

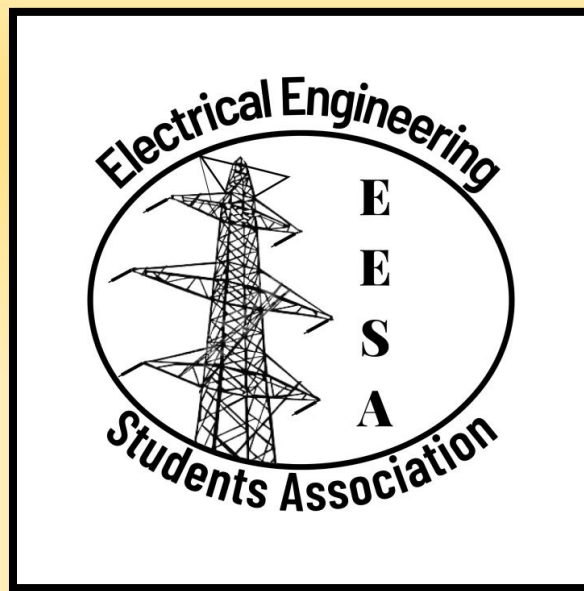
**PUNE VIDHYARTHI GRIHA'S COLLEGE OF  
ENGINEERING AND TECHNOLOGY & GK PATE  
(WANI) INSTITUTE OF MANAGEMENT, PUNE**

**OHHM**

**RECTIFY MISTAKES, AMPLIFY SKILLS**



**ELECTRICAL ENGINEERING STUDENT'S ASSOCIATION**



**EESA**  
Presents

**OHM**

**2021-2022**

The Annual Souvenir of  
Electrical Engineering Students' Association

DEPARTMENT OF ELECTRICAL ENGINEERING  
Pune Vidyarthi Griha's  
College of Engineering & Technology &  
G. K. Pate (Wani) Institute of Management  
44, Vidyanagari, Parvati, Pune – 411009

# Schedule Form of Declaration

**Title :**

OHM 2021-22 EESA,  
PVG's COET  
Parvati Pune-411009

**Magazine Committee:**

Magazine Secretary:  
Shubhangi Pagare  
Jt. Magazine Secretary:  
Samruddhi Sutar

**Languages:**

- ✓ English
- ✓ Marathi
- ✓ Hindi

**Nationality:** Indian

**Publisher :**

Prof. Dr. Mrs V. A. Joshi

**Address :**

Pune Vidyarthi Griha's  
College of Engineering &  
Technology & G. K. Pate (Wani)  
Institute of Management.  
Pune – 411009

**Periodicity:** Annual

**Printed By :**

**Owner :**

EESA PVG's COET  
Pune- 411009

**Edited By :** Magazine Committee

The Department of Electrical Engineering of PVG's COET, PUNE 411009 as an institute accepts no responsibility for the opinions expressed and statements made by individual authors and the contents of advertisement  
(for private circulation only)

# Department of Electrical Engineering

---

PVG's COET & GKPIM, Pune – 411009

## CORE COMMITTEE 2021-22

---

**President:** Dr. Manoj Tarambale  
I/C Principal, PVG's COET, Pune.

**Vice-President:** Prof. Dr Mrs Vrunda Joshi  
HOD Electrical Engineering Department

**Staff Incharge:** Prof. U. B. Sarode  
Dr. S. T. Gaikwad

General Secretary	: Mr. Akshay Badhe	Jt. General Secretary	: Mr. Yashraj Jambhale
Magazine Secretary	:Ms. Shubhangi Pagare	Jt. Magazine Secretary	:Ms. Samruddhi Sutar
Cultural Secretary	:Mr. Sairaj Shelar	Jt. Cultural Secretary	:Mr. Nikhil Bhoite
Library Secretary	:Mr. Narendra Dikole	Jt. Library Secretary	:Mr. Rajwardhan Ghorpade
Placement Secretary	:Mr. Vedang Kulkarni	Jt. Placement Secretary	:Mr. Hrithik Waje
Treasurer	:Mr. Varad Ninal	Technical Support	:Mr.Devwallabha Kulkarni
Class Representative	:Mr. Parth Vaze	Ladies Representative	:Ms. Anushka Lad

---

• **MAGAZINE COMMITTEE 2021-22**

Magazine Secretary : Ms.Shubhangi Pagare

Jt.Magazine Secretary : Ms.Samruddhi Sutar

Cover Page Design : Mr. Anurag Lad

Reportage : Mr. Parth Vaze

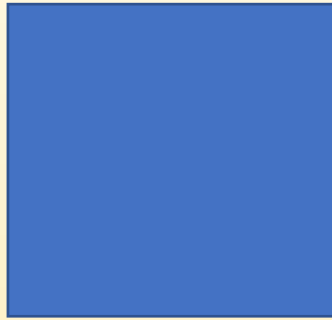
# From Principal's desk



Photo

Words by Principal

# From HOD's desk



Photo

WORDS BY HOD

# SECRETARIAL WORDS



Mr. Akshay Badhe  
General Secretary



Mr. Yashraj Jambhale  
Jt. General Secretary

Electrical Engineering Student's Association (EESA) is a student-run association that looks after the betterment of students. The EESA committee comprises 16 members from the class of the third year. Its purpose is to provide a platform to students for various activities and bring everyone closer. Prof U. B. Sarode and Dr S. T. Gaikwad guided us throughout the year.

In the academic year 2021-22, we carried out a lot of technical as well as non-technical activities even during though half of the year was struck by pandemic, we carried out activities through online as well as offline mode. The EESA Inauguration function was held on 23<sup>rd</sup> September 2021. Chief Guest for the function were our two alumni Mr. Sameer Paranjape who is an leading actor in Marathi industry and has done his debut in 2015 on television and Mr. Miresh R Sheth who is Director of Opulence Power Private Limited. Various cultural activities after the inauguration freshened up everyone.

Soft Skill webinar in association with NDLI club was organized through Chief Guest Ms.Dhivya Rajgopal. The session was attended by more than 100 students from Electrical branch of PVGCOET. Guest Lectures such as "Practical aspects of design and commission of LT HT electrical installation and electrical safety measures", "Project Management", "Importance of 3D design software by Dassault systemes" were conducted. IOT workshop was held for TE students making them more practical towards advancing technologies. Seminar on Power Quality by Mr Aniket Datar was organized for BE students. Our most successful event was National level Project Competition "Versatalia" conducted on 30<sup>th</sup> April 2022 in association with ITSA and TESA of PVGCOET. This event was a grand success with participation from large number of students , allowing them to showcase their talents.

Last but not least EESA also organized Farewell for BE (2021-22) passout students. It was a very special way to say goodbye to our seniors.

As a General Secretary and Jt. General Secretary we are thankful for the opportunity provided to us to manage EESA which helped us boost our confidence and management skills. We would sincerely like to thank Dr. Manoj R. Tarambale sir, Principal PVG's COET, and Dr. Mrs. Vrunda Joshi ma'am, HOD of Electrical Engineering Department for their valuable guidance. We would also like to thank EESA coordinators Prof. U. B. Sarode and Dr. S. T. Gaikwad for their constant guidance and support throughout the journey. Lastly, we would like to thank our fellow EESA Committee members 2021-22 for their constant spirit and determination to make every event a success. This year as half of the year was going through pandemic situation most of the events and seminars were conducted in online mode. However after re-opening of college in offline mode we tried our best to conduct our last few events in offline mode.

# CONTENTS

- Department Report for AY 2021-22
- EESA Committee 2021-2022
- Magazine Committee Words
- Library Report
- EESA Inauguration
- Versatalia National Level Project Competition
- Atlas Copco Day
- Farewell For 2021-22 Batch
- Wordy Muse
- The Ink Studio
- Starry Lens
- Art Flock
- Grab The Technology Lens
- Coordinators Words

PVG's COET & GKPIM, Pune-9  
Department of Electrical Engineering

# Departmental Report for AY 2021-22

## **VISION**

To develop Electrical Engineering Department as one of the premier facility centres for disseminating the state of art engineering education.

## **MISSION**

- Providing quality education in the field of Electrical Engineering
- Developing state of art facilities in the department.
- Creating platforms for training, research and development.
- Producing sound electrical engineers catering need of industry and other stake holders.

## **PROGRAM EDUCATIONAL OBJECTIVES**

1. To provide students with strong knowledge of Electrical Engineering to excel in industry and in higher studies.
2. To provide students with the fundamental knowledge in Engineering Sciences with more emphasis in Electrical Engineering to develop their competency in analysis, synthesis and problem solving in related fields.
3. To train students with good scientific and engineering breadth so as to provide engineering solution in an appropriate technological, global, societal, environmental, ethical and organizational context.
4. To inculcate professional qualities such as teamwork, leadership, entrepreneurial thinking, communication skills, professional thinking in students.
5. To provide students with an excellent academic environment this will motivate them for developing life-long learning abilities

## PROGRAM OUTCOMES

**Engineering graduates will be able to do:**

**PO1: Engineering Knowledge:** An ability to apply knowledge of mathematics, science and engineering fundamentals to analyze complex engineering problems.

**PO2: Problem Analysis:** An ability to identify, formulate and analyze complex engineering problems by reviewing research literature to arrive at substantiated conclusions.

**PO3: Design/Development of Solutions:** An ability to design solutions for complex engineering problems, system components or processes to meet the specified needs of the society, considering safety and environment.

**PO4: Conduct Investigations of Complex problems:** Ability to carry out experiments, simulations and apply research methodologies to investigate the data for providing valid conclusions.

**PO5: Modern tool usage:** An ability to select and apply appropriate techniques, resources and modern engineering tools such as advanced controllers and application softwares for engineering activities

**PO6: The Engineer and society:** An ability to assess and develop professional engineering practices catering various needs of society considering safety, health, regulatory and other relevant issues.

**PO7: Environment and sustainability:** An ability to apply professional engineering knowledge to understand the impact on society and environment, demonstrating the need for the sustainable development.

**PO8: Ethics:** An ability to adopt professional ethics while committing professional and social responsibilities.

**PO9: Individual and Team work:** An ability to develop multidisciplinary skills as an individual and as a member or leader in diverse teams.

**PO10: Communication:** An ability to communicate effectively with engineering community and society at large with effective documentation and presentation on engineering activities.

**PO11: Project management and Finance:** An ability to demonstrate knowledge of engineering and management principles as a member or a leader to manage project and multidisciplinary tasks.

**PO12: Life-long Learning:** An ability to understand need and develop habits of being lifelong learner to adopt to technological changes.

### **PROGRAM SPECIFIC OUTCOMES (PSO)**

**Electrical Engineering graduates will have**

- **PSO1:** An ability to acquire adequate proficiency in the area of energy systems and sustainability.
- **PSO2:** An ability to acquire multidisciplinary skills in the areas of control system and drives.
- **PSO3:** An ability to acquire core competency through industry interactions.























## Students Achievement / Laurels in various activities :

### Project Competition

Sr. No.	Project Competition	Members	Class	Competition Level	Participation / Award
1.	A project titled "Soil Monitoring Bot" secured 2 <sup>nd</sup> Rank in National level eYantra Robotics Competition (eYRC 2021-22) of IIT Bombay sponsored by NMEICT.	Aditya Yeole, Akshay Badhe, Gaurav Patil	TE Electrical	National level	Rank II and prize money Rs. 25000/-.
2.	Versatalia- IEEE sponsored National level project competition organized by PVG's COET & GKPIIM, Pune on 30 <sup>th</sup> April 2022	Shreya Tukaram Surwase, Siddhi Swapnil Naik, Renuka Shirish Joshi, Yukta Bhagwan Naik, Surbhi Bhandari	BE Electrical	National level	First prize prize money Rs 10,000/-
3.	Versatalia- IEEE sponsored National level project competition organized by PVG's COET & GKPIIM, Pune on 30 <sup>th</sup> April 2022.	Prasanna Warad, Apurva Nikam, Pranav Kale, Suyash Chavan	BE Electrical	National level	Second prize prize money Rs 5,000/-
4.	Versatalia- IEEE sponsored National level project competition organized by PVG's COET & GKPIIM, Pune on 30 <sup>th</sup> April 2022.	Aniruddha Kasture, Gururaj Rajmane, Sayali Kulkarni, Ishwari Kochak	BE Electrical	National level	Participants

5.	Versatalia- IEEE sponsored National level project competition organized by PVG's COET & GKPIIM, Pune on 30 <sup>th</sup> April 2022.	Vikrant Gaikwad, Karan Narang, Digvijay Kor, Yuvraj Aher	BE Electrical 1	National level	Participants
6.	Versatalia- IEEE sponsored National level project competition organized by PVG's COET & GKPIIM, Pune on 30 <sup>th</sup> April 2022..	Nishant Kulkarni, Sumeet Khannukar, Shreyas Pawar, Ketan Kulkarni	BE Electrical 1	National level	Participants

## Paper Presentation

Sr. No.	Title of Paper	Student Name	Classes	Competition	Level	Participation /Award
1	Harmonic Analysis of Different Types of Discharge Lamps	Susmit Tayade, Renuka Joshi, Pratiksha Gurav, Siddhi Naik	BE Elect	NCEAM - 21 GES R. H. Sapat COEMR ,Nashik-05.	UG	Best Paper Award
2	Design, Implementation and Monitoring of the Performance of Hybrid Electric Vehicles	Devarsh Wali, Mohit Brahikar, Sujay Pawar, Vivek Navgire, Vivekanand Bagul	BE Elect	IEEE SMARTGE NCON 2021		Published in IEEE xplore <a href="https://ieeexplore.ieee.org/xpl/conhome/96457">https://ieeexplore.ieee.org/xpl/conhome/96457</a>

## Extra Curricular Activities

S. No.	Event	Student Name	Class	Level	Participation/Award
1	Runsangram 2021-22	Siddhoji Sawant, Vivek Hulage, Akhil gangwar, Sumeet Khannukar, Narendra Patil ,Saurabh Mane , Vedant Shewale	BE Electrical	Intra college	Winner Football
2	Runsangram 2021-22	Divyesh Ponshe Siddhoji Sawant, Akhil gangwar, Deepak Bharadwaj ,Saurabh Mane , Akshat Deshmukh , Sahil Jadhav , Nishant Kulkarni	BE Electrical	Intra college	Participation Basketball
3.	Runsangram 2021-22	Suyash Chavan , Saurabh Mane , Prajesh Durgawale	BE Electrical	Intra college	Participation Badminton
4.	Runsangram 2021-22	Tejas Godse, anurag Gawale, Digvijay salunkhe, Uday patil , Shakib Akhtar, Madhav Pitre, Aditya Agarwal , Vikrant Gujar , Mrunal Patil	SE Electrical	Intra college	Participation Football
5.	MIT – AOE Inter College Chess Championship	Uday Patil	SE Electrical	Inter College	Participation Chess
6.	Runsangram 2021-22	Akshay Badhe , Yashraj Jambhale, Aniket Atre, Hritik Waje, Sahil Raut, Jay Jambhale, Varad Ninal Devwallabh Kulkarni,Akshay Ghuge, Jaydeep Sarode, Atharva Manurkar, Priyank Phulpagar	TE Electrical	Intra college	Participation Cricket
7.	Runsangram 2021-22	Priyank Phulpagar, Akshay Badhe Hritik Waje, Shubham Bhongale, Jay Jambhale, Sahil Raut	TE Electrical	Intra college	Participation Volleyball



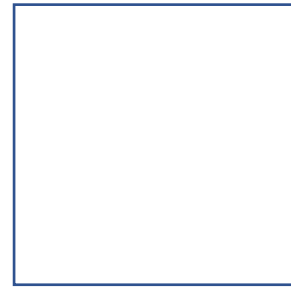



**Activity report of EESA (Electrical Engineering Students' Association)**

# EESA COMMITTEE 2021-22



Prof. U. B. Sarode  
EESA Coordinator



Dr. S. T. Gaikwad  
EESA Coordinator



Mr. Akshay Badhe  
General Secretary



Mr. Yashraj Jambhale  
Jt. General Secretary



Ms. Shubhangi Pagare  
Magazine Secretary



Ms. Samruddhi Sutar  
Jt. Magazine Secretary



Mr. Varad Ninal  
Treasurer



Mr. Devwallabha Kulkarni  
Technical Support



Mr. Sairaj Shelar  
Cultural Secretary



Mr. Nikhil Bhoite  
Jt. Cultural Secretary



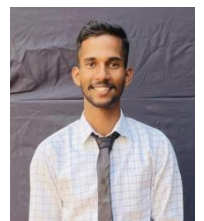
Mr. Narendra Dikole  
Library Secretary



Mr. Rajwardhan Ghorpade  
Jt. Library Secretary



Mr. Vedang Kulkarni  
Placement Secretary



Mr. Hritik Waje  
Jt. Placement Secretary



Mr. Parth Vaze  
Class Representative



Ms. Anushka Lad  
Ladies Representative

# MAGAZINE COMMITTEE WORDS



Mr. Shubhangi Pagare  
Magazine Secretary



Ms. Samruddhi Sutar  
Jt. Magazine Secretary

***“Books are the plane, and the train, and the road, they are the destination and the journey. They are home.”***

Reading is good because it improves our focus, memory, empathy, and communication skills. It can reduce stress, improve your mental health, and help you live longer. Reading also allows you to learn new things to help you succeed in your work and relationships.

We are extremely happy to bring to you all ‘OHM 2021-22’ the annual souvenir magazine of Electrical Engineering Students Association. Through OHM, we hope all students will develop the habit of reading.

Being in the Editorial Committee of the EESA Magazine "OHM 2021-22“, this year’s magazine will always be special as the academic year was conducted partly in online mode and partly in person at our college. This year’s theme for the magazine was ‘DIODE’. A diode is an electric component which allows current to only flow in the forward direction and blocks backward current flow. During these tough times, the diode teaches us to persevere and keep moving forward with everything we have got. We should learn from the past, live in the present and look to the future. Keeping the qualities of the diode in mind, this magazine aims to encourage the students to read, learn and educate themselves during these tough times. The magazine also aims to inculcate the idea of “Rectify Mistakes, Amplify Skills” in our readers’ minds to ensure that they broaden their perspective and gain knowledge while reading this magazine.

OHM provides students of Electrical Engineering Department to showcase their skill in writing, painting, photography, etc. The editing and designing of this magazine is undertaken care by students. Thus, OHM serves as the perfect place for the students to showcase their talents and skills.

We would like to thank, our Head of Department Dr. Mrs. V. A. Joshi, EESA staff coordinators, Prof. U.B. Sarode and Dr. S.T. Gaikwad for keeping us motivated to keep working and to develop this beautiful magazine. We would also like to thank EESA committee for the coordination and support. And last but not least we would like to thank Mr. Anurag Lad for designing the cover page of OHM 2021-22 and Mr Parth Vaze for his help with the reportage of various EESA events.

We really hope students reading this will enjoy and gain knowledge while reading this magazine.

# LIBRARY REPORT



Mr. Narendra Dikole  
Library Secretary



Mr. Rajwardhan Ghorpade  
Jt. Library Secretary

- EESA library has been providing a boundless resource of information for electrical engineering students since 1993 with around 1300 books which include many reference books, also contains national and international technical journals, magazines, educational DVDs and project reports of passed out students. And it is unfolded for all the students as well as staff members of the electrical engineering department. Irrespective of the pandemic, this year we have successfully updated EESA E-library. E-library is well equipped with about 300+ books and University question papers updated till 2022. Both the faculty members and students have been extremely instrumental pavers in the foundation of E-library and we extend our sincere gratitude to all for your whole hearted contributions!
- At last but not least we recognized EESA library browsing almost every sphere of Electrical Engineering will be facilitating the students to stream seamlessly the literature from most veritable sources.

## EESA Library

- Curriculum books : 734
- Total Magazines: 567
- Total Books Donated: 93

## EESA E-Library

- CDs and DVDs of National / International Conferences & Workshops: 51
- More than 100 NPTEL course materials for various subjects.
- Number of e-books: 150

# EESA INAUGURATION



**Mr Mitesh Seth**



**Mr. Sameer Paranjape**

**EESA inaugural function – Our proud alumni as Chief Guest and Guest of Honor**



EESA 2021-22 inauguration was organized on 28<sup>th</sup> September 2021 through online mode due to pandemic. Our chief guest were Mr.Miresh Sheth, Director of Opulence Power Private Limited and Mr. Sameer Paranjape , Leading actor . Both of our guest are proud Alumni of BE Electrical Engineering, PVGCOET. Event started with Ganeshvandana sung by Ms. Prajakta Pandhare of SE Electrical. Ms. Shreya Patil and Ms. Samruddhi Pawar did the compering of the event.. Mr.Tejas Godse interviewed our chief guests with formal and informal questions. Every student would totally relate with their answers and the way they spend their college life. The event was a great success.

# VERSATALIA NATIONAL LEVEL PROJECT COMPEPTITION



'Versatalia' provided students from across India platform to showcase their technical talent in form of projects. It was organized on 30<sup>th</sup> April 2022 was technically sponsored by IEEE. Various sponsors like FACTO things, Raja Software Labs played key role for making an event a success. EESA, TESA & ITSA of PVGCOET together collaborated for organizing this event. Total cash prize worth Rs 1,00,000/- along with many opportunities was provided. We would like to thank Conveners HOD, Electrical department Dr.Vrunda Joshi and Dr. M.P. Bhawalkar and staff coordinators Dr. Ujjwala Thakar. Last but not least EESA coordinators played vital role in managing each sector of an event.

# ATLAS COPCO DAY



Every year, as a tradition Kruttika Scholarship Program was carried out on 11<sup>th</sup> August 2022 Atlas Copco Gecia, Pune. The scholarship has been awarded to female topper of Electrical Engineering Department on the basis of third year engineering result to " Miss Renuka Joshi". She received Rs 50,000/- and also received job offer from Atlas Copco.

# FAREWELL FOR 2021-22 BATCH



# ***WORDY MUSE***



प्रत्येक व्यक्तीची आयुष्यची सुरुवात "आई" या दोन शब्दापासून  
झाली!

"आई" म्हणजे मंदिराचा उंच कळस!

कोठेही न मागता भरभरऊन मिळालेले दान म्हणजे आई...

सारा जन्म चालून पाय जेव्हा थकून जातात,  
शेवटच्या श्वसाबरोबार "आई" हेच शब्द राहतात...!

-श्रुती ईंगोले

प्रश्न..???

...

पदोपदी अगणित विचारांच्या गर्दीत पुन्हा पुन्हा अडकतो मी,  
असतात मोजक्याचं प्रश्नांची उत्तरे उरल्यासुरल्यां चा शोध घेत असतो मी.

कधी नव्या कधी जुन्या पुन्हा पुन्हा त्याच परिघात अडकतो मी.

वाटत असावं त्या अटळ चंद्रा सारखं तेजस्वी- स्वयंप्रकाशी,  
पण ....मात्र लक्षात येतं तो ही आहे का एकटाचं त्या निरभ्र आकाशी?

मनोमन इच्छा माझी हि असते त्या उनाड वाऱ्यासारखे स्वतंत्रं वाहण्याची,  
मग उमजतं....एकटे पणाचा आवाज तर त्याचा हि घुमतोच ना तो स्वतंत्रं  
असला तरीही?

अस्तित्वाचा शोध? मी ही घेत असतो पण,  
वळणा वळणावर उथळ पाण्यासारखा दिशाहीन मी ही पुढे पुढे जात असतो.


काल काल पर्यंतर्च आठवत नाही मला पण  
भूतकाळातुन शिकत शिकत, वर्तमान  
कुरवाळत बसतो मी,  
खंत वाटते मलाही पण इथपर्यंत भविष्यालाच विसरलेला असतो मी.

उदगार चिन्हाच सोडाहो, पूर्णविराम शोधत असतो मी,  
शोधुन तो काही सापडत नाही , स्वल्पविराम देऊन पुन्हा पुन्हा  
प्रश्नचिन्हांच्यांच गदारोळात अडकतो मी.

असतात मोजक्याचं प्रश्नांची उत्तरे उरल्यासरुल्यां चा शोध घेत असतो मी,  
कधी नव्या कधी जुन्या पुन्हा पुन्हा त्याच परिघात अडकतो मी.

~ .अली...!!!

-by Mahamadali Mursal  
SE Electrical



**I find it funny sometimes that  
we sit on a side of window and  
it's raining outside and wondering about  
something precious.**

**Smiling at the memories spent  
in past and imagining how would it be  
bloomed in future**

**But we end up being pule and  
sob at the same time.**

**hiding it's noise behind the rain**

**I till the rain stops**

**That moment we feel hard for  
not being able to live**

**those memories again and**

**helpless for not able to  
make those thoughts real**

**And after the rain stops  
we keep pretending as hell  
that nothing happened.**

**-Shreya Patil  
TE Electrical**



## **The Riddle**

**We were perfect in the past,  
But tomorrow crashed in so fast.  
Our forever didn't last,  
You ran off but I paid the cost.**

**Tainted were the memories pictures were  
lost,  
Not loosing you but loosing myself Hurt  
the most.**

**I tried to say it loud,  
You never listened so I had to shout.**

**I'm really going to miss those taunts,  
Even the thought of getting back haunts.  
You pulled me down when I wanted to  
mount,  
How many times? I lost the count**

**- Anurag Lad  
Se Electrical**

## **When Diode was loved**

**Every one was in black clothes  
Having empty soul  
And eyes full of tears  
Yep... that was day of funeral...**

**DIODE was writer on grave stone  
That was diodes funeral  
The day diode was loved by Everyone  
After being ignored By all for whole life  
For his different abilities**


**Someone come with flowers  
She was powerdiode  
Eye full of tears with guilt and love  
Love She lost just by saying  
"You deserve someone better "**

**She remembered the day  
Diodes confessed his love  
And she thought she is better that he  
And rejected his love**

**All other did the same  
Never acknowledged him  
For his special abilities**

**His love remains one sided  
As his polarity  
Just passes by one side  
He was never loved by both side  
As he did his best**

**Day he died  
Was the same day he proved  
Yes.....I deserves better than this**



He passed more voltage  
Than his capacity  
To save other components  
In his family circuit

And yep....  
He died, but saved all  
For finally he was passing with both side  
Both polarity was for name then  
As his speciality was broken


He realized  
He lost his speciality  
To be loved by all  
As humans do  
They get loved by all after their death

He was loved by all since then  
With his name...  
D- Dedication  
I - Integrity  
O - Optimism  
D - Determination  
E - Excellence

Desperate to be loved  
Is dangerous than  
Desperate to survive  
It makes you go beyond you limits

DIODE was desperate to be loved  
And finally he was loved by all  
At his end in this  
Desperate to survive world

- Mahesh Mustapure



## सोबती फौजीची

दूर असतानाही तू आणि मी  
कायम मनाने जवळचं असतो

अश्रु झोपी जातात उशाशी  
तेव्हाया काळ्याभोर रात्रीला तू  
चंद्र बनून प्रकाश देत असतो

तो चंद्र बाजूला सारून चांदणे  
काळ्याभोर रात्रीचे दुःख पाहत असतो

चंद्र येतो खिडकीतून बोलायला ,समजावयाला  
आणि तिकडे काय व कशी असेल अवस्था तुझी  
हे विचार रात्र जाळून काढतात

तरीही दोघांमध्ये असूनही अंतर  
त्याग व तडजोड यांनी जपलयं  
आपल्या सुखी संसाराला

त्याग तुझे अन् माझे कोणी समजू शकत नाही  
एका फौजीची पत्नी होण काय असतं  
हे प्रत्येक जण जाणू शकतं नाही

तू नसतानाही कर्तव्ये मी येथे पार पाडली  
तू फौजी आहेस देशाचा  
पण मी सुद्धा देशभक्ति निभावली

घर तयार होते भीतीचे तुझी अवस्था बघून  
पण झाले मी शांत या अस्वस्थ मनाला  
समजावून प्रत्येकअश्रूंना तुझापासून  
मी लपवलयं

तुझामुळेच तर आज मला तुझी  
सोबती होण्याच सौभाग्य मिळालयं

तुझामुळेच तर आज मला तुझी  
सोबती होण्याच सौभाग्य मिळालयं.

-साक्षी मर्ढेकर  
(S.E ELECTRICAL)

तुझ्या शिवाय...

सूर्य अस्ताला जात होता ,हलक्या हलक्या सरी बरसत होत्या.  
मी त्याच निसरड्या वाटेवर आज पुन्हा उभा होतो,  
तुझ्या शिवाय.....तिन्हीसांजेस.  
साथ होती मला.....छत्रीची,  
पण जाणवत होते मला तुझ्या-माझ्या आठवणींचे शहारे.  
तज्जा तो सहवास,  
ते निखळ हास्य,  
तुझ्या उबदार हातांचा तो मखमली स्पर्श.

तुझ्या केसांमधला तो निशीगंध,  
मी तुझ्यामध्येचं धुदं,  
तोच पावसाळी सुगंध  
आज तोच क्षण पुन्हा जगत होतो मी.  
कवी मनात माझ्या ह्या सारं काही टिपत होतो मी.

असो,  
पाऊसाने हि घेतला निरोप, तशी मी ही केली छत्री खाली,  
मलाही कळलं नाही गालावरूनी घरंगळत आला कधी?  
तोच अश्रु पुसत होतो मी  
तुझ्या शिवाय,  
तुझ्या त्याचं आठवणीत पुन्हा पुन्हा भिजत होतो मी  
तुझ्या शिवाय...!!!

~ .अली...!!!

-By Mahamadali Mursal  
SE Electrical

# THE INK STUDIO



# *Gravitas- The Epitome of Journalistic Integrity*

*Every day we are inundated with channels hosting shouting matches as an excuse for debates, half-truths contorted to pique our interest and outrageous headlines which demand our attention. Amidst this constant barrage of TRP hungry news telecasts, WION's Gravitas show sets itself apart by its fact based and unbiased reportage.*

*The Gravitas prime time show airs on WION on all weekdays from 9 PM to 10 PM. The show's anchor, Palki Sharma Upadhyay, reports news stories from all over the world.*

*The headlines are divided into various segments depending on their importance and impact and are rigorously analysed from India's point of view by the anchor. The anchor also details how global events affect India.*

*The show presents the most important local news stories like election results, impact of and information about Indian policies and laws (e.g., Farm laws), technology related news among other stories.*

*Complex geopolitical topics like the Afghanistan crisis, Russian invasion of Ukraine etc are tackled with ease, by providing an in-depth analysis and relevant historical information. Palki Sharma Upadhyay had even travelled to Ukraine and delivered ground reports from Kyiv through this show.*

She had also travelled to the UNGA conference last year and reported on the important geopolitical and strategic implications of the

The show has extensively covered the Wuhan Virus pandemic and brought regular reports from all over the world related to Covid-19.

Influential global leaders from countries around the world are regularly interviewed on the show. This allows the viewer to gain a wider perspective of the world and understand the motivations and aspirations of various countries as presented by their leaders.

Anas Mallick, a reporter, and bureau chief at WION has also presented ground reports from the war-stricken countries of Afghanistan and Ukraine on the show. These reports serve to present to the user the harsh reality of war and help us understand the human cost of war.

An important distinction of this show is that it presents the news as pure facts and only informs the viewers opinion, rather than define it. The show never tries to persuade the viewer that only one point of view is correct. It presents all sides of the story to the viewer and enables them to form an informed opinion.

This brand of unbiased journalism is a rare phenomenon, in India as well as all over the world. Nowadays, many news channels try to attract more viewers by polarising and sensationalising news. In doing so they violate the very core principle of journalism, which is journalistic integrity. WION's Gravitas never falters from its path of fact based and unbiased reportage and is therefore one of the last bastions of journalistic integrity.

-Parth Vaze  
(TE Electrical)



Indian Air Force



## *“My Flying Experience as an NCC cadet”*

*The NCC is a voluntary organization engaged in grooming the youth of the country into disciplined and patriotic citizens. NCC trains the youth from different schools and colleges across the country and helps to develop qualities like discipline, character, leadership, courage and ideals of selfless services in them.*

*And create organised, trained and motivated youth, to provide leadership in all walks of life, who will serve the nation regardless of whichever career they choose.*

*To get enrolled in NCC every cadet has to pass written exam followed by physical test and then finally a personal interview. I also went through all these stages and it was overwhelming experience after getting call that you are selected as a NCC cadet.*

*Selected candidates from all graduation fields get training along with their respective academic courses. All these trainings are conducted at NCC Group Headquarter, SB road, Pune. Our training sessions are scheduled on every weekend. My usual day for the parade starts at around 4 to 5 am in the morning. We get ready by wearing the uniform, putting ranks on shoulders, which inculcate confidence and a sense of duty in us like an officer. We do physical training from 6 to 9 am then lectures are conducted by military officers on leadership qualities, personality development, Aircraft recognition, Airmanship, Aeromodelling etc.*

*I did one combined annual training camp of 7 days in that we had many competitions such as debate group discussion, drill competition, sports, singing dancing and speech. This camp gave us an opportunity to learn a plethora of things. It also helps us to build a bond amongst us and form an affectionate relation with our buddies.*



*Now I will come to most magnificent and proud moment in my journey up till now, that was flying the aircraft. As it was my first time to sit in any type of aircraft, so this was excruciating moment of my life.*

*We were given all basic information required for flying, basic training of movements of flight controls, normal operating procedure for flying "VIRUS SW-80 Microlite Aircraft".*

*Finally got the date of sortie (a sortie is a mission for an aircraft that begins when the aircraft takes off for the given time) and this was the happiest day I had experienced in my life. On that day I went there with full preparation, lots of confidence & little nervousness.*

When we reached at NDA, Pune. It was so full of fog that we were unable to see the things in proximity. After waiting for some time to clear fog. Eventually that invigorating moment came.

I went near aircraft our commanding officer was already there. After sitting inside the cockpit, I checked all the Pre-flight checks, which were given told to observe. Then I took confirmation from co-pilot and lastly gave RT (radio telephony) call for line-up. And we took off from runway.

At the initial stage of the flight it was just a normal ride but, later when it gained its speed and left the ground I felt thrilled. The view outside was glorious. The roads, buildings & fields were looking so tiny that it looks like a toy city.

Then sir gave me chance to control the aircraft, firstly I took a right turn using joystick control, then they give me +G and -G experience. (It means (aircraft suddenly fall downwards and goes up for a while). It feels like air is filling inside our body. At that moment my part was to bring the aircraft to its original position using control stick.

To be an NCC cadet it demands to remain dedicated, hardworking, unique, punctual and most of all, an achiever. It inculcate the attitude of never giving up, makes you self-confident. The life as a cadet is one of the best experience one can ever have as it teaches character, comradeship, leadership like an officer, secular outlook and selfless service towards betterment of nation.

-Hrithik Waje  
(TE Electrical)

# *Green Hydrogen and India's National Hydrogen Mission*

*Our world today is facing an unprecedented climate crisis which is threatening our very existence. The summer temperatures in the Arctic circle have risen by over 38 degrees C and this is leading to large scale melting of the Arctic ice sheet and various glaciers. Summer temperatures all over the world have risen astronomically and many parts of Europe, Asia and America are experiencing widespread heat waves.*

*This crisis is of our own making. We have indiscriminately used the Earth's natural resources and burnt through our fossil fuel supply to satisfy our need for industrialization and economic growth.*

*To stop this rapidly expanding climate crisis and limit the Earth's temperature rise to 2 degree C, it is imperative that we act now. Governments, corporate enterprises, industries, and all of us needs to work towards reducing our carbon footprint and better utilize the available resources. Primarily, we need to shift away from the use of fossil fuels, which when burnt produce CO<sub>2</sub>. CO<sub>2</sub> is a greenhouse gas and is responsible for the warming of the Earth's atmosphere.*

*Hydrogen is envisaged to be the future fuel that will replace fossil fuels. However, most of the hydrogen in use is currently grey. The production process for grey hydrogen releases greenhouse gases such as carbon dioxide. In contrast, green hydrogen is produced by splitting a water molecule using renewable energy, which releases oxygen as a by-product.*

Production of green hydrogen is currently not viable financially as the equipment is expensive and the process needs large amounts of energy. Green hydrogen is generated by breaking down water in equipment called electrolyzers. Electrolyser costs need to decline to almost one-third of current levels for green hydrogen to be financially viable. Similarly, renewable energy prices need to decline by almost 50% from current levels for green hydrogen to be viable.

Green hydrogen produced can be combined with nitrogen to make ammonia, avoiding hydrocarbons in the production process. Green ammonia is used to store energy and in fertilizer manufacturing.

As per estimates by the International Energy Agency, replacing grey hydrogen by green hydrogen would lead to carbon dioxide emission being reduced by 830 million tonnes annually. Once green hydrogen costs are reduced, it will hopefully be adopted more widely, leading to a massive reduction in greenhouse gas emissions.

Keeping in mind these important advantages of green hydrogen, the Prime Minister of India launched the National Hydrogen Mission on India's 75th Independence Day (i.e., 15th August 2021). The Mission aims to aid the government in meeting its climate targets and making India a green hydrogen hub. This will help in meeting the target of production of 5 million tonnes of green hydrogen by 2030 and the related development of renewable energy capacity.

*Highlights of the policy include:*

- *Green hydrogen and green ammonia definition*
- *Measures to improve availability and cost of renewable power*
- *Measures to allow banking of power*
- *Provision to encourage green hydrogen exports*
- *Measures to increase demand for green hydrogen*

*Intended benefits of the policy*

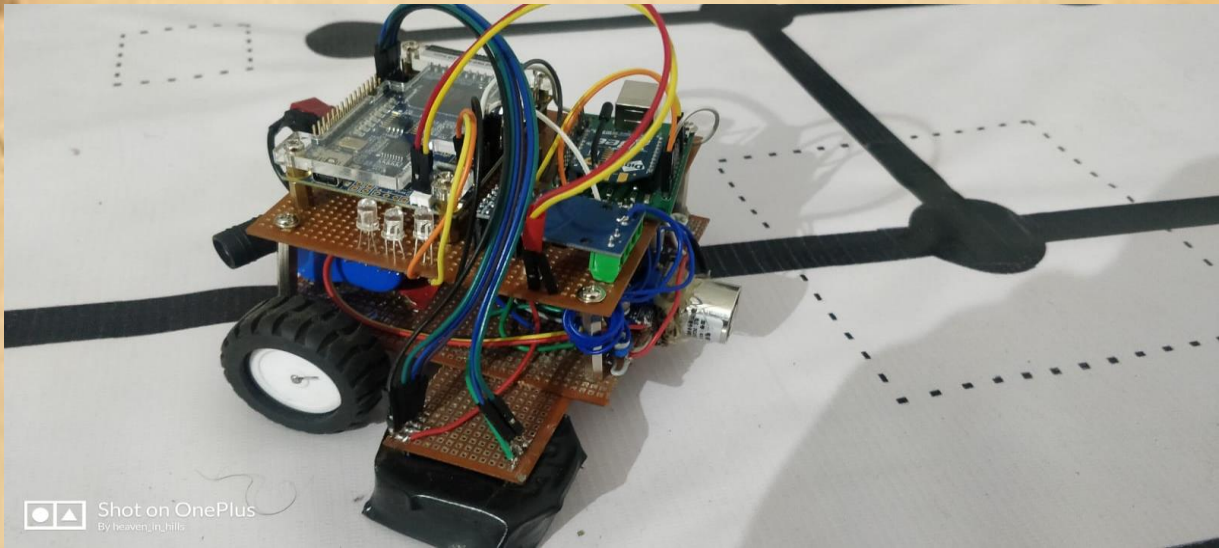
- *Reduce green hydrogen costs. Incentives under the policy will increase green hydrogen production, which will lead to lower costs due to economies of scale.*
- *Improve availability of clean fuel.*
- *Reduce dependence on fossil fuel, especially imported fuel.*
- *Support exports of clean fuel from India.*
- *Enable movement towards net-zero emissions (India's target is 2070).*
- *Enable large greenhouse gas emitting sectors such as iron and steel, refining etc. to reduce their carbon footprint.*

*Green hydrogen is an extremely viable alternative to fossil fuels. The proof of its economic viability as an automotive fuel, was recently proved by Union Minister Nitin Gadkari driving a Hydrogen fuel-based car to Parliament at a cost of just Rs 2 per km.*

*The National Hydrogen Mission is an important first step to transform India into a Green Hydrogen hub and a hydrogen-based society. This will in turn allow it to fulfil its climate goals and become carbon neutral by 2070.*

*-Parth Vaze  
(TE Electrical)*

# OUR JOURNEY OF EYANTRA ROBOTICS COMPETITION



## *Team Members:*

- |                                      |                        |
|--------------------------------------|------------------------|
| <i>1. Aditya Yeole (Team Leader)</i> | <i>(TE ELECTRICAL)</i> |
| <i>2. Pranav Shinde</i>              | <i>(TE IT)</i>         |
| <i>3. Gaurav Patil</i>               | <i>(TE ELECTRICAL)</i> |
| <i>4. Akshay Badhe</i>               | <i>(TE ELECTRICAL)</i> |

*We had an amazing journey. We participated in e-YRC 2021-2022 and won second position out of 200 plus teams in our allotted theme. We had assigned soil monitoring bot theme.*

*We didn't know anything about robot building when we started off in the competition. Teams has to do the assigned tasks in given deadlines. The tasks initially consisted of application of fundamental concepts but the difficulty of tasks gradually increases. So it does not bother much if one does not have prior knowledge of robotics as the format of the competition is designed in way were everyone will learn new things and then implement it. After doing three tasks and our team was shortlisted for stage 2 of competition where we received robotics kit from Eyantra team in which they provided us everything needed to build the bot.*

Our theme was an abstraction of a farm where bot will traverse the arena and detect different requirements of soil then fulfil those requirements. In this journey we burnt our FPGA (Field Programmable Gate Array) which was brain of our bot but we didn't lose hope and again started with new FPGA which was also provided Eyantra team.

This competition was all about not giving till you make it. We faced many challenges while building the bot and implementing the code o hardware. Generally debugging of problem would take a lot of time so it was a big challenge to make things work in given deadline. But Eyantra team used take QNA sessions and also used address our queries on forum. The competition was six months long and we had to manage our academics with it. We used to work full day on holiday and used to work after evening when collage was over.

At the end of task 6 we got to know that our team was in top 5 teams and was shortlisted for the pre-finale and finale. In the pre-finale we had to show live run of bot and in the finale we interacted with the jury of IITB. Finally, after the day of interaction we got to know that we won the second position in the competition. It was the moment when we felt our hard work of six months payed off.

If everything goes well you might be the next winner of eYRC. The Eyantra coopetition would take lot of time but the practical knowledge gained from it would be priceless. All the best!!!

-Gaurav Patil  
(TE ELECTRICAL)

# IS THE STOCK MARKET RISKY?



*We are always fascinated by the stock market from our childhood, some people get interested in teenage but never dared to do research or enter it because, we always have been told that the Stock Market is gambling, or it is very risky. But no one had an interest in finding out the truth, because the cross-checking with elders is not in our culture right. So, we don't dare to ask them, also in our surroundings there is hardly anyone who can tell you what is stock market and how it works, but now because of the revolution in the telecom sector the internet got very cheap and everyone has a decent amount of internet availability, so we also have used this internet for many useful things like education and entertainment purpose and to gain some skills which are not thought in the school and college. We know how much the power of the internet is because we are the GenZ.*

We have been experiencing the internet for more than half of age. For example, suppose my age was twenty-one then I have been using the internet for the last 10 to 12 years. Some people may have more experience but that is not important here having access to the internet is what I want to discuss.

So, even after having an interest and the internet, we are afraid to search on the internet 'what is stock market', That is because again our parents or surroundings people will tell you about any 'X person had lost his money in the stock market' but no one wants to discuss about what wrong went in his story. for example: how does he buy the share, is he checked the fundamental of the stock, or is he only trading by watching the news or on basis of tips. And you know the reason behind not having such a conversation with our parents is because they even do not know anything about the Share Market. From this, one sentence comes to my mind which I had read somewhere "Indians are very good in maths but poor in financial".

Now I don't want to argue on the above topic because three to five percent of people will have an exception, right? even if do not know about handling the finances then also there is no problem our development has been done in that manner but now with help of mentor or internet, you can grab all the knowledge.

Let's start with what is stock market and what is the importance of risk management is in the stock market in short.

## What is the Stock Market?

“A stock market is a place where equity shares of companies are bought and sold by the participants (buyers and sellers of stocks). The participants can be investors and traders who seek profits over the short time or in the long run.” And in India, there are two stock exchanges is present NSE and BSE (BSE is Asia's oldest stock exchange) now I don't want to discuss how to buy and sell the stocks because I don't have written this article for that, but my focus is as you can see in the headline is on “RISK IN STOCK MARKET”.

## Risk is the possibility or chance of loss

From this statement, you get what is a risk and there is always risk present in every activity you perform in your daily life. For example, you came to college with your bike, now there is a possibility of a small or big accident but even knowing the risk you came to college because you have confidence in yourself which is not developed in one day but it is because of you know that you learned the bike and had an experience of riding it much time. This brings self-belief and confidence in you, and you come to college riding the bike without thinking about any fear. In the same way, if I told you that there is a risk in the stock market but by managing it properly you can invest with zero risk in a stock market yes you heard it correctly, I said, “ZERO RISK”.

Again, how that is possible I will give you a small task it is quite simple and easy to perform (I request you to try it once) which will bring out maximum doubts from your mind and may change your way toward the stock market

## TASK

1. Take one coin of 1 or 2 rupees and take one paper and pen and flip it ten times. Now, whenever you flip the coin if the head comes to write +3000 on paper and when the tail comes to write -1000 on paper.

2. As you know that the probability of a head or tail is 50-50 in a single flip and if you had a winning ratio of 30%, that is from 10 flips head comes only 3 times you will make +9000, and the remaining 7 times you get tail then -7000 if you do the simple maths between  $[(+9000) + (-7000)]$  then net values come +2000. or

3. In your case, if you have a winning ratio of more than 30% then your net amount will be even more. Now tell me in the above example where is risk present? It is just a simple game of probability in which if you get the tail then you are going to lose one thousand rupees and if the head comes then you will make three thousand rupees.

Like the above example, the stock market is somewhat game of Probability with the addition of fundamental analysis and technical analysis. and you know the average winning percent required in the stock market to make money is between 49% to 52% only. when you want to enter the stock market you check the risk and plan your task accordingly, and then your risk gets automatically eliminated.

The most interesting and last example of this article is, when you had decided to do the Engineering then there are many people in your family and surroundings had told you once that the condition of Engineering field is not good in current time, there are thousands of numbers of engineers are graduating every year and few of them get a Placements, etc. Still, you chose Engineering because you know what challenges you are going to face and you had done your study to deal with challenges

If you check with people whose money gets lost in the stock market had known about risk management and applied it in their investment process and most of the time the answer comes NO. Some people even do not know about risk management and what is strategy and how to use it with fundamental and technical analysis. And thus, due to this the retail trader does not make money.

If you ask a question to the Professional Investor or Trader about what is important while coming into the stock market the answer will come "Firstly you have to define Risk and then select Stock accordingly".

If you know how "RISK MANAGEMENT" is done and with the use of Proven Strategies (examples: Support and Resistance, Price action) you can make decent money in the Stock market.

Also with Risk management, Discipline is particularly important but will touch on this point in other articles. This article was especially for RISK.

**"RISK COMES FROM NOT KNOWING WHAT YOU ARE DOING"**

-Warren Buffett  
(Successful investor)

In the end, I want you to question yourself "IS THE STOCK MARKET RISKY?"

-Hrutvik Nimbolkar  
(TE Electrical)

# You have Family to support!

The age of 16, you just completed your 10th board exams, now you are very excited that finally you will go to college. New building, new friends, new teachers, new experience just kind of nervous about how will it go all getting into mind. Board result came Boommm!!! You got very good marks. You told parents about result they feel very happy hugged you, feeling proud that your all efforts made it worth.

Now it's time to think what to pursue after it. Will you go for 11th 12th or ITI or Diploma?? You start thinking about it. All day all time your thought process is happening. You getting information from people what to pursue. Every person giving different advice. Now you don't know what to do? Then a person came. He pointed out main problem you forgot to consider your parent's 'Financial Capabilities'.

Money!!! This 5 letter word affect all the decision you will make in your life. Want to go in good college, want to learn something, want some good stuff but you just can't! This all stays back of the mind of you. You starts overthinking, you couldn't concentrate on a single thing. Confidence is not same as before. After that, you prioritize money over all things.

*This got us thinking that our parents are already working hard for us. They leave behind their own life goals for us. They wake up for us, perish their wanting, just follow daily routine and live colorless life. Obviously they have high hopes from us so stop messing around. It's now our responsibility to make them proud and to stand like pillar whenever they need us. You will know when they are satisfied with your success and then you can focus on your own life. Yes YOU HAVE FAMILY TO SUPPORT FIRST!!*

*- Jay Jambhale  
(TE electrical)*

# My YouTube Journey

The journey started with a thought of helping students like us to understand the basic concepts of electrical engineering domain. When I started the YouTube journey it was a period around which India was facing its first wave of Covid 19. All the colleges were shifted to online mode from offline mode. Due to various problems such as bandwidth issue during lecture, health issues, etc many students weren't able to grasp everything during lecture period itself. So, I thought why not help such students through YouTube platform.

At initial stage I had no idea about how to screen record, how to edit a video and upload it on YouTube but still I started working on it. When you want to make a video for educational purpose, you have to explain it in such a way that even a normal student who has no idea about the topic should also understand the topic and also get through knowledge about it. This made me study each topic in detail before preparing for a video.

I uploaded my first video on my channel TECH ELECTRIC on 19 July 2020. The video was on "Construction & Working of DC Motor". Many of my friends supported my first video and encouraged me to make more such videos. I started improving my style of delivering, voice modulation and editing video by video. In no time subscribers and views on my channel started increasing continuously which gave me a lot of confidence and motivation to work harder.

Till date I have uploaded 27 videos. Channel received over 1K Subscribers, 3K watch hours and 1 Lakh views. It's been a great experience to share all this content with learners on YouTube platform. I have received many encouraging messages from the learner in YouTube comment section all from various regions appreciating the content and asking for more such content. I try to stay connected with my channel viewers through social media platform such as Telegram, Instagram and Twitter.

I have plans to introduce more playlists for other subjects on my channel in future. I hope that channel will continue to grow further exponentially the way it has been growing. It's been a completely different learning experience for me throughout this YouTube journey

- Piyush Mahajan  
(TE electrical)



मूळ रंग तीनच, 'लाल, निळा आणि पिवळा'.. पांढरा आणि काळा म्हणाल तर ते रंग नाहीत त्या छटा आहेत. उदा-- एखाद्याने काळा किंवा पांढरा शर्ट घातला तर त्याला कोणी बोलत नाही की, "अरे वाह! काय मस्त रंगीत शर्ट घातलायस!" आणि उरला आता हिरवा , तो होतो निळा आणि पिवळ्याच्या मिश्रणाने तयार! या सहा रंगापासूनच पुढे अनंत छटा निर्माण होत गेल्या.

माणसाचंही जीवन पाहायला गेलं तर ते एकप्रकारच रंगचक्रच असत अस म्हणायला काही हरकत नाही. प्रत्येकाचं आयुष्य हे काळ्या-पांढऱ्या छटांनी म्हणजेच सुख दुःखाने दाटलेलं असत, तर प्रत्येकाच्या स्वभावातही आपल्याला काळ्या व पांढऱ्या छटा दिसून येतात. या ठिकाणी पांढरा म्हणजे संतांचा, शांततेचा रंग आणि काळा म्हणजे राक्षसाचा रंग अशी समजूत होऊन जाते, पण दुसऱ्या हाताला पाहिलं तर काळा रंग हा दृढता आणि वर्चस्व दर्शवतो तर पांढरा रंग हा काही ठिकाणी माघार घेतल्याचे, दुबळेपणाचे प्रतीक म्हणून वापरला जातो.

पिवळ्या रंगाबद्दल बोलायचं झालं तर पिवळा रंग हा अतिशय फिकट पण अखंड विश्वतील सर्वात प्रखर वस्तू 'सूर्य' हा पिवळा रंग धारण करून सर्वांचे डोळे दिपवून टाकतो, त्यामुळे ज्यांच्या स्वभावात पिवळ्या रंगची छटा आढळते त्या लोकांना छुपे रुस्तम समजायला हरकत नाही! दुसऱ्या बाजूला पिवळा हा रंग मैत्रीचा रंग म्हणून देखील ओळखला जातो, तरी एकंदरीतपणे उष्ण रंगाच्या गटात मोडणारा पिवळा रंग हा मला तरी निरुपद्रवी वाटतो.

'भगवा हा त्याग, शौर्य आणि क्रांतीचा, निळा रंग हा शांततेचा, प्रगतीचा आणि हिरवा हा शेतीचा, समृद्धीचा रंग' हेच शाळेत असल्यापासून मी शिकत आलोय, पण आजच्या भारतामध्ये निळा-भगवा-हिरवा हे रंग अर्थाच्या आधारे कमी आणि जाती-धर्माच्या नावावरती जास्त विभागले गेले असल्यामुळे या रंगांविषयी जास्त न बोललेलंच बरं!

आता गाडी वळवूया 'लाल' या रंगाकडे. 'धोबी का कुत्ता, ना घर का ना घाट का' याप्रमाणे अवस्था झालेल्या लाल रंगाची मात्र मला दया येते. आता तुम्हीच पहा न, लाल हा रंग आपण प्रेमाचा म्हणून ओळखतो आणि दुसऱ्या बाजूला रक्तपाताचा, धोक्याचा रंग ही लालच, त्याग आणि शौर्याचा रंग लाल आणि रागाचा-द्वेषाचा रंग ही लालच, त्यामुळे लाल रंग हा चांगला की वाईट असा गहन प्रश्न मला इथे पडतो. पण काही झाले तरी रस्त्यावरील सर्व गाड्या एक क्षणात थांबवण्याची ताकत मात्र फक्त लाल रंगमध्येच, जिथे शिस्त आणि व्यवस्थितपणा गरजेचा तिथे धाक आणि राग आवश्यकच!!

म्हणूनच म्हणालो की माणसाचं आयुष्यही काही वेगळं नाही, माणूस हा स्वतःवरती अनेक रंग धारण करून फिरत असतो आणि त्या रंगावरून त्याचे बाह्यमूल्यांकन समाज करतो, परंतु हे मूल्यांकन करताना धारण केलेल्या रंगाच्या योग्य त्या छटा ओळखणे ही तितकेच महत्वाचे बर का! शेवटी एवढंच म्हणेन (की लिहीन?) की जो माणूस स्वतःचे आणि समोरच्याचे रंग अचूक ओळखेल त्यालाच आयुष्यरूपी चित्र हे अगदी अचूक जमेल...

- शंतनू संकपाळ

# *Electric Vehicle eco-system is growing in India*

*Electric Vehicles sales have steadily risen in India over the past few years. Are they, however, a feasible investment in our fossil-fuel hungry nation? Read on to find out*  
*In today's day and age where climate change and consistently rising global crude oil prices are hotly debated topic, Electric Vehicles arise as one of the first and foremost solutions to the problem. There was a surge in the sales of Electric Vehicles from 2020 onwards, with 3.1 million units being sold globally in that year. In 2021 too, in total of 6.5 million units were sold globally. Closer home, India also saw a concurrent rise in EV sales with 3,29,190 EVs being sold, a 168 percent increase over 2020's 1,22,607.*

*The above numbers point towards EVs possibly being the future of mobility. To increase awareness about electric vehicles amongst the people many Auto-expo are being arranged. One of them was Pune Automotive Fuel Conclave from 2nd to 5th April, Pune AFC 2022 hosted India's largest vehicle exhibition exclusively focused on alternate fuel technologies, conducted across the four days of the Conclave. Two-wheelers, three-wheelers, cars, goods vehicles, and buses from leading manufacturers like Tata Motors, Piaggio, Skoda, Volkswagen, KPIT, etc and many startups were present to showcase their product such as Revamp Moto, Ather Energy and LOG9 Batteries and many more. powered by electricity, hydrogen fuel, and biofuels were on display. The conclave also saw India's largest EV rally, covering several iconic locations in Pune.*

*We Visited PuneAFC and saw all the startups and their products. One of the startups that we interacted with was Revamp Moto, Nashik based EV startup presented its Modular Utility Electric Vehicles the Revamp Mitra and the RM25. These electric bikes allow small-time vendors as well as e-commerce giants to deliver and sell their products within an affordable budget. This startup was also featured on Shark Tank India which is an Indian reality business show and managed to raise INR 1Cr funding on the Show.*

*Revamp Moto is an EV startup founded by Jayesh Tope, Pritesh Mahajan and Pushkaraj Salunke. Founder, Pritesh Mahajan stated, "Owing to the present environmental issues of at this time, we've engineered EV Bikes in a fashion that can show to be a snug and air pollution free product for our customers"*

*Talking about EV ecosystem in india Indian government providing various schemes and subsidies the ecosystem has grown exponentially in the past year schemes like fame which stands for faster adoption and manufacturing & electric vehicles in India, national mission on transformative mobility and storage 2019.*



*- Swaroop Bharaskar  
(SE electrical)*

# Stanny Lens





- Aniruddha Rekhe  
(FE Electrical)



*Aniruddha Rekhe*



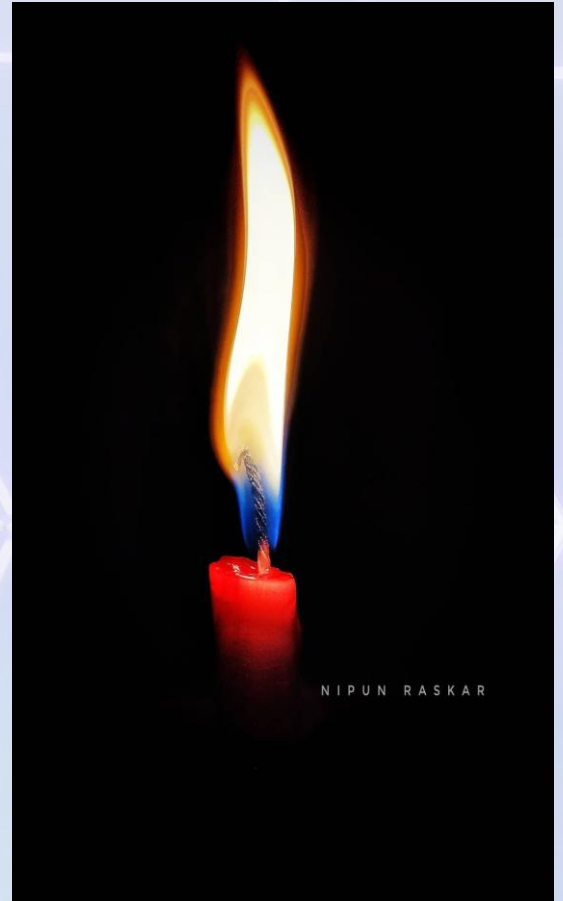
- Akshay Badhe  
(TE Electrical)



- Devwallabha Kulkarni  
(TE Electrical)

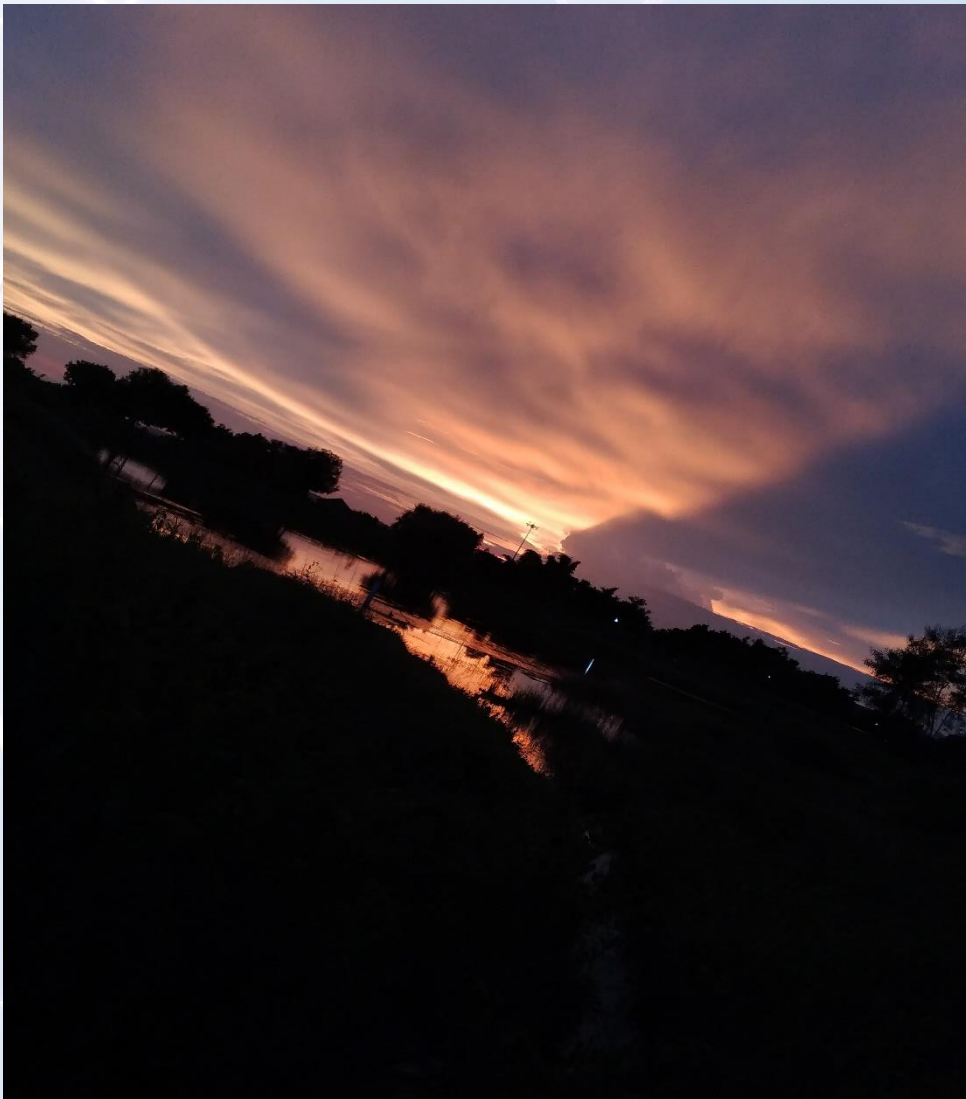


- Anushka Lad  
(TE Electrical)



- Nipun Raskar  
(SE Electrical)





- Harsh Deshpande  
(SE Electrical)

© SarveshTilkar



- Sarvesh Tilkar  
(SE Electrical)

©SarveshTilkar



-yashraj jambhale



yash jambhale  
photography

- Yashraj Jambhale  
(TE Electrical)



- Yashraj Jambhale  
(TE Electrical)



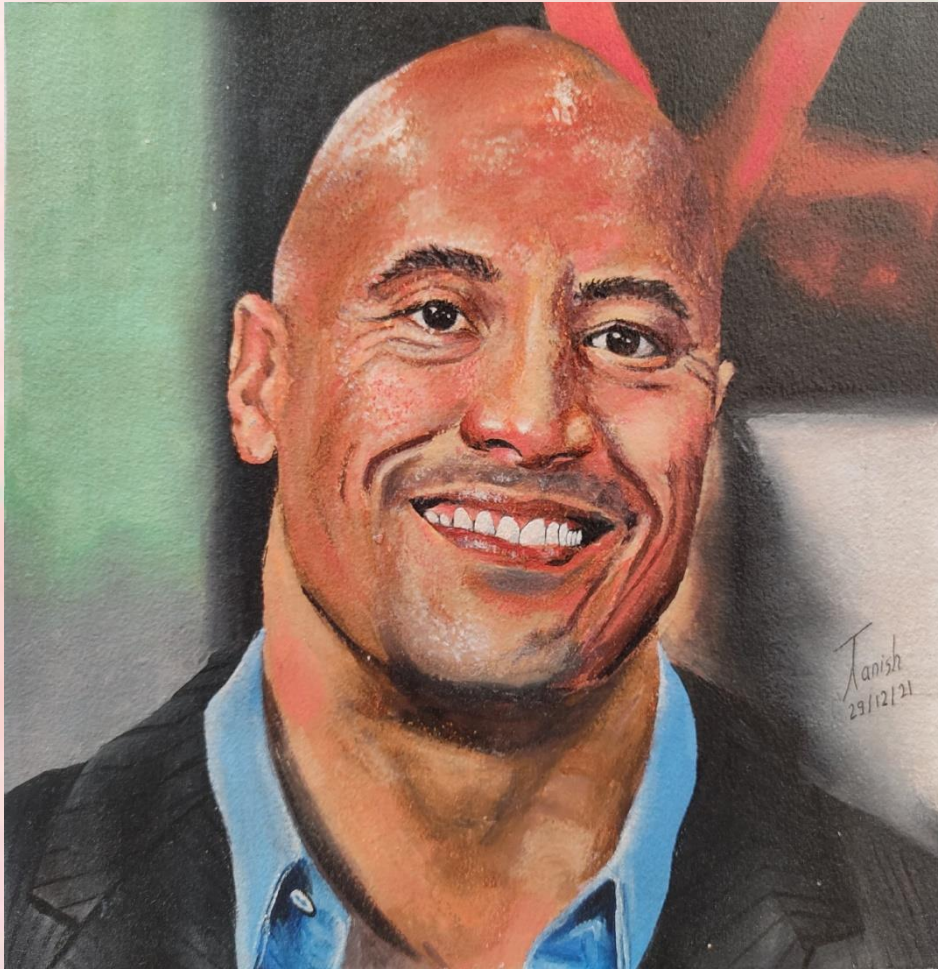


- Yashraj Jambhale  
(TE Electrical)



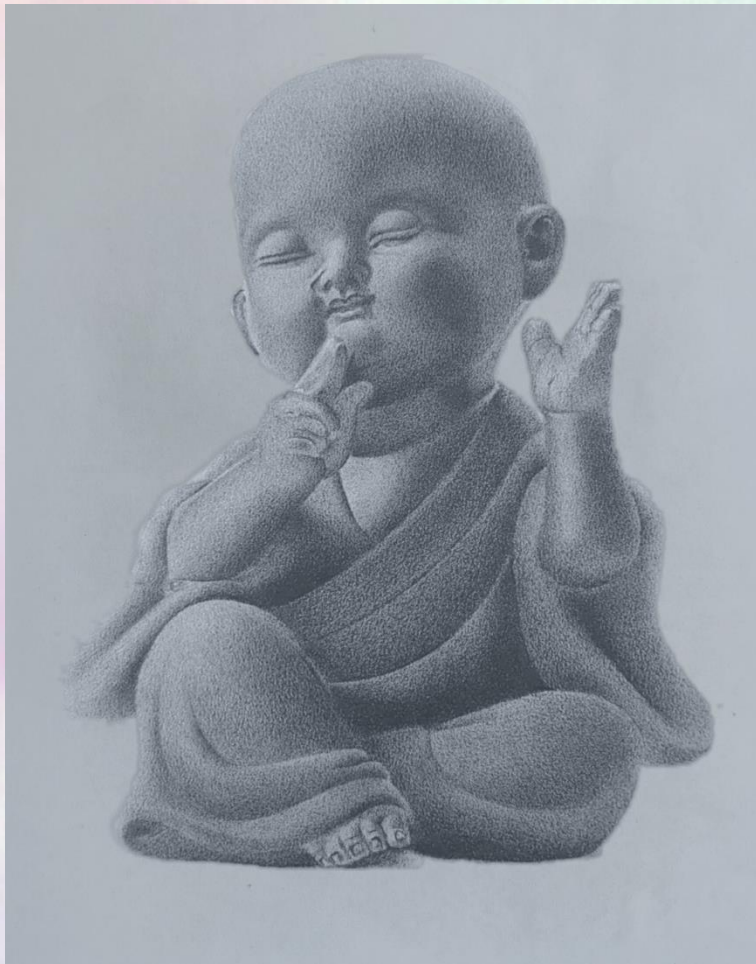
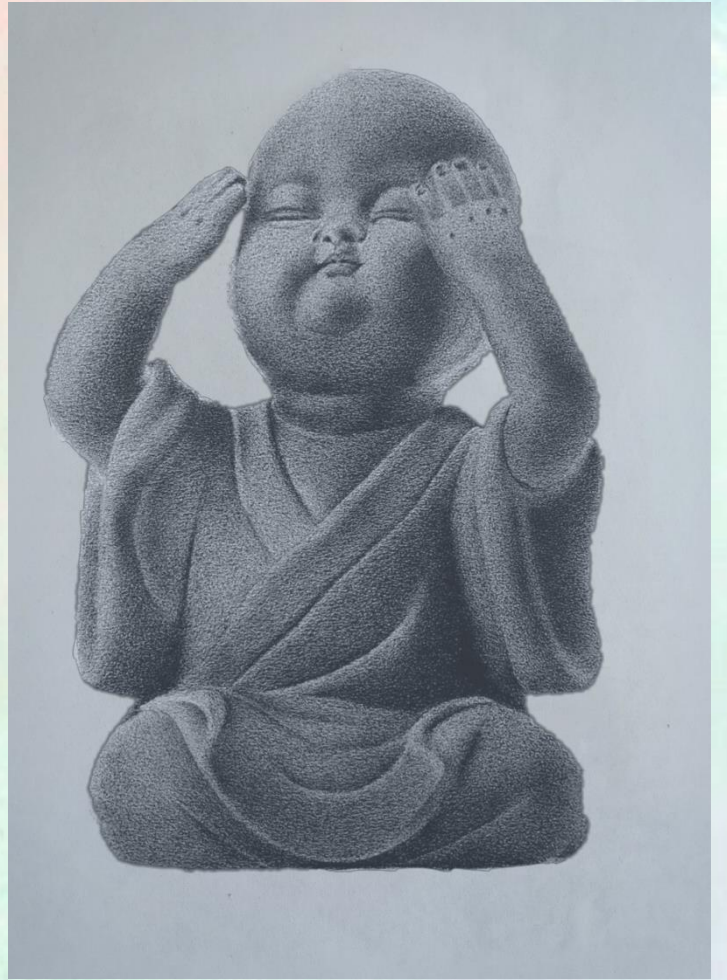
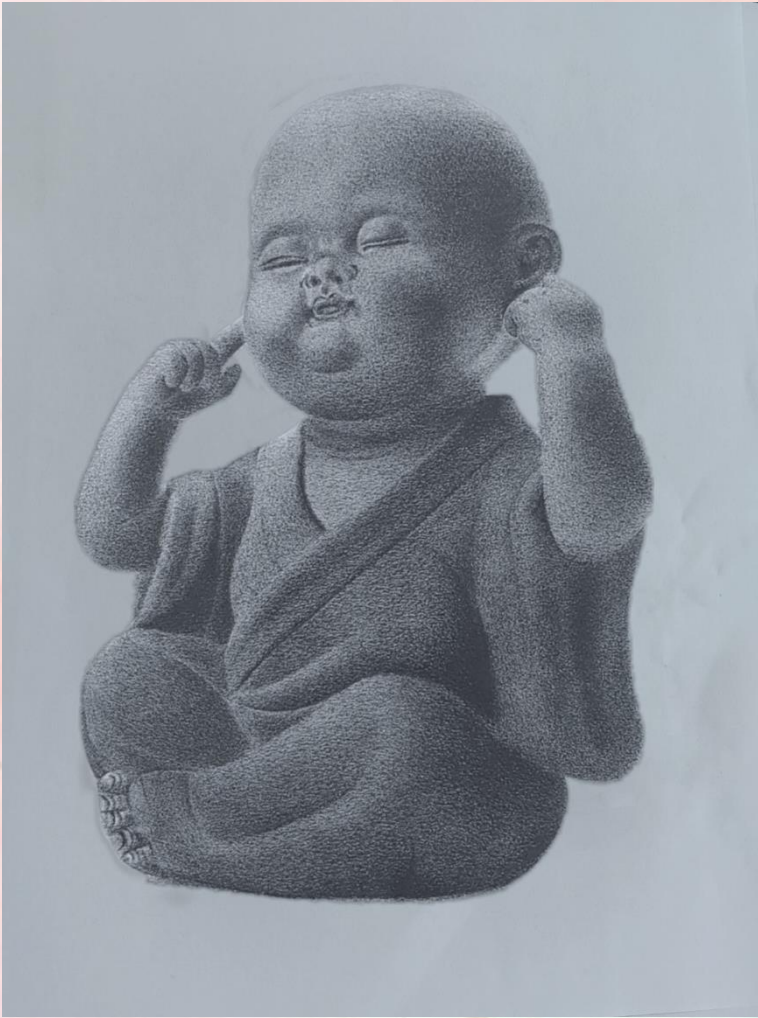


# Art Flock



-Tanish Dange  
(FE Electrical)

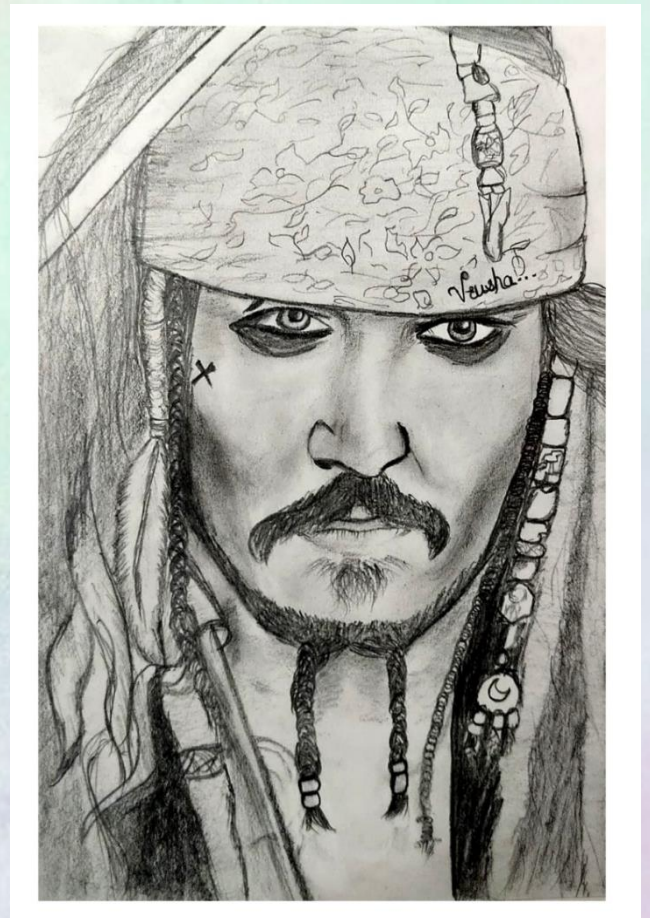


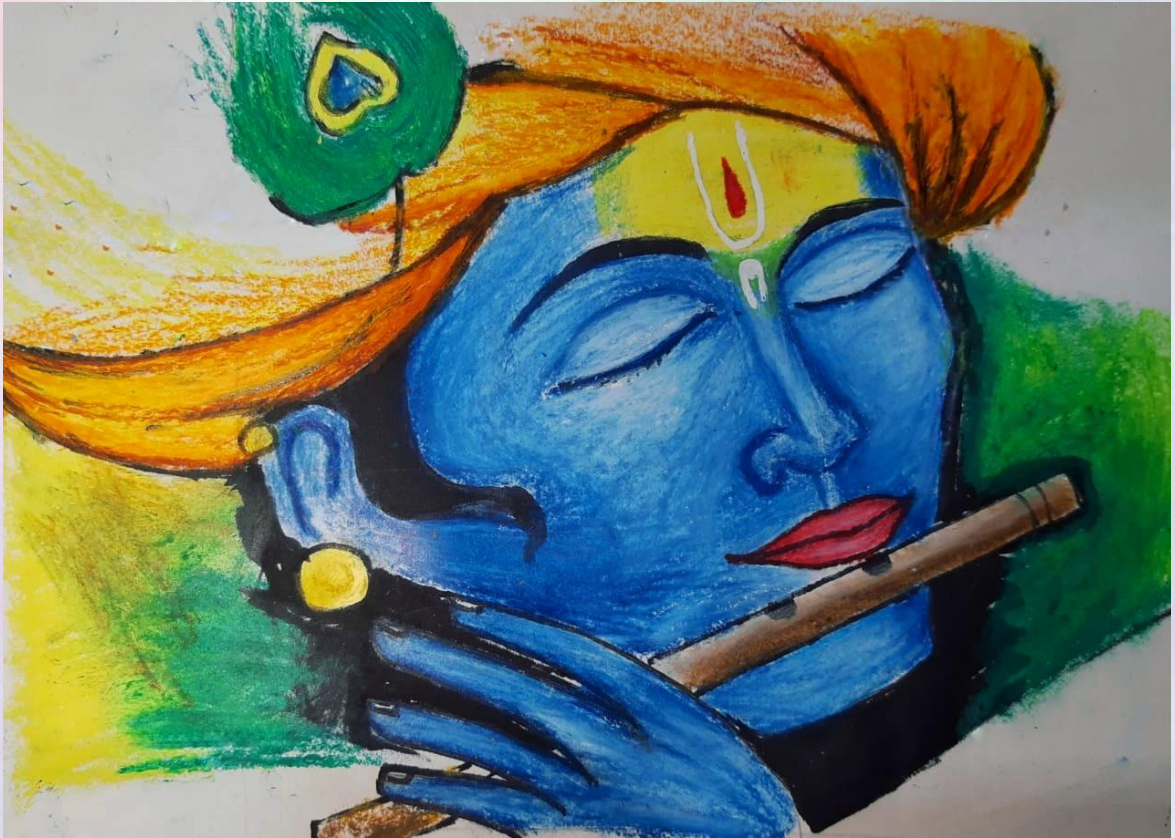
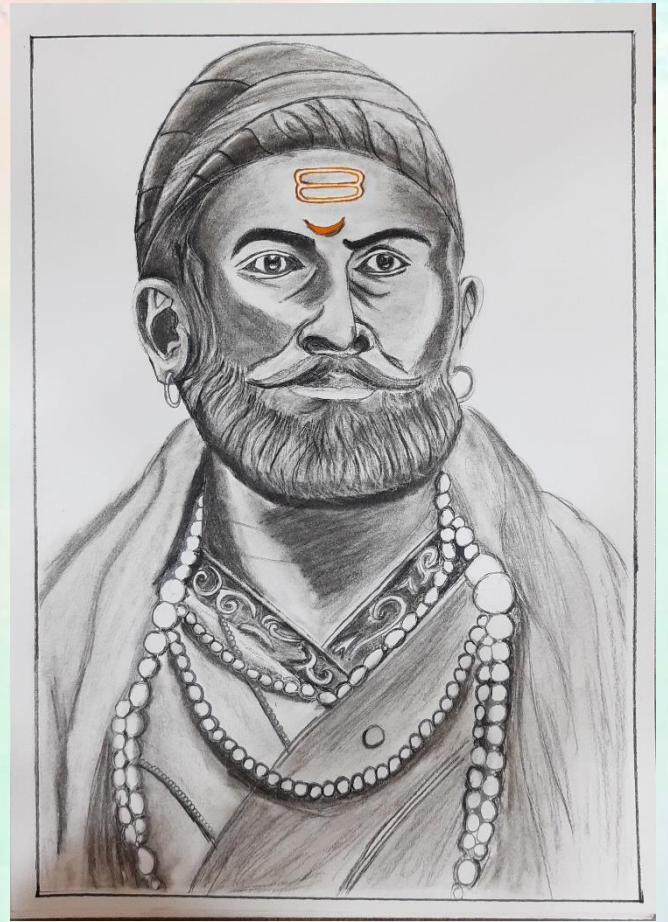


-Prashant Kharat  
(TE Electrical)



Vrushali Mahamuni  
(TE Electrical)

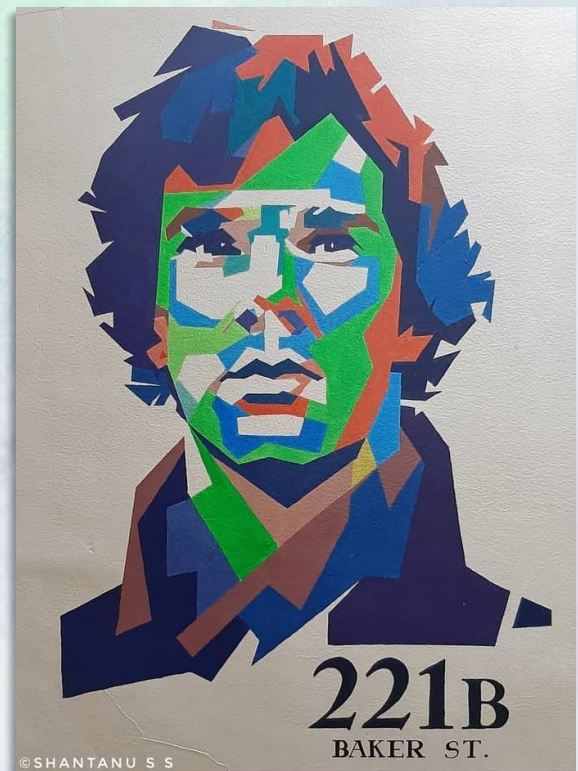


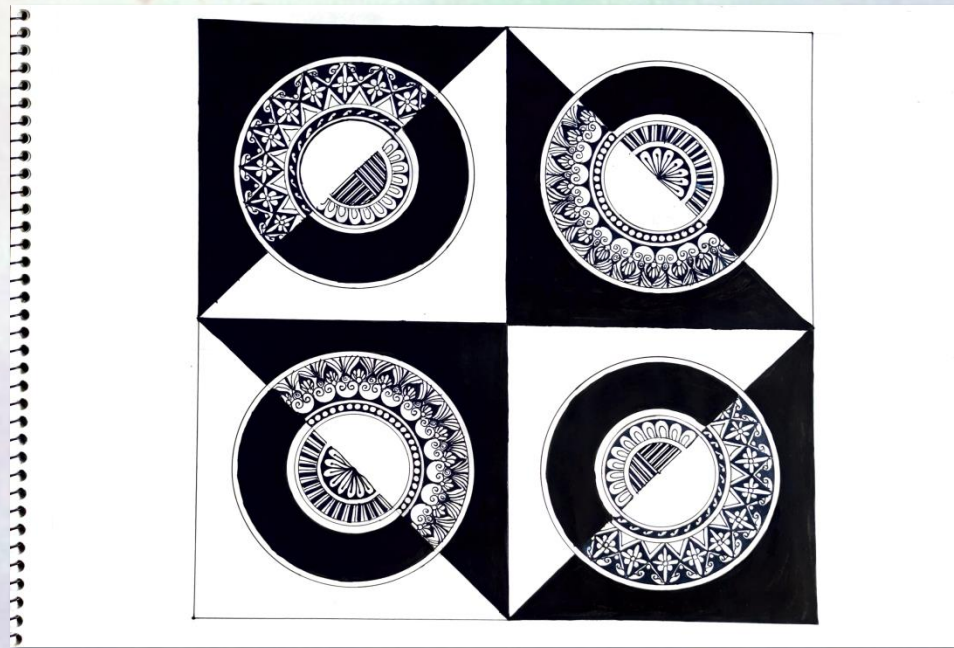
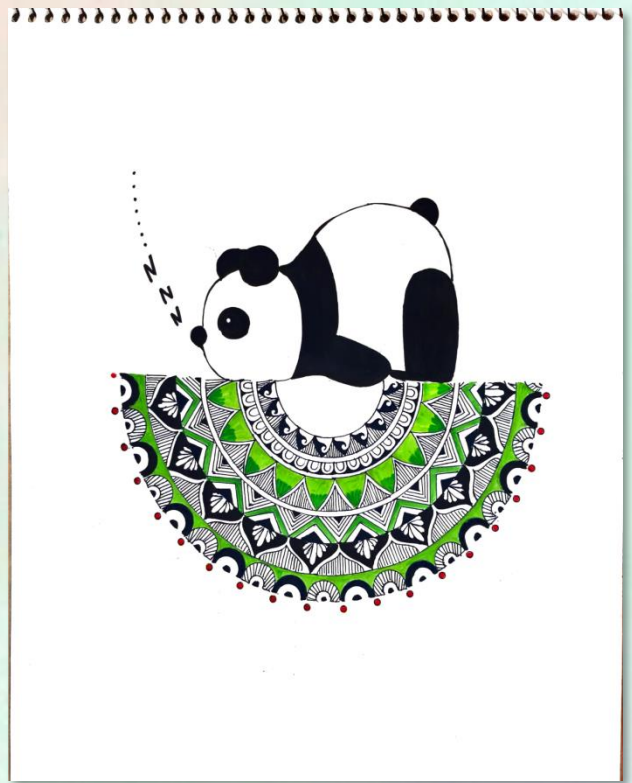
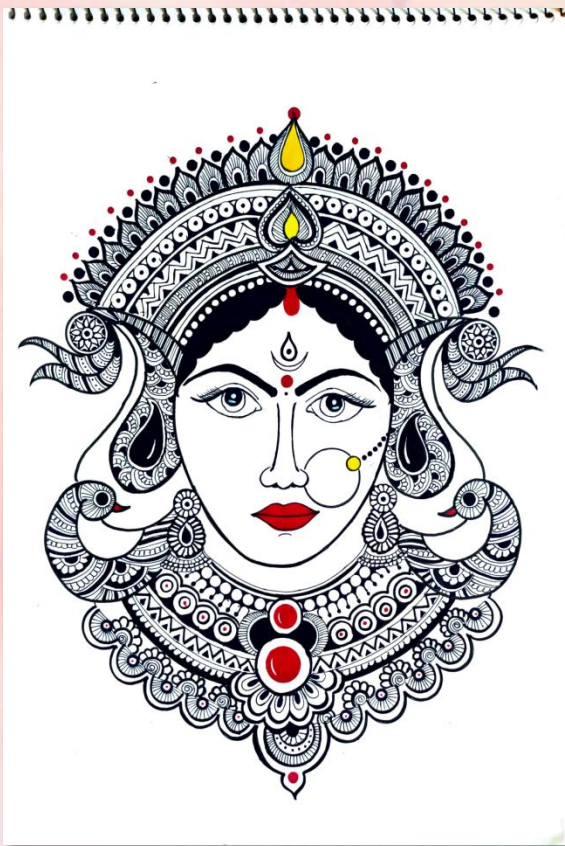


- Abhishek Rajmane  
(TE Electrical)



- Shantanu Sankpal  
(BE Electrical)

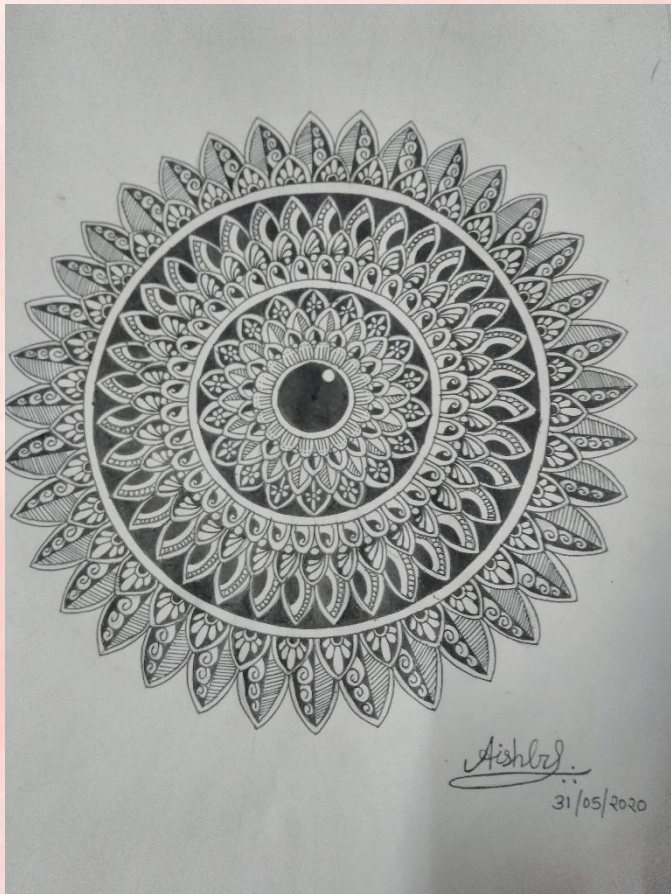




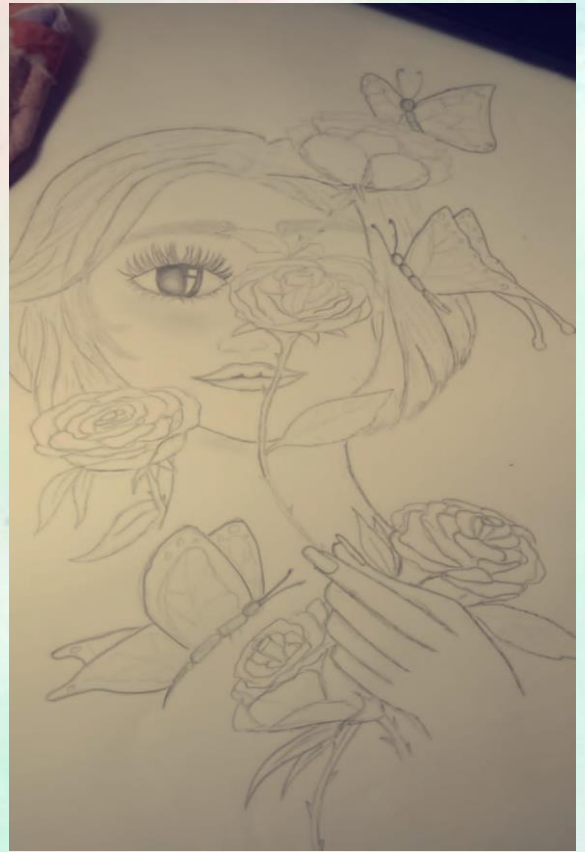
- Shubhangi Pagare  
(TE Electrical)



- Akshay Badhe  
(TE Electrical)



- Aishwarya valsa



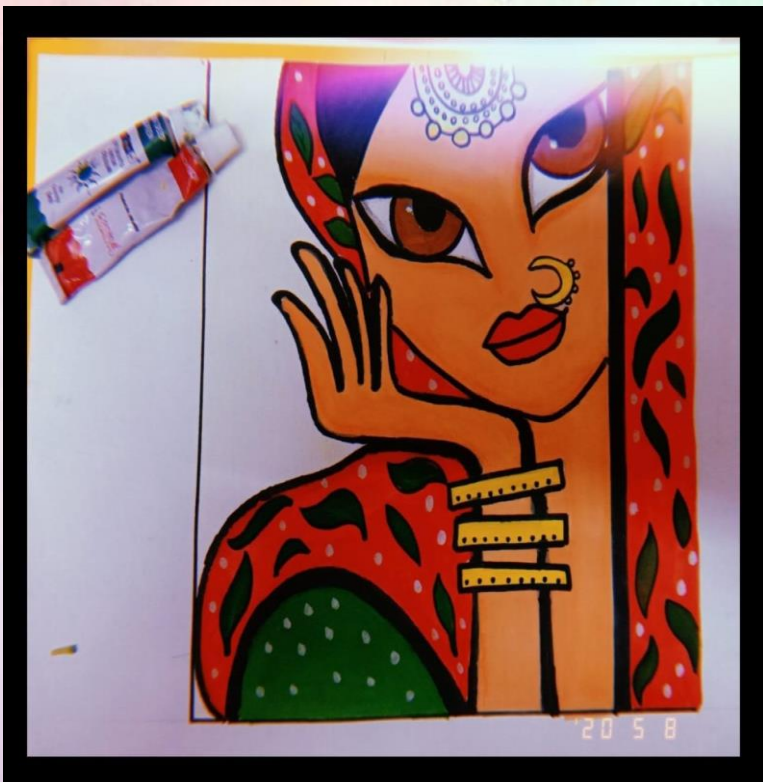
-Anurag Lad  
(SE Electrical)



- Rasika Adhav  
(TE Electrical)



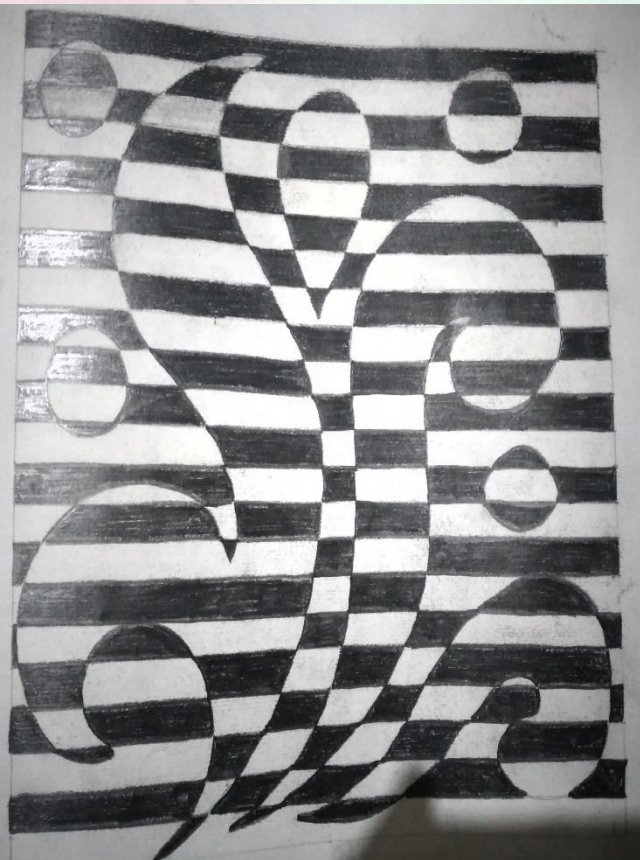
SAMRUDDHI SUTAR



Samruddhi sutar  
(TE Electrical)



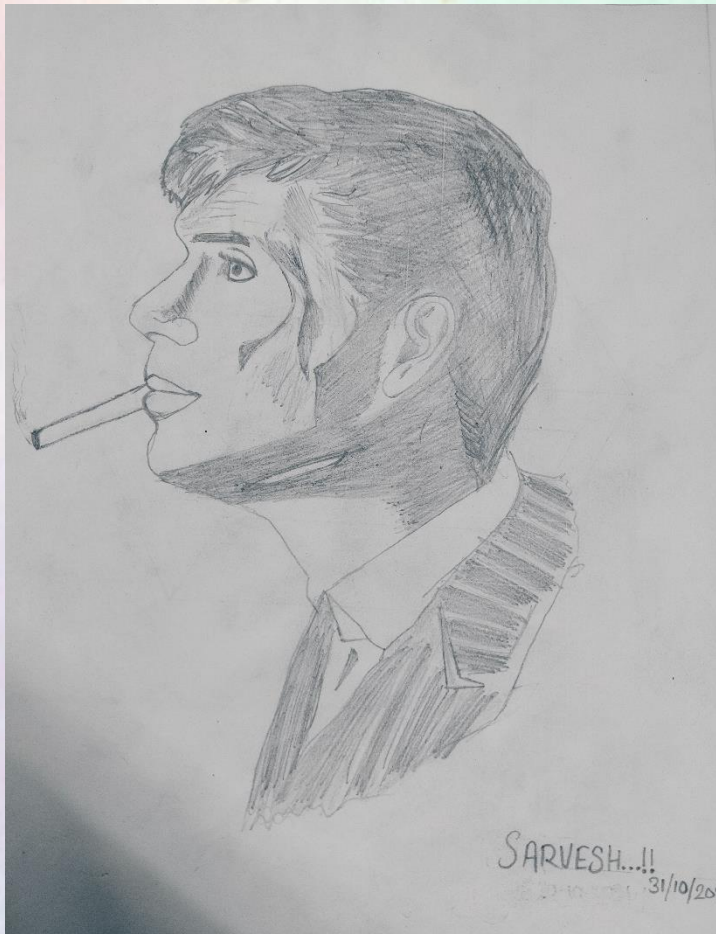
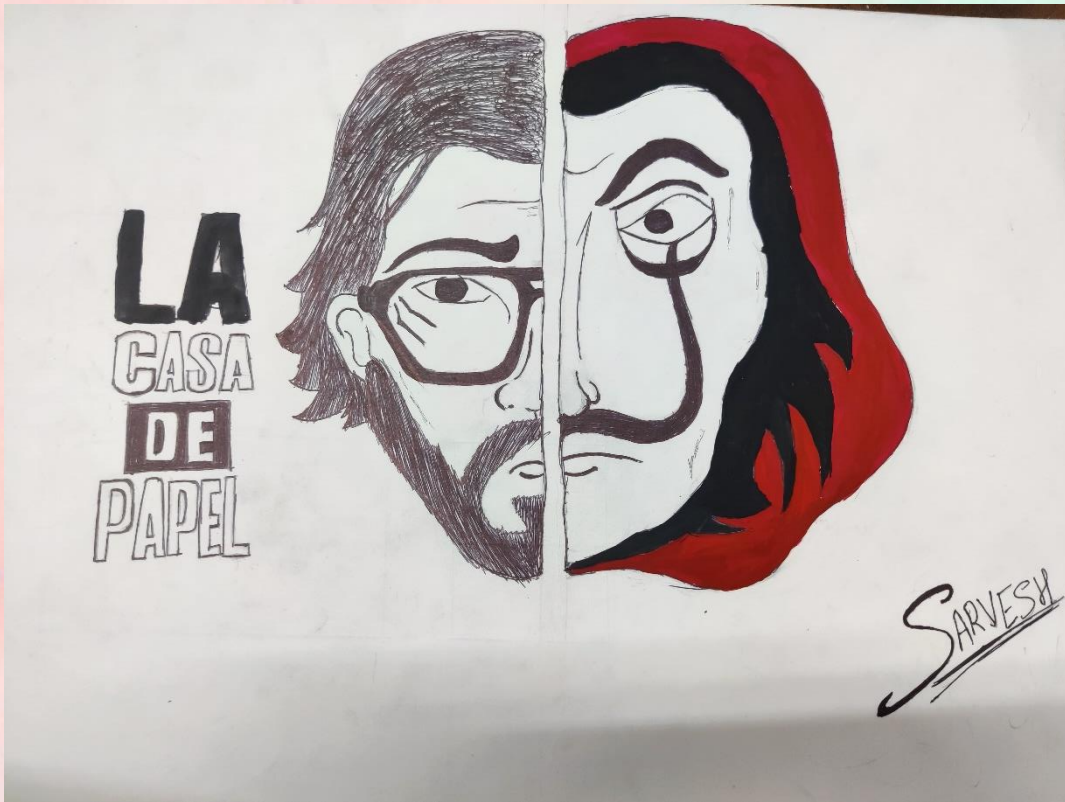
-Diya Chawan  
(FE Electrical)



-Harsh Deshpande  
(SE Electrical)



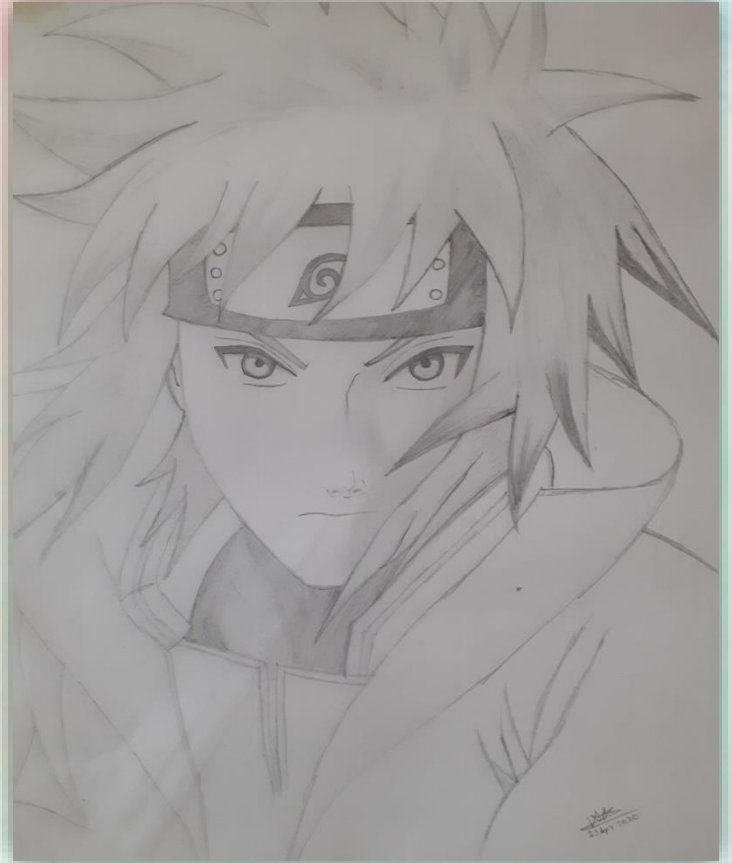
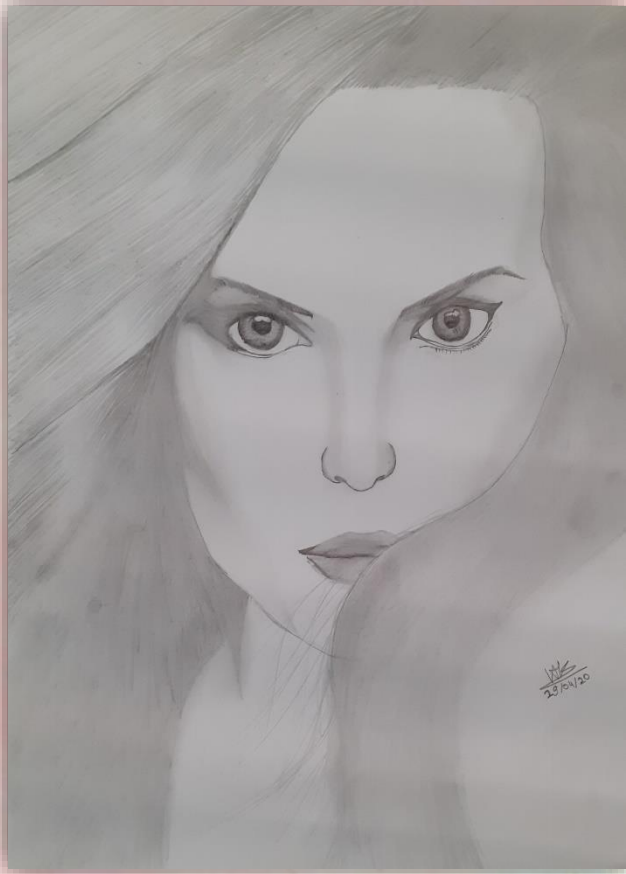
Vrushali Mahamuni  
(TE Electrical)



- Sarvesh Tilekar  
(FE Electrical)



- Sneha Adake  
(TE Electrical)



- Vedang Kulkarni  
(TE Electrical)



- Devwallabha Kulkarni  
(TE Electrical)



Vrushali Mahamuni  
(TE Electrical)



**GRAB THE**

**TECHNOLOGY**





**LENS**



## Name of Project : DIGITAL MIRAGE

Guide:	Dr. Ujjwala Thakkar		
Group No:	1		
	Aniruddha Kasture andikast2000@gmail.com 7028519887		Gururaj Rajmane gururajmane188@gmail.com 9423537101
	Sayali Kulkarni sayalikulkarni179@gmail.com 9359004033		Ishwari Kochak bhuvaneshvari05@gmail.com 9403176617




## Name of Project : AUTONOMOUS CAR USING IMAGE PROCESSING

Guide:	Dr. Ujjwala Thakkar		
Group No:	2		
	Renuka Joshi joshirenuka210@gmail.com 9421244895		Shreya Surwase surwaseshreya18@gmail.com 8275585286
	Yukta Naik yuktahn17@gmail.com 9359181523		Surbhi Bhandari surbhibhandari75@gmail.com 8795747966

**Name of Project: STUDY AND ANALYSIS OF DRIVE CYCLE FOR EV APPLICATION**

**Guide:** Dr. V. A. Joshi



**Group No:** 3

	<p>Shantanu Sankpal iamshantanuss@gmail.com 8329728253</p>		<p>Palash Shirude palashshirude@gmail.com 9420913359</p>
	<p>Kunal Mali kunalмали995@gmail.com 876513359</p>		

**Name of Project: IOT BASED HEALTH MONITORING USING ARDIUNO UNO**

**Guide:** Mrs. L. D. Sovani

**Group No:** 4

	<p>Rohit Gavali rohitagavali2000@gmail.com 7350233247</p>		<p>Shubham Kause kauseshubham@gmail.com 8766818173</p>
	<p>Renuka Naik 18011045@pvgcoet.ac.in 7722085097</p>		

## Name of Project: HYBRID POWER GENERATION

Guide: Prof. U. B. Sarode

Group No: 5



Akshat Deshmukh  
[deshmukh.akshat@gmail.com](mailto:deshmukh.akshat@gmail.com)  
9822344883



Prajesh Durgawale  
[prajeshdurgawale1@gmail.com](mailto:prajeshdurgawale1@gmail.com)  
7887764381



Ankit Hichami  
[ankithichami567@gmail.com](mailto:ankithichami567@gmail.com)  
9139378579

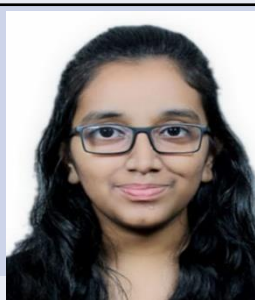
## Name of Project : AI TECHNIQUE IN ISOLATED SOLAR SYSTEM

Guide: Dr. Mrs. M. S. THAKARE

Group No: 6



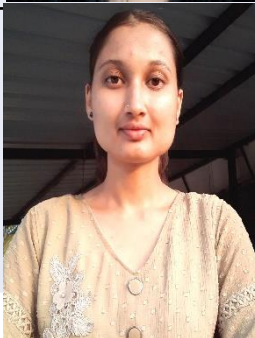
Kiran Ugale  
[kiranugale401@gmail.com](mailto:kiranugale401@gmail.com)  
8080441159



Aakansha Bhosale  
[aakanshabhosale8@gmail.com](mailto:aakanshabhosale8@gmail.com)  
9421799743






Mayuri Chetule  
[mayurichetule2000@gmail.com](mailto:mayurichetule2000@gmail.com)  
9420464231





Neha Naykodi  
[nehanaykodi@gmail.com](mailto:nehanaykodi@gmail.com)  
9172271971




Name of Project : REACTIVE POWER COMPENSATION IN SOLAR POWER PLANT

Guide:	Prof. O. S. Pawaskar		
Group No:	7		
	Narendra Patil narendra2000patil@gmail.com 9325044390		Smit Mate smitmate2000sept@gmail.com 7887759598
	Deepak Bhardwaj deepakbhardwaj0003@gmail.com 9139378579		




Name of Project : SMART SUBSTATION MONITORING AND CONTROL

Guide:	Prof. O. S. Pawaskar		
Group No:	8		
	Manasvi Bambode manasvibambode@gmail.com 7083264397		Dipti Shinde 19011070@pvgcoet.ac.in 7559284294
	Snehal Datir snehaldatir172@gmail.com 9359790867		






## Name of Project: VOICE ACTIVATED HOME AUTOMATION SYSTEM FOR BEDRIDDEN PATIENTS

Guide:	Prof. R. A. Ranjekar		
Group No:	9		
	Pratiksha Gurav 308pratikshagurav@gmail.com 7709986177		Sidhoji Sawant sawantsidhoji@gmail.com 9168020342
	Atharva Dandavate asd162001@gmail.com 8299378579		Aastha Kadu aastha.kadu1@gmail.com 9764098967

## Name of Project : SIZING AND SIGHTING OF BATTERY CHARGING STATION FOR ELECTRICAL VEHICLE FOR PUNE CITY

Guide:	Dr. S. T. Gaikwad		
Group No:	10		
	Tanmay Nerkar tanmaynerkar1@gmail.com 9834583703		Anushri Malode malodeanushri@gmail.com 9552136552
	Mansi Mali <a href="mailto:mali.mansid@gmail.com">mali.mansid@gmail.com</a> 9479892004		



# Name of Project: FAULT ANALYSIS OF INDUCTION MOTOR USING MCSA

Guide:	Prof Mrs. R. A. Ranjekar		
Group No:	11		
	Vedant Shevale vedantshevale2000@gmail.com 8983213957		Pramod Titkare 19111063@pvgcoet.ac.in 8830918167
	Kiran Dagade kirandagade45@gmail.com 7666312291		Sanil Pandhare 19111063@pvgcoet.ac.in 7888288017
	Omkar Baraskar omkarbaraskar2@gmail.com 8788135412		

# Name of Project : ACTIVE HARMONIC FILTER

Guide:	Dr. M. P. Bhawalkar		
Group No:	12		
	Pranav Kale pranavjk2000@gmail.com 9552590530		Prasanna Warad waradprasanna@gmail.com 9405503147
	Apurva Nikam apurvanikam1632000@gmail.com 7620897378		Suyash Chavan suyashchavan46@gmail.com 9604824539

## Name of Project: SOLAR PANEL MONITORING SYSTEM

Guide:	Dr. M. S. Thakare		
Group No:	13		
	Nishant Kulkarni kulkarnik792@gmail.com 9373061016		Sumeet Khannukar sumeetkhannukar07@gmail.com 7588840872
	Ketan Kulkarni kulkarnik792@gmail.com 9139378579		

## Name of Project : DESIGN AND IMPLEMENTATION OF PASSIVE AND ACTIVE POWER FILTER FOR MITIGATION OF POWER QUALITY ISSUES DUE TO INTEGRATION OF SOLAR PHOTOVOLTAIC SYSTEM INTO THE GRID USING MATLAB SIMULINK.

Guide:	Mrs. G. M. Karve		
Group No:	14		
	Karan Narang karannarang1720@gmail.com 8799901911		Vikrant Gaikwad vikrantgaikwad724@gmail.com 9890396427
	Yuvraj Aher aheryl622@gmail.com 7558443136		

Name of Project: PERFORMANCE ANALYSIS OF BI-DIRECTIONAL DC TO DC CONVERTER

Guide: Prof. P. R. Khatri

Group No: 15



Sahil Jadhav  
sahiljadhav8016@g  
mail.com  
9359019101

# Coordinator's words

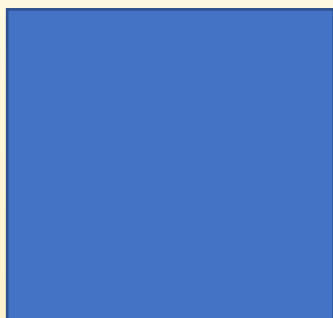


PHOTO1



PHOTO2

Words by coordinators



**Pune Vidyarthi Griha's  
College of Engineering and Technology  
& G.K.Pate (Wani) Institute of  
Management**

पुणे विद्यार्थी गृहाचे  
अभियांत्रिकी व तंत्रज्ञान महाविद्यालय, पुणे.

P.V.G.'s  
**COLLEGE OF ENGINEERING & TECHNOLOGY**

**44, Vidya Nagari, Pune 411009. Maharashtra, India.**

**Tel. : +91-20-24228258/65/79 Fax.: +91-20-24226858**

**Email: [principal@pvgcoet.ac.in](mailto:principal@pvgcoet.ac.in), [info@pvgcoet.ac.in](mailto:info@pvgcoet.ac.in)**

**Website: [www.pvgcoet.ac.in](http://www.pvgcoet.ac.in)**