Shreyas Chele ,Sanidhya ,Falugni : 2nd round VIGNITE hackathon 2019
- Team CYBROTICS came AIR7 in ROBOCON 2019.
- Priti songade (be entc) has been awarded with "The Namrata Bhagat Award for Innovative Youth Engineer-2019" award for the Year 2019-2020.
- Team ARYANS of college came AIR2 in BAJA SAE2020.
- Team CYBROTICS came AIR1 in stage 1 of ROBOCON 2020.

2020-21
- Zoha Shaikh, Pallavi Vedpathak : 1st Runner Up at College Hackathon organised by EdgeFx Technologies Private Limited.
- Saurabh Pawar , Vaidehi Nare: Consolation Prize in Bootcamp and College Hackathon.
- Rushikesh Gunjal, Trupti Deore, Chetali Dike, Pooja Thorat : Special Prize in Bootcamp and Hackathon.

CULTURAL ACHIEVEMENTS
- Ishwari Mankar , Asawari Gund Patil won Street Play Competition on IMPRESIONS
  held at COEP.
- Aman Parate ranked third in group dance competition on IMPRESSIONS held at
  COEP.
- Team Kalarpan ranked first amoung the regional drama team at PURUSHOTTAM2019.
- Shashank Gaud ranked second in poetry competition on the occasion of KARGIL VIJAY DIVAS at DR. Babasaheb Ambedkar Technology University Lonere, Raigad

SPORTS ACHIEVEMENTS

1)Shashank Gaud : Represented GECA in
- ICT 2018 for Basketball,ZEST 2019 for Basketball,ICT 2019 for Basketball
- ICT 2019 for Kabbadi
- Runner up in WEST basketball competition WALCHAN Sangli in2019
- Second runnerup in Zenith 2020 at SGGS ,Nanded

2)Rachit Ladhe :Represented GECA in ICT 2019 for kabbadi

3)Dhiraj Ahire :Represented GECA in ICT 2019 for kabbadi

4)Nimesh Lande :Represented GECA in ICT 2019 for Volleyball

5)Prathamesh Sable :Represented GECA in
- University Matches 2019 for Volleyball
- University Matches 2019 for Cricket
- ZEST COEP 2019 for Cricket
- Zonal trial for university team 2019

6)Advait Kulkarni :Represented GECA in
- LAKSHAY 2020 runner up in Badminton
- ICT 2019 semifinal in Badminton

7)Mayuri Kokate :Represented GECA in
- ICT 2018 for Basketball
- Winner in Zenith 2020 for Basketball

8)Sonal Patle:Represented GECA in Zenith 2020 for Basketball

9)Sudip Wadte: Represented GECA in
- ZEST (Pune) 2020
- ZENITH (Nanded)2020
- ICT (BAMU) 2019

10)E&TC department holds interdepartmental sport sheild consecutive 2 times
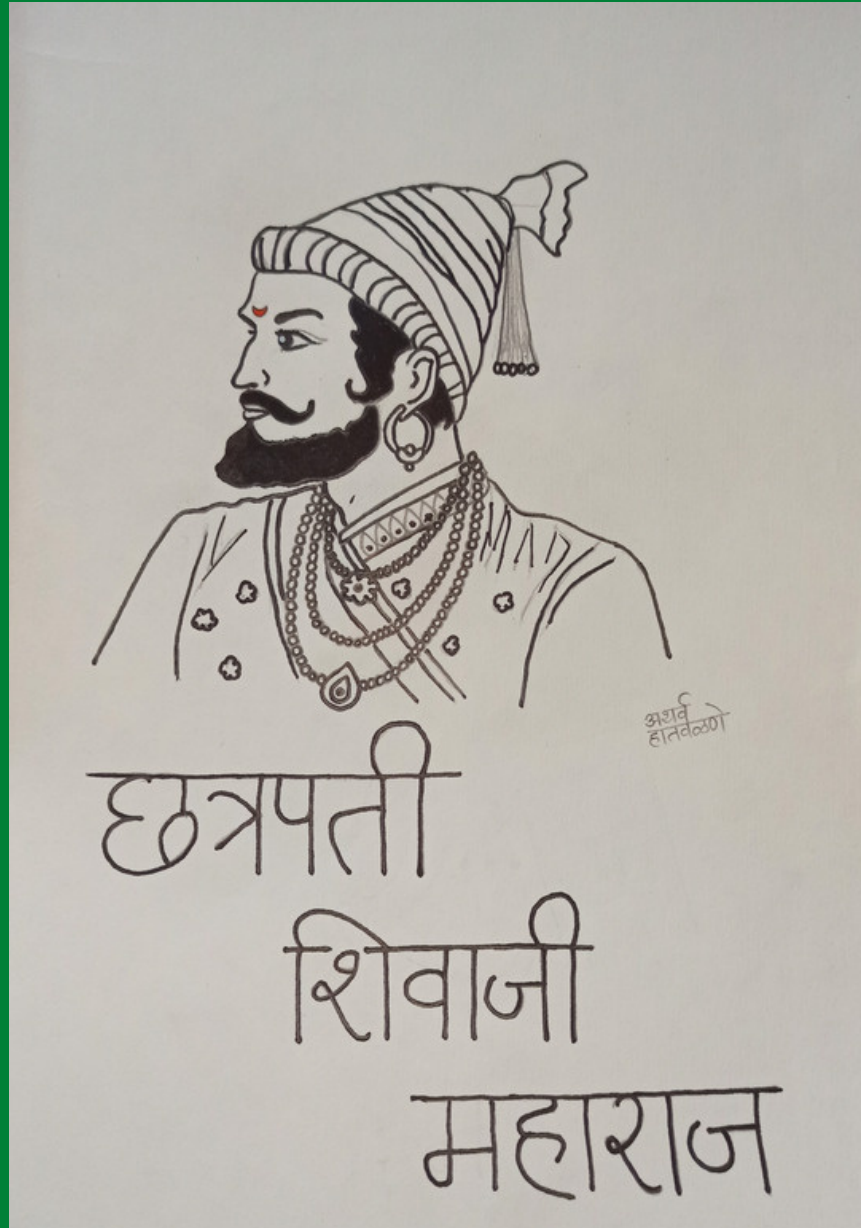
__Shradha Sontakke
(BE ENTC)

_Ankita Roshankhede
(SE ENTC)

छत्रपती शिवाजी महाराज

__Atharv Hatwalne
(SE ENTC)

महती माझ्या राजाची

राजे, तुमचे नाव ओठांवर आले की,
मनात एक वेगळीच ऊर्जा संचारते,
तुमच्या प्रतिमेसमोर नतमस्तक होऊन
माझे मन तुमचाच जयघोष उच्चारते!

रयतेच्या कल्याणासाठी, सुखासाठी
स्वराज्य तुम्ही उभारले,
हाल-अपेष्टा सोसणाऱ्या रयतेचे त्यामुळे
जीवनमान खूप सुधारले!

धर्म, पंथ, जात या गोष्टींना
तुम्ही कधीही नाही दिला थारा,
सर्व समाजाला एकजूट करून
'हर हर महादेव'चा दिला नारा!

'स्वराज्यासाठी एकता महत्त्वाची'
हे तुम्ही समर्पकपणे जाणले,
तिला मजबूत करण्यासाठी तुम्ही
प्रत्येकासोबत जिव्हाळ्याचे नाते विणले!
स्त्रियांचा अनादर करणाऱ्यांचा
स्वराज्यात होत होता शिरच्छेद,
स्त्री-पुरुष दोघेही समसमान
नव्हता कसलाच भेदाभेद!

स्त्रियांचा अनादर करणाऱ्यांचा
स्वराज्यात होत होता शिरच्छेद,
स्त्री-पुरुष दोघेही समसमान
नव्हता कसलाच भेदाभेद!
राजे, तुमची निर्णयक्षमता होती
अचूक, योग्य तथा वेगवान,
हेच तीन गुण सांगतात की,
तुम्ही होतात अत्यंत बुद्धिमान!

आऊसाहेब आणि शहाजीराजे यांचेही
स्वराज्यनिर्मितीत आहे खूप मोठे योगदान,
तुम्हा सर्वांच्या संघटित प्रयत्नांमुळेच
आपले स्वराज्य झाले अधिक बलवान!

राजे, अनेक मोठमोठ्या शत्रूंना तुम्ही
नमविले करून यशस्वी रणकंदन,
अशा शूर, स्वराज्यसंस्थापक, तेजस्वी
छत्रपतींना आम्हा सर्वांचे त्रिवार वंदन!

✍ अथर्व संदीप हातवळणे

आयुष्याची सफर

हि सफर अाहे अाहे अानंदाची
स्वत: ला जाणण्याची
स्वत: ला सामान्यातून असामान्याकडे नेण्याची

हि सफर अाहे स्वत:ला अष्टपैलू बनवण्याची
आयुष्याच्या प्रत्येक कठीण प्रसंगात स्वत:ला सिद्ध करण्याची
प्रत्येक क्षणाला नवे काहितरी शिकण्याची

हि सफर अाहे अापल्या आयुष्याची
'स्व' शी संवाद साधून अात्मविश्वास वाढवण्याची
चुकांची जाणीव करून देणारी व त्यातून शिकवणारीही

हि सफर आहे आयुष्याच्या पायथ्याची
पायथ्यापासून शिखरा पर्यंत नेण्याची.........

ह्या सफरेच्या अंती मात्र एकच कोडे उमगते,
यश, किर्ती, संपत्ती हे साध्याचे अखेरचे स्थान नव्हे
तर ते मिळवण्यासाठी केलेला हा प्रवासच आनंदाची सफर आहे,
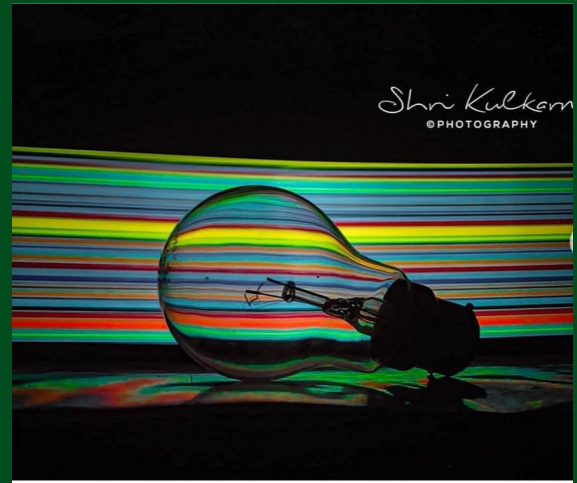आयुष्याची सफर आहे........

- समृद्धी वडगावकर
TE ENTC

CREATIVE ZONE

SHOT BY:ZOHA SHAIKH
(TE ENTC)

SHOT BY:- SHRINIDHHI KULKARNI
(BE ENTC)

- Pallavi Ner
(BE ENTC)

Government College Of Engineering Aurangabad
TEESA

SOCIAL ACTIVITIES

Swachh Bharat Abhiyan
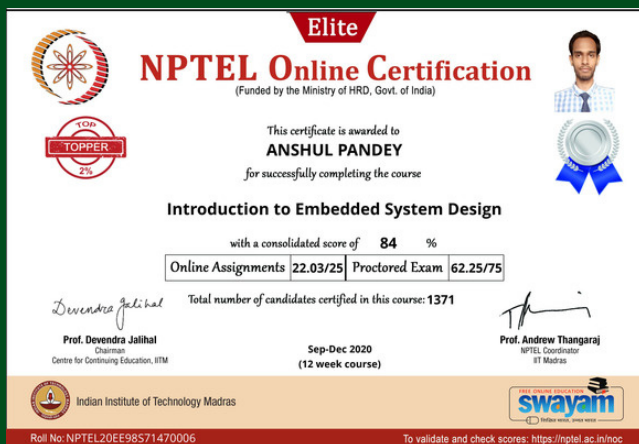
Tree Plantation

Samvedna

1) Vinay Thute

Done Two Industrial Projects one at Mahindra Tractor Company and one at Adani Power Plant Rajasthan Ltd all under 6 month internship of TABXO Labs LLP. Project were based on RFID & IOT Domain.
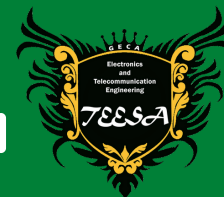
2) Anshul Pandey

Completed and topped the introduction to Embedded system Design course of Nptel .He was ranked among the top 2% of total student appeared for the corresponding nptel course.

2) Ritik Nandanwar

Completed almost 16 Freelancing orders during Covid19 Lockdown for various organisation in almost 3 months.

PLACEMENTS

SR. NO	NAME	COMPANY
1	SANJANA ELUVANGAL	TATA CONSULTANCY SERVICES
2	ATHARVA BAGAD	TATA CONSULTANCY SERVICES
3	GAURI KECHE	LARSEN AND TOUBRO, TATA CONSULTANCY SERVICES
4	VENKATESH MAHAMUNI	TATA CONSULTANCY SERVICES
5	SAMBHAV SOVITKAR	TATA CONSULTANCY SERVICES
6	ANSHUL PANDEY	TATA CONSULTANCY SERVICES
7	SHANTANU KINGAONKAR	TATA CONSULTANCY SERVICES
8	UTKARSH PATNI	TATA CONSULTANCY SERVICES
9	SHIVANI GAVHANE	LARSEN AND TOUBRO, TATA CONSULTANCY SERVICES
10	INSHRAH MIRZA	LARSEN AND TOUBRO, TATA CONSULTANCY SERVICES
11	AMAN PARATE	LARSEN AND TOUBRO
12	MAYURI THUTE	LARSEN AND TOUBRO

FROM GENERAL SECRETARY

Government College of Engineering Aurangabad is a reputed autonomous institute that's been nurturing, guiding and developing bright and aspiring engineers for the past few decades.
Electronics and telecommunication branch, is nowhere behind when it comes to adopting itself to all the modern methods and making sure the process of give and take of education runs smoothly.
And as the pandemic hit world tried to recover from the blows, our department showed utmost determination in keeping the essence of the flow of education intact.
I hope this becomes an example for everyone who wishes to put in efforts like this.

- AJINKYA GHALLE
GENERAL SECRETARY
ELECTRONICS AND TELECOMMUNICATION

FROM EDITOR'S DESK

Dear Readers,
This department of Electronics and telecommunication of Government College of Engineering Aurangabad, has been nurturing young minds with the belief that "The whole purpose of education is to turn mirrors into windows" .
We are pleased to present you the fourth edition of our 'E-magazine' the departmental magazine of TEESA. For you, we have worked hard to bring up an exhilarating flashback of the inception of the department and the events and achievements during the session 2020-2021.
We would like to thank our Head of Department **Prof .Hirekhan** and faculty coordinator **Prof.S.S.Agrawal** under whose guidance we organized many workshops and events.Also we express our thanks to the whole TEESA council for their valuable contribution in the making of this magazine.

Happy reading!

-ZOHA SHAIKH   (JOINT GENERAL SECRETARY)
VAIDEHI NARE (JOINT TECHNICAL SECRETARY)
SAURABH PAWAR (JOINT CULTURAL SECRETARY)

TEESA COUNCIL 2020-21

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
DEPARTMENTAL COUNCIL 2020-21

AJINKYA GHALLE
GENERAL SECRETARY

VINAY THUTE
VICE PRESIDENT

AMAN PARATE
TECHINICAL SECRETARY

SUDIP WADTE
SPORTS SECRETARY

PALLAVI NER
CULTURAL SECRETARY

TANAY BHATT
TREASURER

PRAJAKTA TIKHADE
LADIES REPRESENTATIVE

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
DEPARTMENTAL COUNCIL 2020-21

ZOHA SHAIKH
JOINT GENERAL SECRETARY

SAURABH PAWAR
JOINT CULTURAL SECRETARY

VAIDEHI NARE
JOINT TECHNICAL SECRETARY

SHASHANK GAUD
JOINT SPORTS SECRETARY

ESHWARI BURLAWAR
JOINT TREASURER

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION
DEPARTMENTAL COUNCIL 2020-21

VEDANT WAKHARE
CO. GENERAL SECRETARY

RUTUJA NAIK
CO. CULTURAL SECRETARY

ONKAR KAPALE
CO. TECHNICAL SECRETARY

KARTIK PATIL
CO. SPORTS SECRETARY

TANMAY KHANDELWAL
CO.TREASURER