DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Vision of Department:-

To lead in technical, quality education, innovation, research for development of sustainable & inclusive technology for the society.

Mission of Department:-

- **M1 :** To create ambience of academic excellence through state of art infrastructure
- **M2 :** To create student-centric pedagogy that will lead to employability.
- **M3 :** To create a software engineering professional with knowledge of multidisciplinary fields, can provide innovative products & service to society.
- **M4 :** To train and motivate the students for lifelong learning, employability, and entrepreneurship

Program Educational Objectives (PEOs)

PEO1: Equipped to analyze and solve industry problems using a strong foundation in engineering sciences and computer science and engineering.

PEO2: Skilled in solving real-world problems in a multidisciplinary environment using modern tools and techniques.

PEO3: Developed into an ethical IT professional who contributes to societal and environmental progress.

Program Specific Outcomes (PSO's)

PSO1 : To be able to give solution in networking, OOP, web development, cloud, IOT on real life application using open source software.

PSO2 : To be able to acquaint with modern trends in industry/research giving novel solution to existing social problems.

Publications

Sr. No.	Title of paper	Name of the author/s	ISSN Number
1	Fake news detection in social media based on sentiment analysis using classifier techniques	Sarita V Balshetwar Abhilash RS &, Dani Jermisha R	1573-7721
2	A Review on AI based Restaurant Management System	Mr. Abhishek Korde, Ms. Aditi Loni, Ms. Vaibhavi Deshpande, Ms. Dhanashri Rajput, Ms. Rutuja Chavan, Mrs. Dr. S. V. Balshetwar.	ISBN 978-93-91535-44-5
3	A Review On Ethical Maze In AI Development	Ms. Karina V Rathod, Dr. S V Balshetwar	978-81-961931-1-9
4	A Review On Sorting Techniques Visualizer	Dr.S.V.Balshetwar, Muskan Hanif Shaikh	978-93-91535-44-5
5	A Review on Blue Eye Technology	Ms. Archana Ghadage, Dr S V Balshetwar	978-81-961931-0-2
6	A Review paper on social distance detection using deep learning	K P Jagtap, Mangesh Deshmukh, Raj shinde, Abhishek kale, Kedar shikare	ISSN online 2582-7898
7	Notification system using cloud	K P Jagtap, Pawar Shubham, Ithape Prasanna, Taralekar Shubham, Bagwan Akib,	2582-3930

Publications

Sr. No.	Title of paper	Name of the author/s	ISSN Number
8	Disease Prediction System	Shikalgar A. A., Tanuja D. Supekar, Aishwarya A. Shinde, Arpita S. Phadtare, Shraddha S. Potekar	ISSN: 2582-3930
9	QUIZZLES: Test Your Skills and Become a Master	Himgouri Tapase, Miss. Neha Bobade, Mr. Shrijeet Desai and Miss. Shruti Kesarkar	ISSN 0973-4562
10	NFT Music Marketplace	Tapase H O, Bhoite Kshitij Sujit, Pawar Amardeep Vivek, Soni Ayush Lalchand, Momin Huzefa Ajamuddin	ISSN: 2582-3932
11	Scanning & Detection of Virus Using Cryptographic Hash function	Himgouri O.Tapase, Bhavika N. Oswal, Kajal N. Katkar, Rutuja A. More, Ruturaj R. Jadhav	e-ISSN: 2582-5210
12	Criminal Detection Through Facial Recognition	Nalawade Suraj, Shinde Ayush Sanjay, Ghorpade Utkarsh kishor, Navgane Aditya Suresh, Gaikwad Anuj Ajit,	ISSN: 2582-3932

Research

Sr. No.	Title	Inventor's Name	Patent Number
1	Secret Key Management For Distributed Wireless Sensor Network	Mrs.Mandhare R.M	202211053605 A
2	Online Waste Management System	Mrs.H.O.Tapase	133836

Achievements

Congratulations!

Sr. No	Students Name	Title of Activity	Prize
1	Abhishek Korde,Dhanashree Rajput,Vaibhavi Deshpande,Rutuja Chavan,Aditi Loni	Project Name-AI based Restaurant Management System	Best Project of the Year, Won 1st prize in 10th National conference NCETET-2023 at Bharati Vidyapeeths college of engineering Kolhapur
2	Shaikh Muskan,Kumbhar Aishwarya,Mane Rutuja,Palande Aarti	Project Name-Sorting Visualizer using Javascript	Best Project of the Year
3	Patel Vipul	National level YASHOTECHFEST 2K23	Won 2nd prize for the event poster presentation,Won 2nd prize for the event Bridge Tech
4	Rathod Karina	National level YASHOTECHFEST 2K23	Won 2nd prize for the event Mini Project (Model),Won 3rd prize for the event Paper Presentation
5	Kiran Salunkhe	National level YASHOTECHFEST 2K23	Won 3rd prize for the event Paper Presentation
6	Ankita Phalke, Archna Ghadage, Sakshi Rajput	Cummins Scholarship	Awarded a Cummins Scholarship

## Artificial Intelligence (AI) and Machine Learning (ML)

The evolution of AI has reached remarkable milestones, especially with the advent of generative models like GPT-4 and DALL-E. These models are capable of generating human-like text, images, and code, marking significant progress in natural language processing and image synthesis. AI applications now extend to diagnostics in healthcare, financial fraud detection, and automated content creation. In the automotive industry, AI models power autonomous vehicles, using vast datasets to interpret real-world environments and make predictive decisions. Research in reinforcement learning and transformer-based architectures has accelerated, contributing to more adaptive, context-aware AI systems that can be applied in complex, real-world scenarios.-**Abhishek Kale (Btech)**

Edge Computing and 5G Integration

Edge computing, combined with 5G connectivity, brings data processing closer to the source, enabling real-time, low-latency applications. This infrastructure allows for instant responses in applications such as autonomous vehicles, industrial robotics, and smart city frameworks. 5G and edge computing also enhance remote surgery, virtual and augmented reality experiences, and efficient power management in smart grids. As devices no longer need to rely on centralized cloud data centers, industries experience faster data flow, reduced operational costs, and increased productivity, transforming IoT applications in fields from agriculture to healthcare.-**Shinde Aishwarya Anil (BTech),Mane Rutuja Arjun(TY)**

Internet of Things (IoT) and Smart Devices
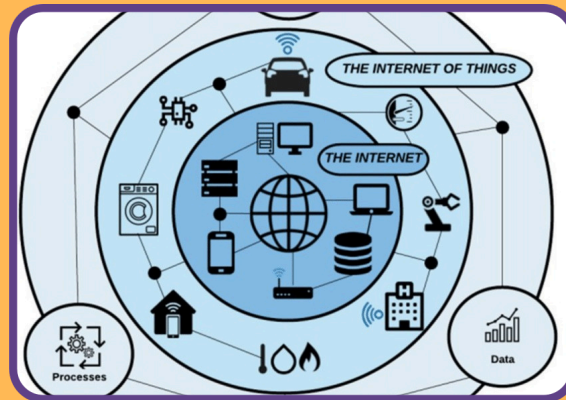
The IoT ecosystem continues to expand, connecting everything from home appliances to industrial machines. Smart homes integrate IoT devices for energy management, security, and convenience, while smart cities leverage IoT for monitoring traffic, waste management, and air quality. Industrial IoT (IIoT) transforms manufacturing with real-time data monitoring, predictive maintenance, and automation, contributing to Industry 4.0. As more devices connect to the network, edge computing and 5G have become essential for handling the massive amounts of data IoT generates, ensuring faster response times and better reliability.-**Aditi Santosh Loni (BTech),Yadav Swapnil (SY)**

Sustainable and Green Technology in Computing
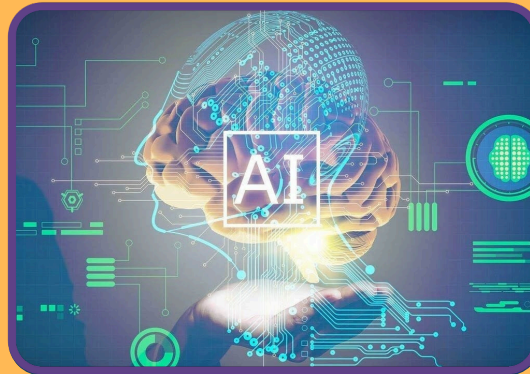
With rising awareness of environmental impacts, tech companies are shifting toward green computing. Innovations include energy-efficient data centers, recyclable hardware, and eco-friendly cloud services. The shift to renewable energy sources and carbon-neutral goals is being prioritized by major tech firms. Research in sustainable AI focuses on reducing the energy consumption of training large models. Techniques like liquid cooling and AI-driven power management are helping data centers cut down on energy use, aiming to minimize the tech industry's carbon footprint and promote environmental responsibility.-**Pawar Shubham Chandrakant (BTech),Shinde Raj Rahul(TY)**
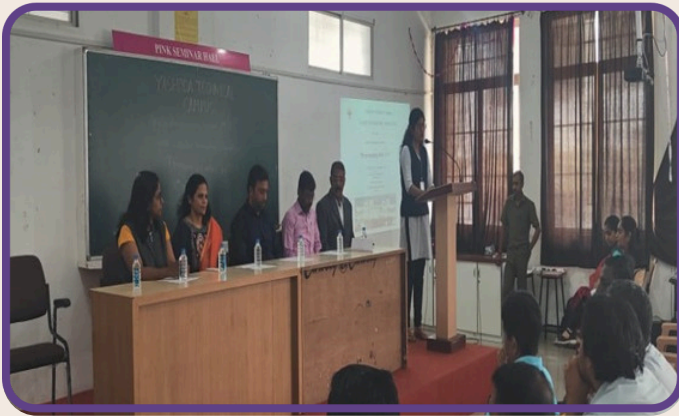
Activities
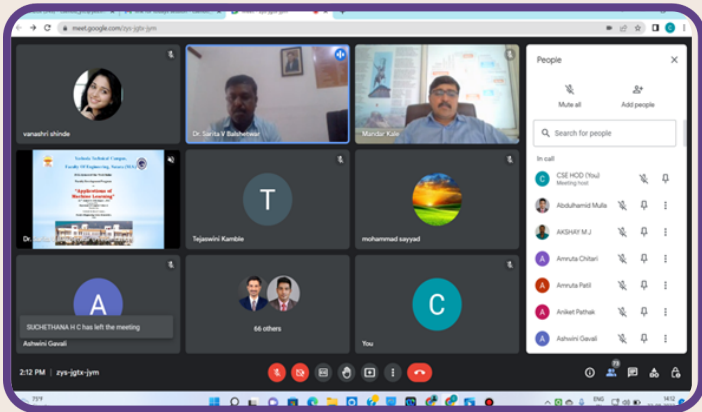
One-Week Online FDP on "Applications of Machine Learning" (22/08/2022 to 26/08/2022)

SDP on "Programming with C++" (05/09/22 to 08/09/22 and 12/09/2022)

Teacher's Day Celebration (05/09/2022)

Guest lecture on "Project Domain Selection"(17/10/2022)

Guest lecture on "Business Communication" (22/09/2022)

Guest Lecture on "Full Stack Development" on 19/09/2022

Facilities

Computer Lab

Library

Digital Classroom

Hostel

Transportation

Wi-Fi Campus