# Government College Of Engineering, Amravati

(An Autonomous Institute Of Government Of Maharashtra)

*"Towards Global Technological Excellence"*

# Department of Information Technology

# NEWSLETTER

## JANUARY 22-MARCH 23

# Principal's Desk

I would like to congratulate all the faculties and students for publishing their departmental newsletter. Since 2001, the department has grown in terms of infrastructure, teaching learning process and qualified staff. I give my good wishes to the whole Department of Information Technology for their future ventures. Appreciating the achievements inspires the students to participate and develop confidence for their future endeavors. Once again, I wish everyone all the very best.



**Prof. Dr. A. M. Mahalle**
**Principal,**
Government College of Engineering, Amravati

# Head's Desk

The Department of Information Technology is publishing its newsletter which would contain all the events, departmental, students' and faculty achievements. The Information Technology Department was started in the year 2001. The Department has well qualified and experienced faculty, well equipped laboratories, classrooms and other facilities for imparting the state of the art course contents and educational experience. Our students work in world class multinational organizations that are private and public sectors units.



**Prof. A. W. Bhade**
**Head,**
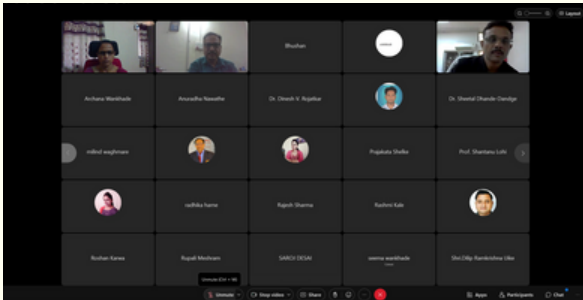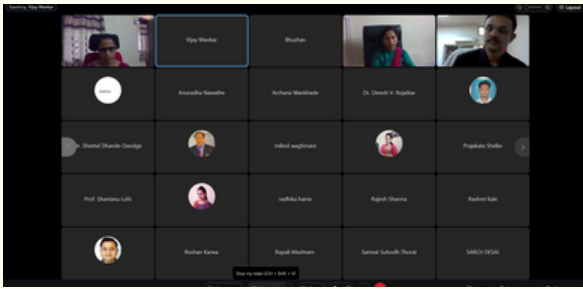Department of Information Technology, GCoE, Amravati

## Faculty and Staff of IT



### Faculty Co-ordinator

Dr. K. P. Wagh

### Editorial Team

Sanika Yawale          Piyush Nimbokar
Divya Waghmare          Aaditya Narnaware
Vaidehi Warghat          Bhavesh Chaudhari

# शिवस्वराज्य दिन
## २५ जून २०२२

The program was hosted by the department of Information Technology under the guidance of **Prof. A. D. Wankhede**. **Rangoli and Poster Making Competition** were organized.





## Visit of Hon. Principal to Department

**30th September 2022**

Hon. Dr. A. M. Mahalle, Principal, GCoE, Amravati visited IT Department and was felicitated. Also, Dr. S. A. Lohi, Assistant Professor, Department of Information Technology was felicitated by Hon. Principal for getting PhD degree.

## Faculty Development Program

**21st–25th March 2022**
**Convener: Prof. A. W. Bhade (Head, IT)**
**Coordinator: Prof. S. R. Wankhade (Assistant Professor, IT)**

One Week Faculty Development Program on "Introduction to Machine Learning in Research" was organized by Department of Information Technology in Online mode in which the sessions were handled by experts from industry and academia.



## TEACHERS' DAY

**5 September 2022**

The program was organized to appreciate the hard work and presence of teachers in students' life by the students of 3rd year. Here the audience were acquainted with the legacy of Dr. Sarvepalli Radhakrishnan. The students expressed their warm gratitude by felicitating the faculties with a tree sapling.

# TREE PLANTATION



## 28 SEPTEMBER 2022

The program was conducted under the **"One Student One Tree"** activity. The students of third year and final year planted the tree saplings followed by tree plantation by the faculty members. The program was conducted under the guidance of respected HoD Prof. A.W. Bhade.









# वाचन प्रेरणा दिन

## १५ ऑक्टोबर २०२२

The program was organized to commemorate the birth anniversary of Dr. APJ Abdul Kalam celebrated as 'Vachan Prerna Din'. The aim of the program was to inculcate the habit of reading in the students by group reading under the guidance of respected HoD Prof. A.W. Bhade. The program was co-ordinated by Prof. Bhushan Wakode.

## STRUCTURED MENTORING

**28 October 2022**
The event was named as **"Structured Mentoring"**. Structured Mentoring is an initiative taken by alumni of our college **Prof. Vaishali Gaidhane** and Head of Department Information Technology **Prof. A. W. Bhade** for students of CS and IT students, it is a continuous process.
The objectives of this program were:
1 To make students Industry ready
2.Motivate them to participate in various coding competitions



## Students demonstration IIoT equipment's and projects





The **principle secretary Hon. Mr. Vikas Chandra Rastogi, Director Hon. Dr. Abhay Wagh** along with **Joint secretary Hon. Mr. Suhas Tidke, Joint director Mumbai division, Pramod Naik, Joint director Amravati division Dr. Vijay Mankar** visited our college on **25th December 2022.** In this visit the students of IT Department demonstrated the various equipments of IIoT at Centre of Excellence in Industrial Internet of Things at department of IT and also demonstrated the various IIoT projects.

# STUDENT DEVELOPMENT PROGRAM ON
## " INTRODUCTION TO INDUSTRIAL INTERNET OF THINGS "

**07th to 11th January 2023**
The one-week student development program on **Industrial Internet of Things (IIoT)** was organized by **Government College of Engineering, Amravati**, in collaboration with two industrial partners, **Divy IT Solutions, Pune** and **Sensital Pvt. Ltd. Australia**. This program was scheduled in CSE AV Hall and Centre of Excellence in IIoT. **The Centre of Excellence in Industrial Internet of Things** was established in year 2020 at Government College of Engineering, Amravati and this facility is available only at Government College of Engineering, Amravati throughout the Maharashtra. The program was scheduled from 7th January to 11th January 2023 and was aimed at providing a comprehensive understanding of IIoT to the students. The patron of the program was **Dr. V. R. Mankar**, Joint Director, Amravati Region, and **Dr. A. M. Mahalle**, Principal, GCOE Amravati.



CENTER OF EXCELLANCE IN IIoT

## Sessions on IIoT

The theoretical sessions included **Introduction to IIoT, Introduction to Sensors, Arduino and Arduino IDE, Programming with Arduino, Wiring** and I**nterfacing, IOT Enabling**, and **Map out of PLC**. The hands-on training sessions included **Smart Home, Raspberry Pi, and PLC Trainers.** The program covered a wide range of topics, which helped students to gain a deeper understanding of IIoT and its applications. The introduction to IIoT provided an overview of the concept of IIoT and its significance in the manufacturing industry. The introduction to sensors explained the different types of sensors used in IIoT devices and their applications. The Arduino and Arduino IDE session covered the basics of Arduino programming and how to use the IDE for programming. The programming with Arduino session provided hands-on experience in writing and executing code on Arduino. The hands-on training sessions provided students with an opportunity to apply their knowledge practically. The smart home session helped students to create a smart home system using IIoT devices. The Raspberry Pi session provided hands-on experience in using Raspberry Pi for IIoT applications. The PLC trainer's session helped students to understand the working of PLC and its applications in IIoT.
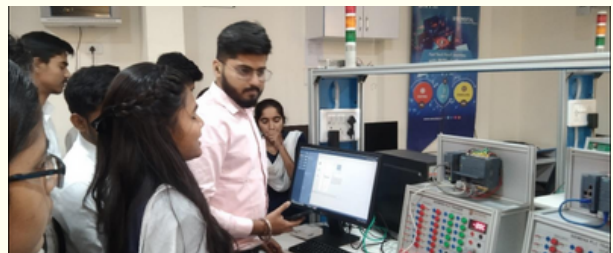


The expert faculty for the program was **Er. Rohit Bhanushali**, who has extensive experience in IIoT and has worked on various IIoT projects. The convenors of the program were **Dr. P. B. Ambhore, Incharge Centre of Excellence in IIoT, GCOE Amravat**i and
**Prof. A. W. Bhade, HOD IT Dept., GCOE Amravati**. Dr. P. B. Ambhore has expertise in IIoT and has worked on various IIoT projects. Prof. A. W. Bhade has been associated with GCOE Amravati for many years and has a deep understanding of the needs of the students.





In conclusion, the one-week student development program on IIoT organized by Government College of Engineering, Amravati, was a great success. The program covered a wide range of topics, which helped students to gain a comprehensive understanding of IIoT and its applications. The expert faculty played a crucial role in making the program a success. The hands-on training sessions provided students with an opportunity to apply their knowledge practically, which is essential for understanding IIoT devices. The program was a great initiative by Government College of Engineering, Amravati to enhance the knowledge and skills of students in the field of IIoT.

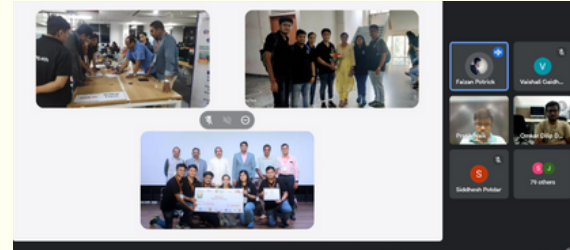## SMART INDIA HACKATHON ORIENTATION SESSION

**14 January 2023**

Session was regarding Smart India Hackathon orientation under the guidance of respected HoD **Prof. A.W. Bhade. Prof. Vaishli Gaidhane** guided students to make them understand the structure and procedure for SIH and to make students aware about the opportunity provided by SIH. Session included the brief discussion regarding the participation in SIH. Winners of Previous year SIH share their experiences and guided students to make active participation in SIH.





## Industrial Expert Session

**23 March 2023**

The session was organized for IT Department students under the guidance of Prof. A. W. Bhade to guide them about the various aspects in software industry. Expert for the session shared his work experience with the students and guided them for future endeavours. He also shared the information regarding supply chain working in software industry and discussed about the two main aspects i.e. development and support. There was a QnA session where expert addressed each and every query of students.





## Birth Anniversary of Netaji Subhash Chandra Bose

**23rd January 2023**

On the Birth Anniversary of Netaji Subhash Chandra Bose, the Department of Information Technology visited Durga Primary School, Shirada . This activity was undertaken by NSS Unit of GCOE, Amravati where Prof.Archana Bhade, Head, Department of IT and Prof. Seema Wankhade along with Vaishnavi Lande and Gayatri Shende From 2nd Year IT Visited The school. The goal was to aware children about basics of computer. The students were taught basic programs like MS-Word, Paint, etc. A computer set was gifted to the school to help students to grow interest in technology.

**Expert: Er. Ashish Daga, oracle APPS Techno functional Developer at Leviton.**
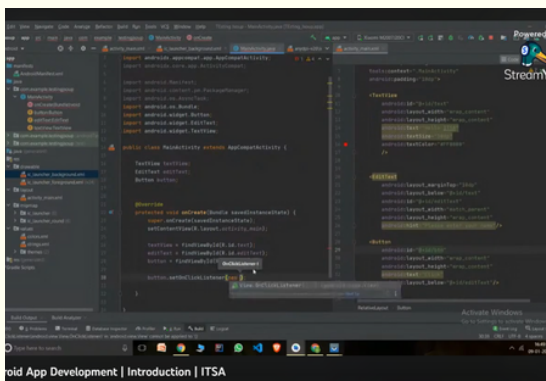
# INFORMATION TECHNOLOGY STUDENTS ASSOCIATION (ITSA)

## Session on Blockchain Technology
## 08th January 2022

### Conducted by: Mohit Rakhade

The session was primarily focused on introducing students to blockchain technology. Students were introduced to basic concepts of blockchain technology. Roadmap for becoming a blockchain developer was also discussed.



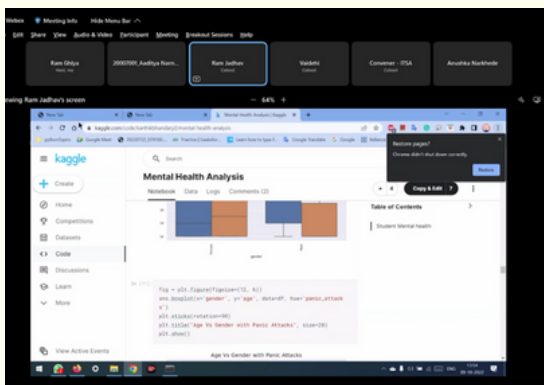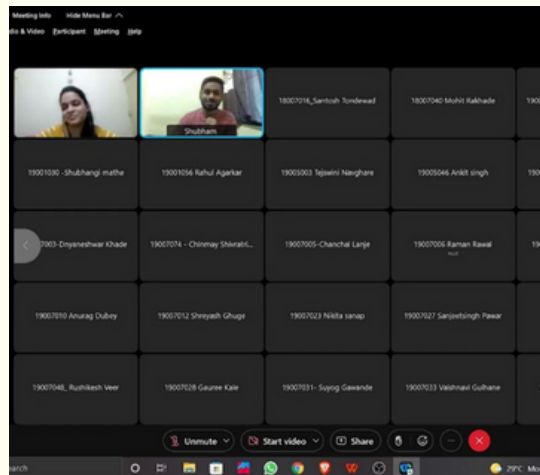## Session on Android Development
## 09th January 2022

### Conducted By: Shivam Shendurkar

This was an introductory session on android development. The main focus of this session was showing students the process of creating an android application. A basic android application was designed and built in the session.

## Workshop on Campus Placement and Higher Studies
## 25th February 2022

### Conducted By: Shubham Chaudhari, Sharvari Oka

Our Alumni Mr. Shubham Chaudhari and Ms. Sharvari Oka were the mentors for this session Various topics were discussed by the mentors but the main focus was on placements and higher studies. After the session a QNA session was also conducted

## ITSA Workshop on Data Analytics
## 09th January 2022

### Speaker: Mr. Ram Jadhav

The workshop covered libraries used in Python for data analytics, explained SQL and data structures related to data analytics, discussed arrangement of data sets, provided resources for learning data analytics, and offered project guidance.
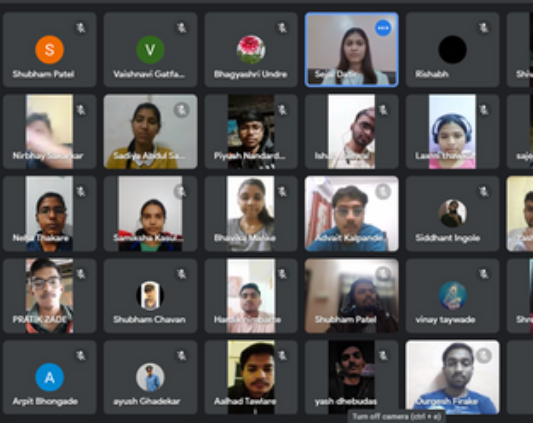
## Session on Profile Building and Career Guidance
### 15th October 2022



This was an offline session.
The speakers of the session were Mr. Bhansali (Lead SDE at DataSee.io), Ms. Samdekar(Developer Associate at SAP Labs), Mr. Gilalkar (SWE at Teradata). The session covered various topics like open source, research, profile building etc.





## Session on Project Guidance
### 03rd December 2022

**Speaker: Mr. Shubham Patel.**

He is an alumnus of 2018 B-Tech IT Batch. He is currently working in Qualcomm and has done his M-Tech from IIT Madras. As that session isn't sufficient on vast topics like Project Guidance so ITSA has continued 2.0 on 10-12-2022.

## Session on Web Development
### 21st December 2022

**Speaker: Mr. Prathamesh Bhansali.**

The session was managed by Ram Ghiya and was hosted by Vaidehi Warghat and Kabir Pakhale and coordinated by Sanket Dudhmande. Mr. Prathamesh Bhansali Sir,currently working as a Lead SDE at Datasee.AI. He covered all the useful concepts of Web Development at which one can start building their webpage.





## Session on Flutter Development
### 16th January 2023

**Speaker: Karan Kharode (Lead Frontend Engineer at Zapit.io)**

Sir had given brief information about Dart Language and its scope in today's era. Sir had not only elucidated topics theoretically but also had demonstrated it practically. At last there was a Question and Answer Session. That clears / Resolves doubt of students as for many of them are new to this field.

# INSTITUTION OF ENGINEERS (IE)

# INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)

## Hands on Session on Python Programming

### 27th August 2022

**Speaker:**
**Miss. Pallavi Bidwe**
**Data Analytics engineer in Excelr Solution, Pune**

This Session was Organized by ISTE Team of IT department under the guidance of Prof. A.D. Wankhade. The speaker explained brief view of python functions , libraries , syntax and also about data analytics. She also addressed the students in the QnA session followed.



## Poster Making Competition

### 19th November 2022

**Judges: Dr. K. P. Wagh (Assistant Professor IT) and Prof. K. N. Tayade (Assistant Professor IT)**

A Poster Making Competition was conducted under IE and ISTE Student Chapter under the guidance of Prof. A.D.Wankhade. The themes for the Competition were Database Management System, Network and Embedded, System Administrations, Programming, Projects – IoT, AI/ML, Blockchain. Judges evaluated all of the participants posters and announced their results for the Poster Making Competition. The program was a success in the presence of Prof. A. W. Bhade and Dr. P. B. Ambhore.



Prizes:-
1. Sakshi Khadilkar (3rd IT) - Rs.1000/-
2. Zeba (3rd IT) – Rs.750/-
3. Prem Satpaise (2nd IT) – Rs.500/-

# Zenith Cultural Fest

## Runner up in Departmental Dance in Zenith 2k22





**Participants:**

Vaishnavi Devardekar, Raksha Jogi, Urvashi Dharne, Vaishnavi Bhoyar, Nikita Sanap, Gauri Ambuskar, Sakshi Barde, Kankeshwari Pawar, Divya Waghmare, Sakshi Khadilkar, Piyush Nimbokar, Jaydeep Gedam, Bhavesh Chaudhari, Yash Ingle, Yash Vithalkar

## Runner up in Departmental Dance in Zenith 2k23

**Participants:**

Kankeshwari Pawar, Gauri Ambuskar, Gauri Bharambe, Vaishnavi Kshirsagar, Ishwari Kusumbe, Kshitija Jamnikar, Mrunali Khrzekar, Sakshi Daberao, Yash Gupta, Soham Aswar, Manish Telashe, Kabir Pakhale, Ishan Jaiswal





## Winner in Departmental Drama in Zenith 2k23

### Drama: Sangharsha Jivanacha

**Participants:**

Shubham chavhan, Yash Ingle, Samruddhi Sahatpure, Vaishnavi Gatfane, Kabir Pakhale, Alhad Tawlare, Soham Aswar, Siddhant Ingole, Aditya Yenkar, Uday Fating, Niraj Ingole, Manish Telasi

# KALPANA CHAWLA TROPHY

## Winner in Chess (Boys) in KCT 2k22

**Samruddha Dudul** from 1st year IT was Winner in chess in KCT 2k22.





## Runner up in Chess (Girls) in KCT 2k22

**Shruti Jogi** from 1st year IT was Runner up in chess in KCT 2k22.

## Winner in Cricket in KCT 2k23

Players:
Dhiraj Balpande, Harshad Velhal, Aditya Bagde, Deepak Nagre, Rahul Shingne, Ayush Ghadekar, Anurag Kadu, Nilesh Chavhan, Atharva Kulkarni, Kshitij Telang, Kabir Pakhale, Uday Fating, Mithilesh Porate

Man of the Tournament:
**Harshad Velhal**
Man of the Match:
**Kshitij Telang**

## Winner in Volleyball in KCT 2k23

Players:
Sanket Bodhe, Anurag Matode, Advait Kalpande, Shreyash Yelore, Piyush Nimbokar, Yogesh Nagbhidkar, Sujal Gulhane, Nakul Kore, Ayush Ghadekar, Arun Ghuglot, Yash Vithalkar

Best Defender:
**Yogesh Nagbhidkar**

# PRAJWALAN ' 23

## -Igniting Minds

Two events namely INNOV-A-THON and OVERKILL were organized under the Department of Information Technology under the guidance of Prajwalan co-ordinators Prof. S.R. Wankhade and Prof. K.N. Tayade .

## INNOV-A-THON
### 19th February 2023

The judges for the event were Prof. A. W. Bhade and Prof. S. R. Raulkar. The competition consisted of one round of PPT submission based on which the participants were examined by the judges.
**Faculty Co-ordinator: Prof. D.R. Uike**

**Winner:**
Team HT04 (Bhavesh Chaudhari , Jaydeep Gedam & Sakshi Khadilkar 3rd IT) - Rs.5000
**Runner-up:**
Team HT03 (Sahil Fulmali & Radha Ilmulwar from 2nd CSE) -Rs.2000



## OVERKILL
### 19th & 20th February 2023

There were three rounds conducted on the first day, and the teams had to compete against each other to qualify for the final round based on a knockout scheme. On the second day, the final round was conducted.
**Faculty Co-ordinator: Dr. P.B. Ambhore**

**Winner:**
Team (Jaideep Wankhade (SKNCOE , Pune), Tejaboy(Sardar Patel) , Prashad Aherkar (VNIT Nagpur) , Kanishka Rajhans(VNIT Nagpur) , Tejas Sahu(SPSDK Science)) -Rs.5000
**Runner-up:**
Team (Saptak Chawode, Shantanu Hiwanj, Aniket Hinge, Abimanyu Hing, and Vishnu Mahajan , from HVPM COET) - Rs.2000

## STUDENTS' ACHIEVEMENTS (2022-23)

| Sr.no. | Name | Year | Achievement |
|---|---|---|---|
| 1. | Shivasing Borade | 3rd | Selected in Microsoft Mentorship program 2022 |
| 2. | Vaishnavi Devardekar | 4th | HR associate at HOMEFLIC wegrow, Cognizant campus ambassador, social activities from deesha group |
| 3. | Zeba | 3rd | Got two gold medals in NCC Camp in Aug 2022 for 1. Best Cadet 2. Best in written test |
| 4. | Jaydeep Gedam | 3rd | E-cell team secured AIR 4 in National Enterprenurship Challenge at IIT Bombay |
| 5. | Ayush Ghadekar | 3rd | Runner up in net cricket won Rs. 1000 cash prize in prajwalan |
| 7. | Gauri Ambuskar | 3rd | Runner-up Non Departmental Dance Zenith2k23 |

## FACULTY PATENT FILED

| Sr. no. | Name | Particular |
|---|---|---|
| 1. | Prof. K. N. Tayade | Patent of registration design of "Accident Notifying Device for Vehicles" published on 07/06/2022, Design Number-361252-001by The Patent Office, Government of India. |

## FACULTY GUEST LECTURES

| Sr. no. | Name | Particular |
|---------|------|-----------|
| 1. | Dr. K. P. Wagh | Delivered expert lecture on Machine Learning in Short term training program |
| 2. | Dr. P. B. Ambhore | 1.Guest Speaker on "How to write Effective Research Papers" Year 2022-23<br>2.Guest Lecture on "Comparative Research Paper and How to write Quality Reports" 2022-23 |

## FACULTY PARTICIPATION

| Sr. no. | Name | Particular |
|---------|------|-----------|
| 1. | Dr. P. B. Ambhore | 1.Worked as Member of IJSER(International Journal of Scientific & Research)<br>2.Worked as Editorial Board Member of Advances in Vision Computing<br>3.Worked as a Editorial Board Member of IJAID: International Journal Of Artificial Intelligence And Development (UDOT Information And Communications Technologies) Cross Cut Road, Coimbatore, Tamil Nadu-641012.India<br>4.Worked as a Editorial Board Member of International Journal of Management, Sciences, Innovation, and Technology – IJMSIT Editorial Board Members<br>5. Worked as a Editorial and Contributors in Intelligent Sustainable Systems: Proceedings of ICISS 2022. |

## FACULTY PARTICIPATION

| Sr. no. | Name | Particular |
|---------|------|------------|
| 2. | Prof. K. N. Tayade | 1. Contributed as Jury Member at the "Maharashtra Start-Up Yatra 2022", an event organized by Government of Maharashtra on 13-14 Oct 2022.<br>2. Contributed as Regional Coordinator, Amravati Region for "Future Skill Prime" program conducted by NASSCOM.<br>3. Contributed as Primary Evaluator at "Smart India Hackathon 2022", organized by AICTE, New Delhi in July 2022.<br>4. Contributed as Academic Auditor to perform Academic Audit of Information Technology Department, Government College of Engineering, Aurangabad. |

## RESEARCH PAPERS

1. Dr.P.B.Ambhore An Effective Blockchain Technique to Resist Against Deepfake Videos An Effective Blockchain Technique to Resist Against Deepfake Videos Publisher: IEEE.

2.Dr.P.B.Ambhore Enhancing Content Based Image Retrieval Technique by Observing Image Feature Extraction Methods Enhancing Content Based Image Retrieval Technique by Observing Image Feature Extraction Methods Publisher: IEEE.

3. Dr.P.B.Ambhore Amalgamation of Blockchain Technology and Cloud Computing for a Secure and More Adaptable Cloud Amalgamation of Blockchain Technology and Cloud Computing for a Secure and More Adaptable Cloud CRC Press.

4. Dr. P.B. Ambhore/ A novel method development for classification of COVID-19 Pneumonia in lungs Using Machine learning approach, Neuro Quantology | September 2022 | Volume 20 | Issue 9 | Page 4484-4490 | doi: 10.14704/nq.2022.20.9.NQ44513.

5. Rashmi S. Thakre, Dr. K. P. Wagh, Prof. S. M. Shinde, "Machine Learning Based Covid-19 Detection Using Magnetic Resonance Imaging (MRI)", in International Journal of Research and Analytical Reviews(IJRAR), ISSN NO: 2347-3150, Volume XI, Issue IX, September- 2022.

6. A. W. Bhade and G. R. Bamnote, "Comparison of pre-processing and feature extraction techniques for Alzheimer detection using MRI images," 2022 Fifth International Conference on Computational Intelligence and Communication Technologies (CCICT), Sonepat, India, 2022, pp. 42-48, doi: 10.1109/CCiCT56684.2022.00020.

7. Research Paper selected for Scopus Indexed IEEE 11th International Conference ,ICETET SIP 2023 , Title: Design Secure Cloud Based IoT Network for End to End Cloud Communication, Authors: Archana D. Wankhade and Kishor Wagh