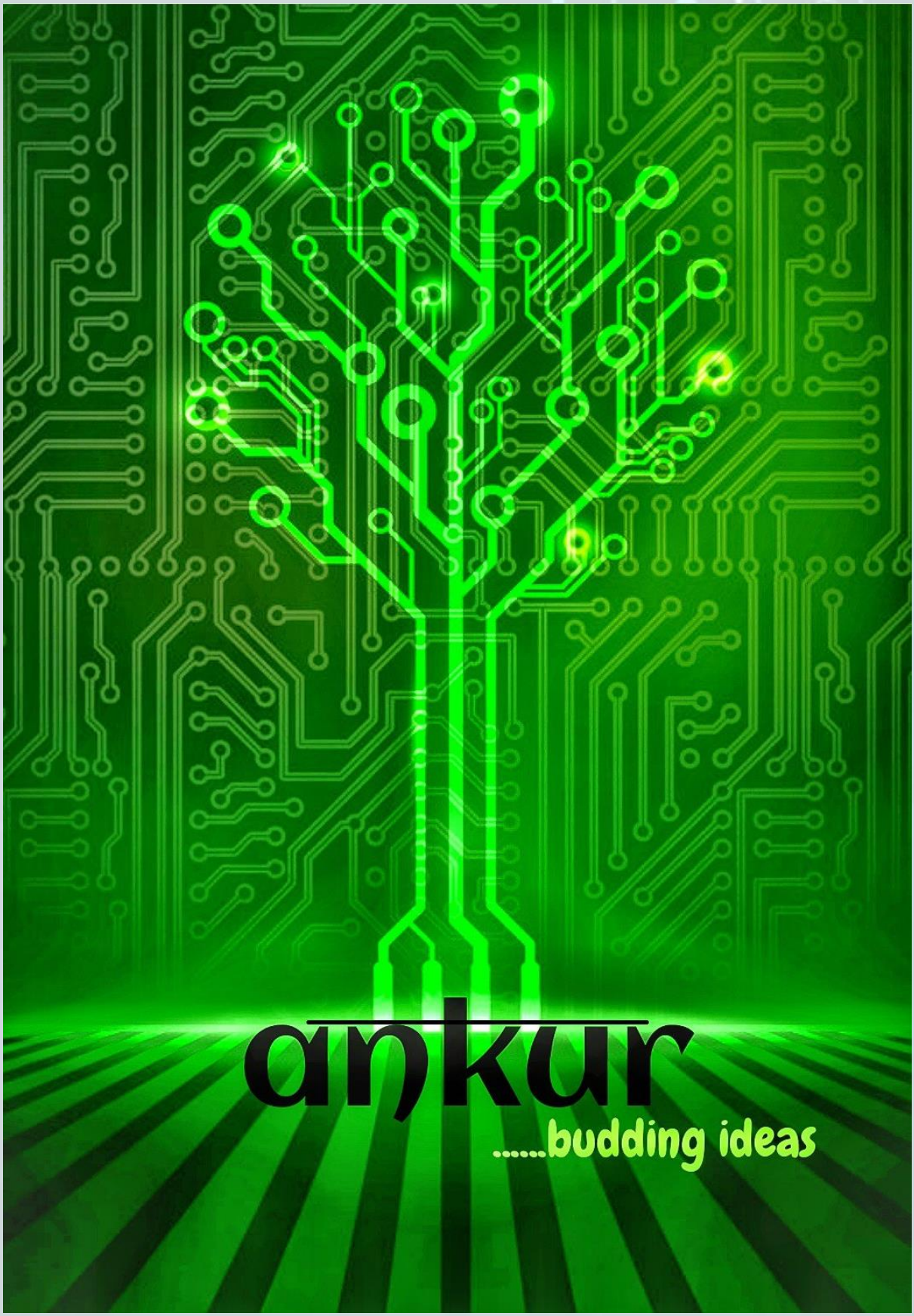
ankur
.....budding ideas

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From the HOD's Desk:

It gives me immense pleasure to pen a few words as prologue to our department project idea book **"ANKUR 2k23"**, exclusively a collection of the latest project ideas which bears immense potential of shaping into astounding startups in the fields of Biomedical, Robotics, Automation, Signal processing, Image processing, Internet of Things, Machine Learning and many more.

The Electronics and Computer Science (Formerly known as Electronics and Telecommunication Engineering) is an erratically changing and ever evolving branch. Innovation, orientation and an ever expanding base serve as a firm foundation for the latest development in the department.

Our department is imparting the required technical and practical knowledge to the students.
Electronics and Telecommunication department has always been a source of development may be its social, cultural or technical.

Launching **"ANKUR 2k23"**, a project idea book of Electronics & Telecommunication department is an attempt to be a part of global connection.

"ANKUR 2k23" would provide a platform for aspiring engineering to gain knowledge about the latest projects in the various upcoming domains of Electronics and computer science.

The book contains project ideas, applications and student achievements in the field of research and publications and many more. We motivate and guide students to present/publish the research paper on successful completion of their projects in the reputed international conferences or journals.

We invite our readers to respond to the **"ANKUR 2k23"** with suggestions, criticisms and scope of improvement so that this book takes a genuine interactive shape.

Dr. Vidhya D S

HOD ECS

``

DON BOSCO COLLEGE OF ENGINEERING
FATORDA- GOA

DEPARTMENT OF ELECTRONICS AND COMPUTER SCIENCE
(Formerly known as Department of Electronics & Telecommunication Engineering)

2022 – 2023

"Ankur 2k23"

……budding ideas

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4.2 Footprint city App

5. IoT

5.1 PAMME! Predictive Automated Machine Monitoring Expert

5.2 Automated Cocktail Making Machine

Underwater ROV (Remotely Operated Vehicle)

``

Domain/Area of Interest: Robotics

Project Members:

Mr. Adarsh Suryavanshi

Mr. Pradin chitari

Mr. Utkarsh Balaji

Mr. Abdullah Abbad

Project Guides:

Prof. Kimberly Morais

Prof. Mohini Naik

Brief Idea of project:

The aim of this project is to design an underwater ROV with the ability to move freely and be easily controlled. This ROV will utilize the Arduino platform for processing and will be controlled via a remote controller. It will incorporate RF modules for seamless data transmission. The ROV's thrusters will enable both horizontal and vertical propulsion, ensuring

``

smooth navigation. Equipped with a camera, this underwater ROV will find applications in sea expeditions, shipwreck investigations, military operations, and commercial use. Additionally, its modular design allows for the integration of various equipment based on specific project requirements.

Applications:

Oil And Gas Industry, Military

Working Model:

Loco Board

Domain/Area of Interest: Robotics

Project Members:

Ms. Adhira Joan Coutinho

Mr. Britney Viendra Mascarenhas

Mr. Jemimah Gonsalves

Project Guides:

Prof. Michelle Araujo e Viegas

Prof. Kimberly Morais

Brief Idea of project:

In industrial settings, the transportation of finished goods can often pose various challenges. Manual handling often requires the use of various tools to lift heavy items, and in some cases, automated machines can be less cost-effective compared to manual labor.

To address these challenges, Loco Board offers an innovative solution. This gesture-controlled board allows for effortless transportation of goods,

``

providing an alternative method. By utilizing hand movements, users can control the board to move in forward, backward, left, and right directions. Additionally, the board is designed to carry a reasonable amount of weight, making it a practical and cost-effective device for transporting final products in industrial companies

Applications:

Loco Board can be used for goods transportation in industries, healthcare, film, airports, and logistics hubs, providing an efficient and cost-effective solution.

Working Model:

``

Smart Luggage

Domain/Area of Interest: Robotics, Instrumentation and Wireless Sensor Networks

Project Members:

Mr. Kingsley Monteiro

Mr. Saish Fondekar

Mr. Nilay Kurtarkar

Project Guides:

Prof. Samantha Cardoso

Prof. Yeshudas Muttu

Brief Idea of project:

A smart bag is an application-specific design that might be handy when traveling, particularly through airports. Smart implies clever, and the bag will be able to carry out the many features for which it was built. Arduino, the brain of the proposed system will control all distinguishable features. The power bank attached to the bag will not only charge electronic appliances like mobile and laptops but also power the entire system. Another feature is to tackle the problems that arise due to bag theft. The

``

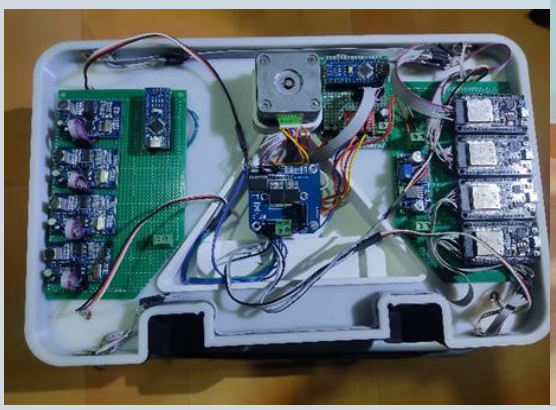
Bluetooth security system gets activated when the owner of the bag goes far away from the smart suitcase. After it gets activate, it will produce an alarm sound through the owner's wrist band making the owner alert of the situation. The smart bag also detects obstacles in its path with the help of ultrasonic sensors. The prime feature of the Smart Luggage System is the "follow the owner" feature where the owner of the bag won't have to carry all the heavy load or drag the bag through the airport which will let both his hands be free so he can do some other work while his luggage follows him automatically.

Applications:

Effortless Travel, Loss Prevention, Obstacle Avoidance and Hands-Free Mobility.

Awards and Participation: Participated for PRAKALP 2K23 and Participated for TECHNIX 2K23.

Working Model:



``

Design And Implementation Of RC Robot For Multipurpose Spraying In Agriculture Appication

Domain/Area of Interest: Image processing, Robotics

Project Members:

Mr. Aadnan Khan

Mr. Zarif Hasan Aga

Mr. Mohd. Adnan Khan

Project Guides:

Dr. D.S Vidhya

Prof. Michelle Araujo E Viegas

``

Brief Idea of project:

The project is to build a remote controlled robot where a user can control it remotely with a pesticide loaded in the tank carried by the RC robot, by this way a user doesn't have to carry a pesticide and go in a field for spraying it. It can also control a nozzle arm for spraying pesticide remotely.

Applications:

Agriculture, Farming, Pesticide spraying

Working Model:

``

Wireless Charging of Electric Vehicles

Domain/Area of Interest: Robotics and Green Energy

Project Members:

Mr Gilferd Calisto Gonsalves

Ms. Swati Shet Kudalkar

Ms. Simmi Vinay Mhapsekar

Project Guides:

Prof. Flavia Leitao

Prof. Vidhya D.S

Brief Idea of project:

Automobiles have been used by mankind for transportation from one location to another. Internal combustion (IC) engines power these vehicles.

``

However, traditional charging methods for vehicles have led to various challenges and issues. These include pollution caused by charging stations, the time consumed to charge a vehicle at a charging station, the inconvenience of cables and wires for charging, and the need to wait at a specific location until the charging process is completed. These problems highlight the limitations of traditional charging systems and the need for more efficient and user-friendly solutions. In response to the challenges faced by traditional charging methods, the focus of this report is on charging electric vehicles with renewable energy. By utilizing renewable sources of energy such as wind and solar power, it is possible to overcome the drawbacks of traditional charging systems. Wireless charging systems provide a convenient and efficient solution, eliminating the need for physical connections. The project explores the utilization of wind energy and dynamo technology for charging battery storage devices while the vehicle is in motion. Furthermore, it investigates the conversion of solar energy into electrical energy to charge the battery, providing a sustainable and eco-friendly solution to the challenges faced by traditional charging methods. The most recent automotive innovations are assisting in improving fuel efficiency and lowering emissions. Electric vehicles, which use batteries and electric motors to power the vehicles or cars, are one such technological advancement that helps to reduce the number of emissions produced

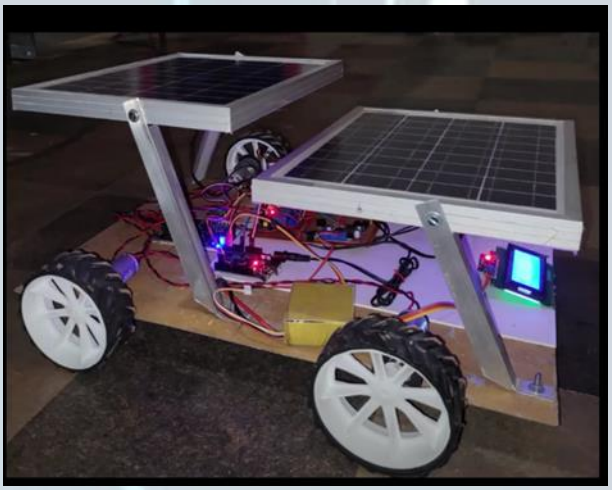
Applications:

EVs can serve as mobile energy storage units, storing excess renewable energy during peak times and releasing it back to the grid when demand is high or renewable generation is low. This helps stabilize the grid and reduces greenhouse gas emissions. Renewable energy sources, like solar offer lower long-term costs compared to fossil fuels, enhancing energy security and reducing vulnerability to global fuel market fluctuations. This promotes the adoption of renewable technologies and provides sustainable solutions for EV charging stations in remote areas, enabling clean transportation options.

``

Awards and Participation: Participated in “TECHNIX 2023” National level Project Competition.

Working Model:



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Campus Navigation App for Institute

Domain/Area of Interest: Augmented Reality

Project Members:

Ms. Vidula D Naik Gaonkar

Ms. Aldrika Pereira

Mr. Nigel Ignatius Dsouza

Project Guides:

Prof. Deron Rodrigues

Prof Flavia Leitao

Brief Idea of project:

It's difficult for newcomers in the college campus to find the required destination. The interior architecture of many buildings such as hospitals and university campuses which includes a lot of departments is confusing to direct people inside a closed infrastructure who are in it for the first time. This leads to wastage of time. So, there must be a system that will

``

guide and help visitors and also students to get to their desired places from their current location. Therefore, we have come up with a mobile application for this purpose time.

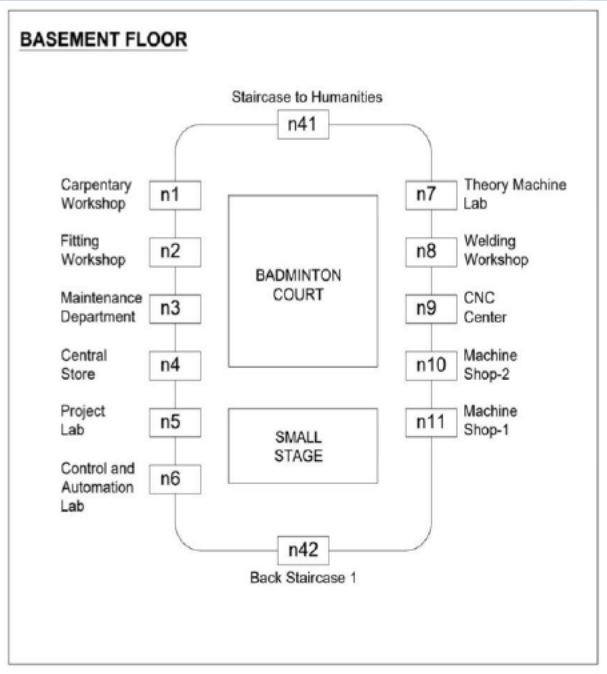
Almost all people, including students, use smartphones. So, a map application will be most helpful to locate the desired place and shortest path from the current location.

The navigation system makes campus navigation technique here more accurate, realistic, and easy to use and understand. The technologies used for the implementation of this application include Artificial Intelligence and AR. The resulting application, which is downloadable from the college website enables the user to find paths to specific locations and provide location-based information on buildings, road, and other facilities in the campus.

Applications:

This application developed offers visitors the ability to explore university campus facilities via mobile devices.

Working Model:



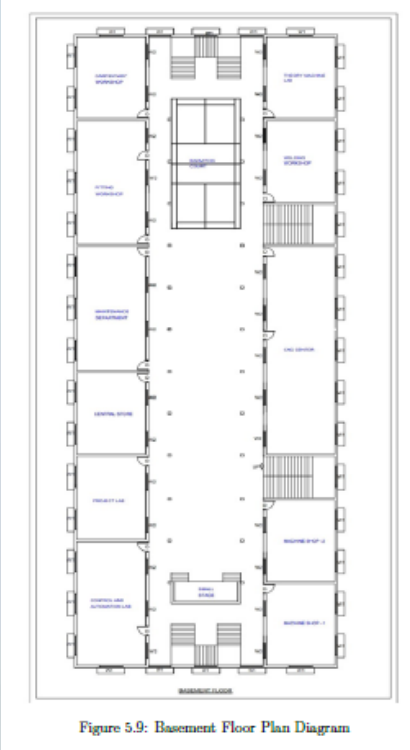


Figure 5.9: Basement Floor Plan Diagram

``

Advanced Smart Mirror

Domain/Area of Interest: Artificial Intelligence

Project Members:

Mr. Sujit Patil

Mr. Eshan Lotlikar

Mr. Pradyumn Karapurker

Project Guides:

Prof. Samantha Cardoso

Prof. Anisha Cotta

Brief Idea of project:

The purpose of this project is to showcase the new advancements in technology with the creation of a Smart Mirror that integrates Artificial Intelligence. The Smart Mirror features a graphical interface that displays various information such as time, date, day,month, year and more.

``

Additionally, we have integrated Alexa as a voice assistant for the mirror, allowing users to access their emails easily. This product is especially useful for busy individuals who want to stay informed and multitask while getting ready. one can receive information while completing daily grooming tasks.

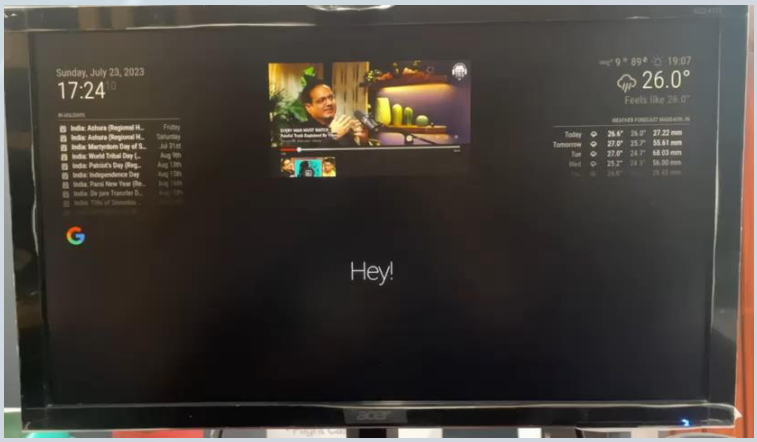
The result is a prototype of the smart-mirror which serves as a companion to the user and offers various benefits. The mirror has the ability to control appliances connected to it through simple vocal commands. This innovation brings various ideas together in one product powered by a Raspberry Pi 4, a pocket-sized personal computer.

The mirror also displays social media notifications and can switch on/off appliances through speech-to-text and text-to-speech engines. The main goal of this home automation system is to make life easier for busy individuals and older people. This project provides two main contributions: the graphical interface of the Smart Mirror and the integration of Alexa as a voice assistant.

Applications:

1. Home Automation

Working Model:



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Automated Turrent System with Intelligent Object Tracking

Domain/Area of Interest: Robotics , Machine Learning and Computer vision

Project Members:

Ms. Jefin Sam John

Ms. Naik Ajinkya Ramnath

Mr. Surawase Aniruddha

Project Guides:

Prof. Melba D'souza

Dr. Shreyas Simu

Brief Idea of project:

India has a long border that passes through a variety of terrains and skirts around 5 countries. The act of safeguarding this stretch is a straining task on the border patrol force and requires a sizable amount of manpower. Our project aims to mitigate this task by creating a system that provides automatic surveillance and deterrence. The system is essentially a motorized gun mounted on top of a control system paired with computer

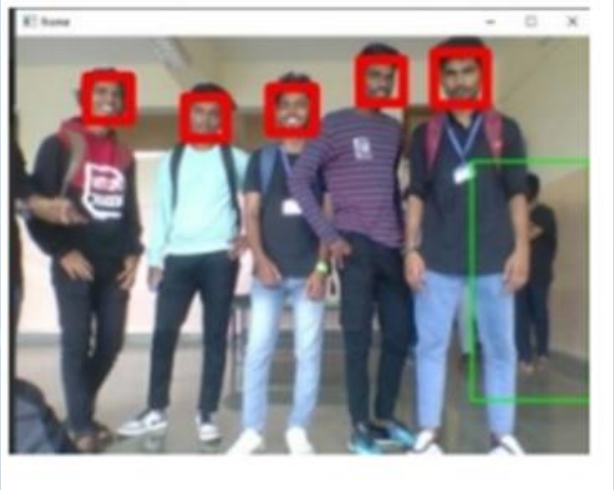
``

vision and object tracking the control system consists of two Stepper motors that each are responsible for their movement on each axis. It also includes a solenoid to pull the trigger of the gun mounted atop it. The motors duplicate the aiming and handling movement that would otherwise be performed by a stationed soldier. The computer vision aspect of the project performs real-time video processing using two video inputs, an HD camera that captures regular footage and an infrared camera that captures thermal signatures emitted by living beings. It is up to the program on the microprocessor to perform video processing algorithms to identify and classify objects into various categories. A decision making algorithm will determine which targets are to be eliminated and in whichever order.

Applications:

Object Detection and Tracking

Working Model:



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Development of Generalized Model to Classify Multi-Frequency POLSAR data

Domain/Area of Interest: Machine Learning

Project Members:

Mr. Sayed Abul Fazal

Ms. Anjima Rajesh

Mr. Arbaaz Shaikh

Project Guides:

Prof. Deron Rodrigues

``

Brief Idea of project:

Polarimetric Synthetic Aperture Radar (PolSAR) is an advanced technique of SAR remote sensing in which fully polarimetric properties of the transmitted and received electromagnetic waves are used to characterize the scattering behavior of different objects/scatterers within a SAR resolution cell. On the one hand, optical sensors are passive, gathering information in the visible and near-infrared sections of the electromagnetic spectrum. And on the other hand, SAR sensors are active, collecting information in the microwave portion of the spectrum. Till today there are dedicated machine learning models which use data of one frequency band either L, P or C band. The model is trained only for the classification of a single band of frequency. Here we are trying to develop a machine learning model that will classify P, L and C bands. We extract the training areas and give it to the classifier and it will classify the data accordingly. The proposed model for multifrequency classification will provide a more robust and reliable solution compared to single band classification techniques.

Applications:

Crop field classification, Land cover classification

Awards and Participation:

Participated and shortlisted for the final phase of “ThinkTech2022” National Level project idea competition

Working Model:

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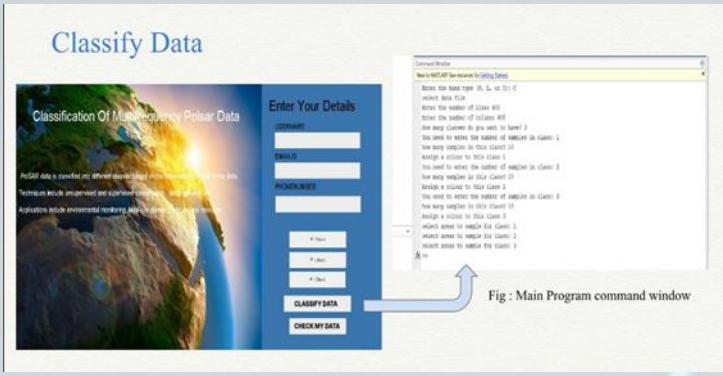


Fig : Main Program command window

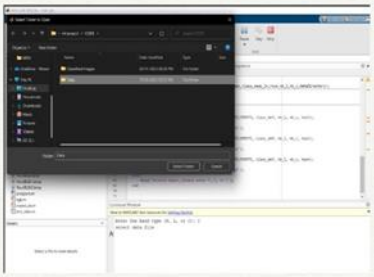


Fig : Record file directory and take dimensions

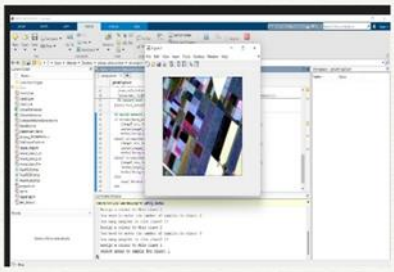


Fig : Taking ROI from User

33

CONFUSION MATRIX

- Technique for summarizing the performance of a classification algorithm.
- The classifier here gives an accuracy of
- 99.3 % for P band ,
- 97.22% for L band,
- 99.9% C band .

The classes chosen here are Rapeseed, Wheat and Barley.

Fig : Confusion Matrix

``

Smart And Secure Door Lock System

Domain/Area of Interest: Machine Learning

Project Members:

Ms. Faazila Ibrahim Mulla

Ms. Muskaan Kalim Khan

Mr. Sarah Sheikh

Project Guides:

Prof. Trima P Fernandes e Fizardo

Prof. Selvyn Fernandes

Brief Idea of project: Theft and crime rates are increasing every day in our society. Thieves nowadays can easily open our regular door lock and can be left unrecognized. To counter this, we have proposed a security system for a much secure environment. The most important feature of any home

``

security system is to detect the person who enter/exit the premises. Instead of monitoring that through password or pin, unique faces can be made into use as they are one's biometric trait, to prevent robbery in a secure environment like a home or any other premise. The goal of this project is to build a smart, easy-to-use door lock that allows key-less unlocking and thus providing security. It allows users to enter hands-free by using face recognition via a camera mounted during day as well as night time. The system is made up of three major components; which includes a back-end (database), an on-board logical unit and the user interface (intruder alert). When a person tries to enter a home, the camera setup captures the face of the person affronting the camera, compares it with the pre-stored images in the database. If the face matches with the pre-stored ones, the door is unlocked else an intruder alert is sent to the owner.

Applications:

Smart and secure door lock systems have numerous applications across industries and residential settings. They offer enhanced security, convenience, and remote access control. Some key applications include residential security, commercial buildings, vacation rentals, healthcare facilities, educational institutions, data centers, and government facilities. These systems can also be used in shared office spaces, elderly care facilities, the hospitality industry, and property management to streamline access and improve overall security. As technology advances, smart door lock systems are becoming an integral part of various industries and everyday life.

Working Model:

``

Web Based Application For Facilitation Of Government Schemes for Persons with Disabilities

Domain/Area of Interest: Web-design, Machine Learning

Project Members:

Ms. Preksha Karpe

Ms. Rashee Gude Prof.

Mr. Aakash Lamani

Project Guides:

Prof. Dr. Shreyas Simu

Prof. Mathilda Colaco

Brief Idea of project:

There are various flagship schemes launched by both the Central Govt and State Govt of Goa for persons with disabilities (PwD). However, many people with disabilities and the ones who look after them are not aware of these schemes and are thus unable to benefit from them. Also, the Central

``

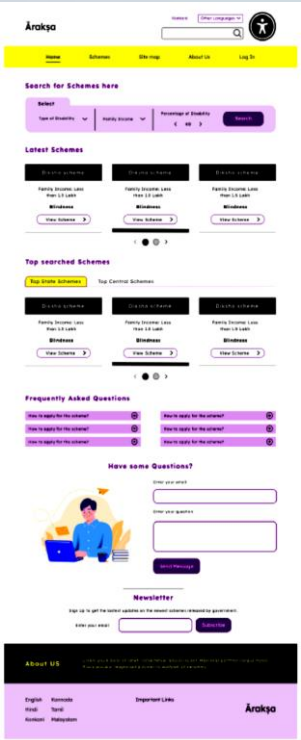
Government website that is currently available for this purpose is difficult to navigate, lacking a proper user interface, and thus the limiting accessibility features may result in a bad user experience. To tackle this issue, a web- based application can be designed with a good UI/UX (User Interface/ User Experience) that is easy to navigate through and with features that include a screen reader, color contrast, and other accessibility features for PwD. The schemes could be categorized

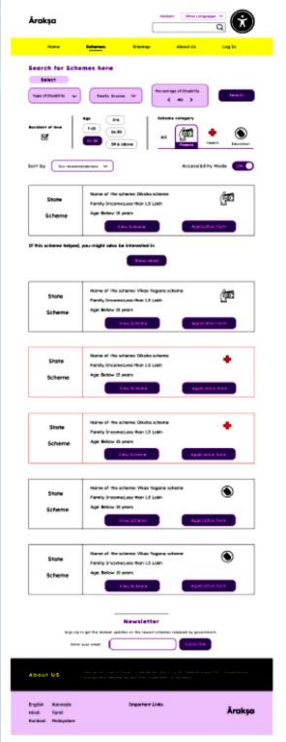
based on education, healthcare, finance, etc. that are released by the state and central governments. Furthermore, the web-based application would also recommend schemes to the user based on factors like type of disability, percentage of disability, and so on.

Applications:

The goal of building a website that supports people with disabilities was achieved by using Concrete CMS and integrating accessibility features. The website was tested and determined to be accessible. Text summarization was also used to generate a summary of the schemes for easy interpretation. The second goal was also met by recommending relevant schemes using machine learning techniques and also separately using the Concrete CMS filtering system.

Working Model:





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e-LAAJ your Healthcare Companion

Domain/Area of Interest: Biomedical, App Development

Project Members:

Mr. Deval Vernekar

Ms. Anrea Peixoto

Ms. Manisha Gaonker

Project Guides:

Prof. Anisha Cotta

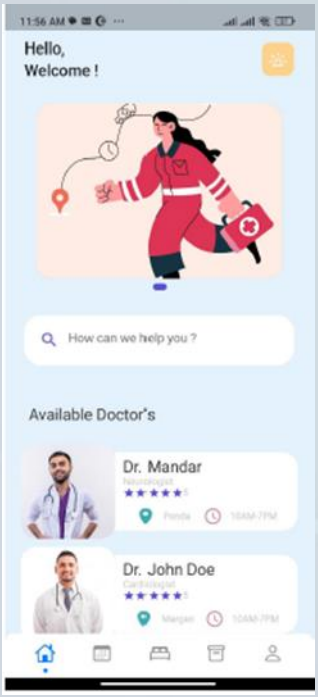
Brief Idea of project:

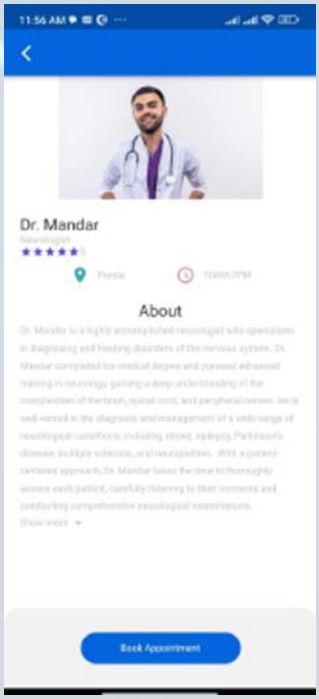
A medical app is a mobile application that provides patients with convenient and accessible healthcare services. The app enables patients to manage various aspects of their healthcare, such as booking doctor appointments, checking hospital bed availability and viewing medical records. The app can also help to reduce wait times, improve

``

communication between patients and doctors, and increase patient engagement with their healthcare. The development of a medical app requires careful consideration of the various processes and data involved, as well as the relationships between entities. With the right design and implementation, a medical app has the potential to transform the way that patients access and manage their healthcare. Therefore here, we suggest "e-LAAJ Your Healthcare Companion,"-Application which functions as a handling and managing system that aids doctors and patients in scheduling appointments with doctors and monitoring their health conditions. Both patients and doctors can manage their online appointment scheduling with the use of this system.

Working Model:





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Footprints city app

Domain/Area of Interest: Mobile Application

Project Members:

Mr. Mandar Borkar

Mr. Preston Almeida

Mr. Hrishikesh Prabhu

Project Guides:

Prof.Mathilda Colaco

Prof. Trima Fernandes e Fizardo

Brief Idea of project:

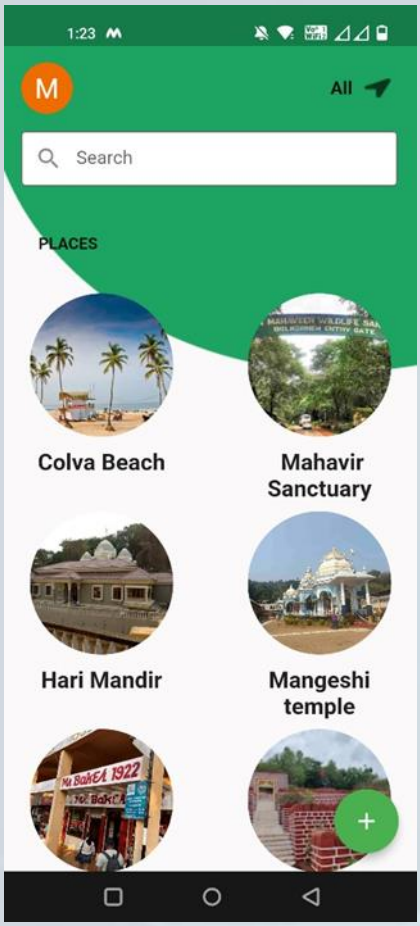
Goa, which is a renowned tourist destination in India, is well-known for its stunning beaches, vibrant culture, and mouthwatering cuisine. Our application uses a location-based travel software that facilitates travelers' exploration of major Goa tourist attractions. Users of the app may quickly locate and navigate to popular sites, eateries, and other points of interest through GPS technology.

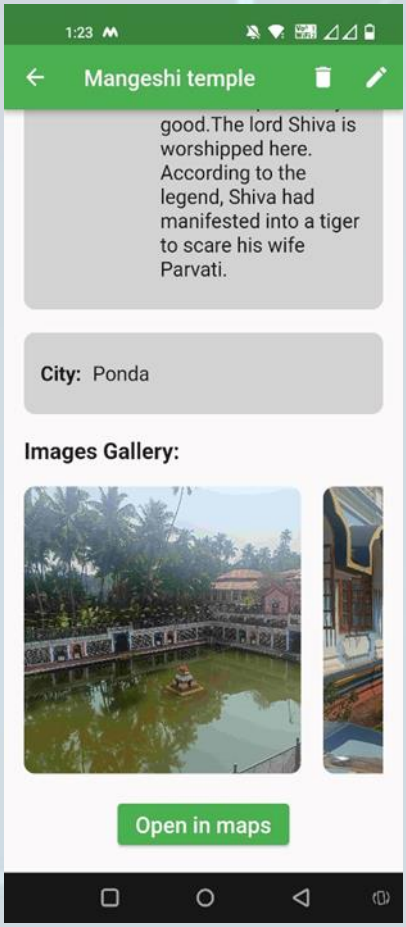
``

Applications:

Application will run on mobile phones

Working Model:





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PAMME! Predictive Automated Machine Monitoring Expert

Domain/Area of Interest: IoT

Project Members:

Mr. Maynard Gomes

Mr. Duane Antao

Ms. Reeva Caldeira

Project Guides:

Prof. Selvyn Fernandes

Prof. Yeshudas Muttu

Brief Idea of project:

Machines are an integral part of our lives and moreover they are very vital for the survival of any industry. Hence, any disruption in the functioning of a machine can cause huge operational and financial losses. By studying various critical parameters of running machines such as vibrations and temperature, and further analysing recurring patterns, we can make informed decisions regarding the health of the machine. In this project, through data collection by sensors we can examine the processed data and

``

conclude on the functioning status of the machine using various machine learning techniques.

Applications:

- Reduce downtime and improve equipment reliability: The primary goal of predictive maintenance is to minimize equipment failure and the associated downtime by scheduling maintenance before a breakdown occurs.

- Minimize maintenance costs & improve safety: By scheduling maintenance proactively, organisation's can minimize the cost of unscheduled repairs and reduce the need for emergency maintenance.

- Enhance maintenance planning and decision-making: Predictive maintenance provides organisation's with valuable insights into equipment performance, enabling them to make informed decisions about maintenance strategies and resource allocation.

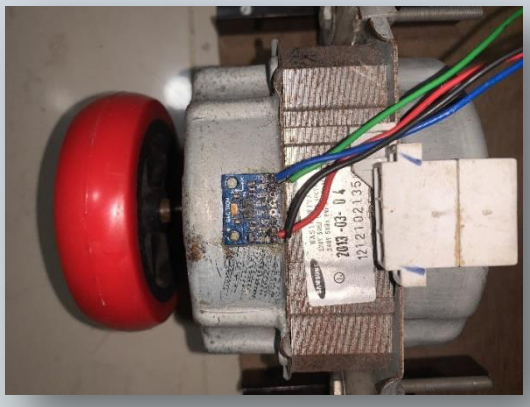
- Improve equipment performance: Predictive maintenance can help organisation's to identify equipment that is underperforming and take steps to improve its performance.

- Enhance overall system efficiency: By reducing the risk of equipment failure, predictive maintenance can help organisation's to improve the efficiency and reliability of their overall systems and processes.

- Monitor and track equipment performance over time: Predictive maintenance provides organisation's with the ability to monitor equipment performance over time and track changes in performance, allowing them to identify and address performance issues before they become critical.

Awards and Participation: ThinkTech 23

Working Model:



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Automated Cocktail Making Machine

Domain/Area of Interest: IOT

Project Members:

Ms. Rajat Balaji Naik

Ms Bipin Shashikant Pagare

Mr Nauman Abdul Sherpur

Project Guides:

Prof. Mohini Naik

Prof. Melba D'souza

Brief Idea of project:

The purpose of this project is to offer a smart next generation cocktail maker machine that automatically prepares cocktails for customer at a bar or restaurant. This machine is simply operated by user's voice command or through app which will display a menu of cocktail drinks to the user, and the user can select the drink from the app. The Automated Cocktail Maker machine has the following features such as Choosing from a Menu of Cocktail drinks through app, automatic glass detection and activation, inbuilt drink recipe storage, making drinks as per recipe with

``

measurement, smart user interface through app. The automated cocktail maker machine is capable of mixing drinks in precision with a friendly user interface to help bars to be more productive The cocktail machine can be customized to make any number of drinks, by changing or increasing the input drinks.

Applications:

1. Integration with Smart Home Systems: Connect the automatic cocktail maker machine with smart home systems, such as voice assistants or home automation platforms. This would allow users to control the machine using voice commands, schedule cocktail preparation, and integrate it seamlessly into their smart home ecosystem

2. Cloud-Based Recipe Database: Create a cloud-based recipe database that can be accessed by the automatic cocktail maker machine. This would enable users to access an extensive collection of cocktail recipes, receive updates for new recipes, and share their own creations with other users.

3. Automated Drink Garnishing: Integrate mechanisms for automated drink garnishing, such as adding fruit slices, herbs, or decorative elements to enhance the presentation of the cocktails. This would add an extra level of visual appeal and professional touch to the drinks.

Working Model:

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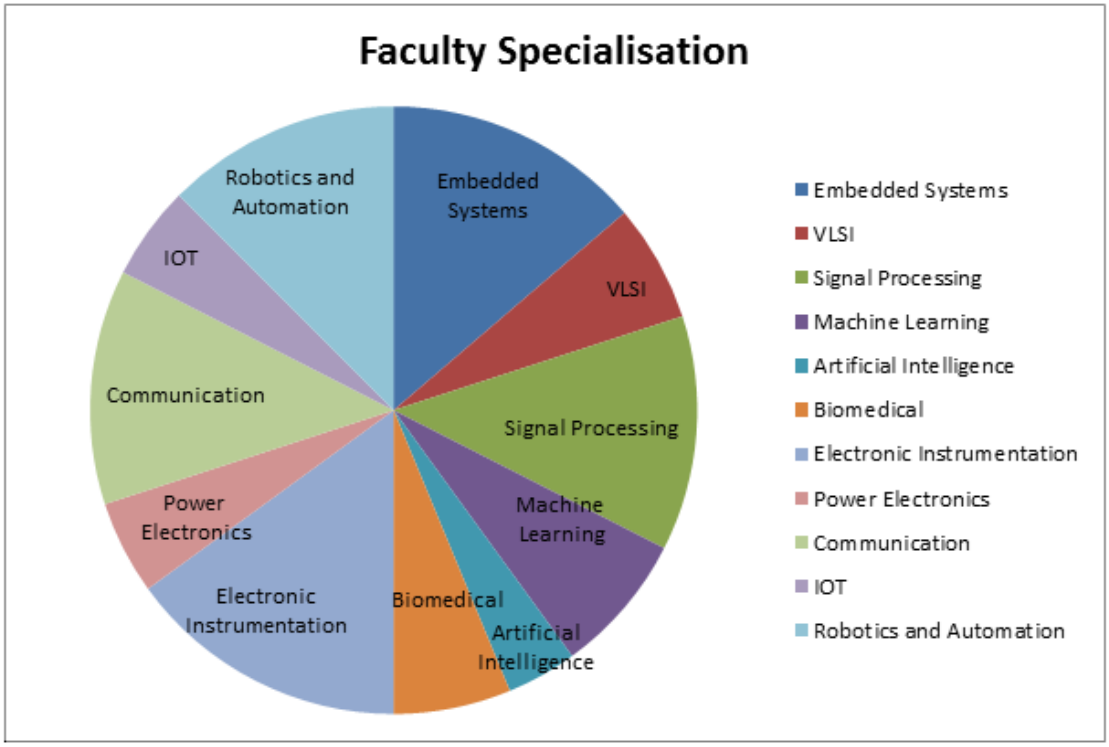
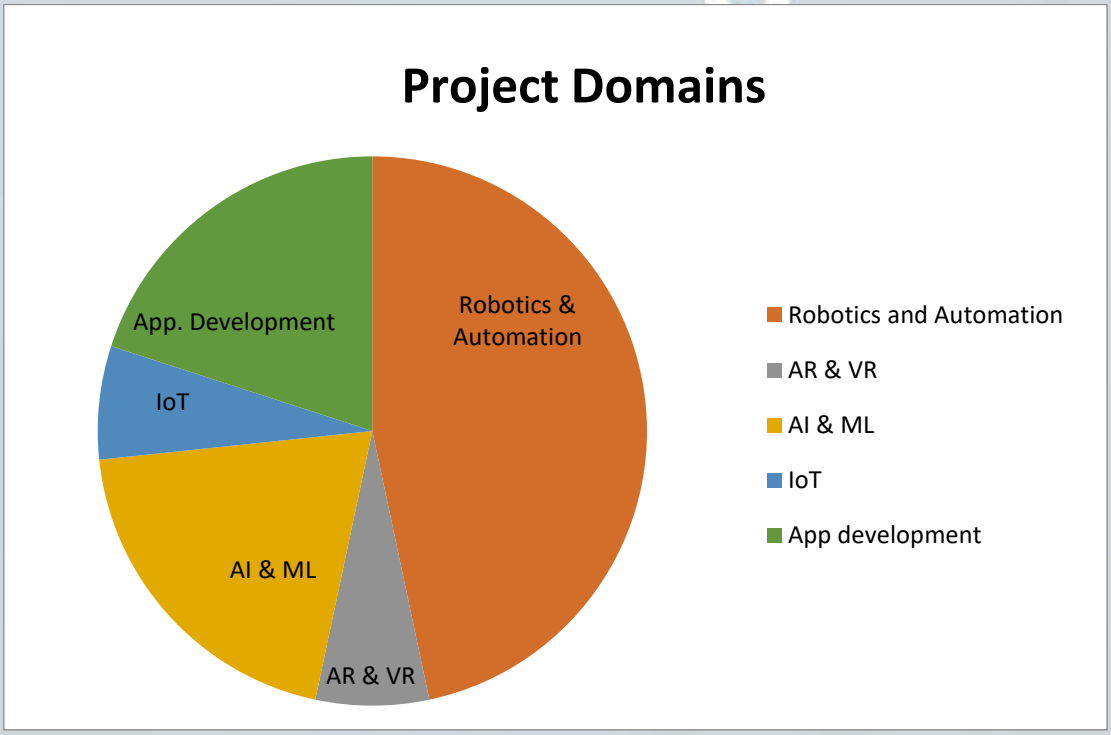

Faculty Specialisation
Embedded Systems
VLSI
Signal Processing
Machine Learning
Artificial Intelligence
Biomedical
Electronic Instrumentation
Power Electronics
Communication
IOT
Robotics and Automation


Project Domains
Robotics & Automation
AR & VR
AI & ML
IoT
App development

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BATCH: 2019-2023

DEPARTMENT OF ELECTRONICS & COMPUTER SCIENCE (Formerly known as Department of Electronics & Telecommunication Engineering)

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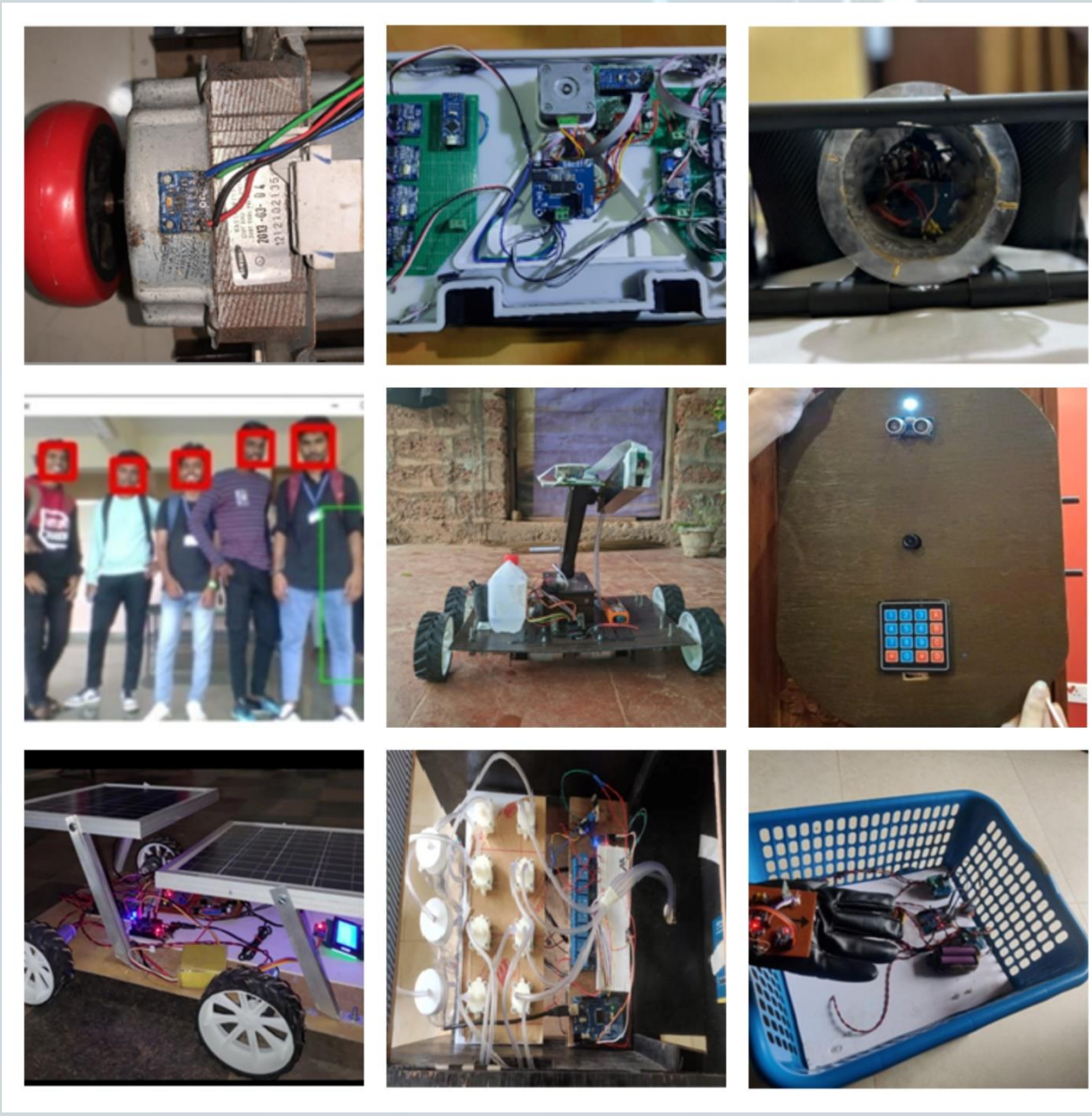
AT A GLIMPSE…



It gives me immense pleasure to present to you "Ankur"-2023. Fresh hopes of a bright future keep us going on in the post pandemic era. The technological landscape is constantly modifying and improving as each day passes – change is the only constant. Ankur 2k23" gives an insight into the projects in the latest and upcoming fields such biomedical, robotics, automation, augmented reality and virtual reality to name a few.

I would like to extend my heartfelt gratitude to our Director, Rev. Fr. Kinley D'Cruz for his unflinching support in all our endeavours. Special thanks to our Principal, Dr. Neena Panandiker for her constant motivation. My gratitude goes out to our HOD, Dr. D.S. Vidhya and her support and guidance. The quality of every project exemplifies the hard work and dedication of staff and students of the ETC Department. A special thank you.

I look at this humble beginning with a great hope that many more students will

catch the fire of innovation and contribute to technology in a big way.

Asst. Prof. Anisha Cotta
Project Coordinator
Dept. of Electronics and Computer Science

It is indeed a happy moment to introduce the project idea book "Ankur 2k23", a collection of bright concept, innovative software and hardware projects implemented by our final year Electronics and Telecommunication Engineering students.

"Ankur 2k23" gives an insight into the projects in the fields of Image processing, Machine Learning, IoT, Computer vision, Biomedical, Automation, Robotics etc.

I appreciate the efforts of all the students and their guides and wish all the students great success and career ahead.

I do hope that "Ankur 2k23"inspires the minds of many students, innovators and readers.

Asst. Prof. Melba D'souza
Project Coordinator
Dept. of Electronics and Computer Science

It is my privilege to have my short note penned down for this issue of our Project Idea Book.

I have been involved with student's project report documentation very closely. Right from providing a semester-long training in a Professional documentation tool: LaTeX, to solving doubts of each project group, the journey has been a challenging but exciting one! I can proudly say that this time all our project reports are in the same format.

I appreciate all the students for showing a lot of interest in learning and getting trained in LaTeX. They are the ones who have converted my efforts into a perfect professional document.

Asst. Prof. Yeshudas Muttu
Final Year Project Report Incharge
Dept. of Electronics and Computer Science

DON BOSCO COLLEGE OF ENGINEERING, FATORDA

DEPARTMENT OF ELECTRONICS AND COMPUTER SCIENCE

VISION

To evolve into a Holistic Learning Hub that moulds technologically proficient engineers in the field of Electronics and Computer Science; contributing to the global industry and society with Integrity, Ethics and Professionalism as envisaged by Don Bosco

MISSION

- **To impart quality education abreast with advances in technology and transform students into competent professionals.**
- **To promote innovation, research and entrepreneurship through collaboration and networking.**
- **To encourage various skill enhancing activities and extra-curricular activities to foster high levels of work ethics and responsibility for a better society.**