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 & Research

Sr.No	Title of paper	Name of the author/s	ISSN Number
1	Ecosense: Smart Green House Monitoring System	Dr. S.V. Balshetwar, Anand Shinde, Yash Dhabdhabe, Raviraj Katkar ,Shravani Katkar	2583-6226
2	AI-VERSE: Transformaive Coding Educa t ion with LLM's	Dr. S.V. Balshetwar, Aman Kadam, Arbaj Pathan, Abhishek Sarakale, Amit Kashid	2583-4819
3	Development of Real-Time Automobile Monitoring System based on IoT and Cloud	S. V. Balshetwa,Shreyash Dude,Nishant Bodare,Om Kadam	3048-6602
4	Analysis of machine learning based intrution detection system	Dasganu Hakke,Aniket Dixit, Thorat S.B.	0039-2049
5	Soldier Health & Position Tracking System	Sakshi Shinde,Ajinkya Chavan,Nikita Nikam,Aishwarya Ghorpade,Najiya Mulani, Suraj Nalawade	ISSN:0970-2555
6	A Novel Placement Prediction System	Chinmani Adhav ,Sanika Pol,Gayatri Shinde,Pranali Bhanage, Kajal Rathod,Dasganu Hakke	e-ISSN: 3048-6610

Research

Sr. No.	Title	Inventor's Name	Patent Number
1	Culinary Operation Controling Devices	Dr. S.V. Balshetwar	165321
2	Guard Health Monitoring Device	Dr.Suraj R.Nalawade	407910-001

Achievements

Congratulations!

Sr. No	Students Name	Title of Activity	Prize
1	Raviraj Katkar, Anand Shinde,Yash Dhobdhabe, Shravani Katkar	Project Name- ECOSENSE: Smart Green House	Best Project of the Year
2	Nikhita Nikam, Najiya Mulani,, Sakshi Shinde, Aishwarya Ghorpade, Ajinkya Chavan	Project Name-Soldier health monitoring & Position tracking system	Best Project of the Year
3	Satyajeet Jagtap	NPTEL -Fundamental Algorithms : Design and Analysis	Completed NPTEL Online Certification
4	Omkar Shinde	NPTEL -Fundamental Algorithms : Design and Analysis	Completed NPTEL Online Certification
5	Ganesh Rane	NPTEL -Programming, Data Structure and algorithm using Python	Completed NPTEL Online Certification

Achievements

Congratulations!

6	Mangesh Chavan	NPTEL -C Programmimg and Assembly Language	Completed NPTEL Online Certification
7	Suraj Gadadare	NPTEL -Programming in JAVA	Completed NPTEL Online Certification
8	Shreyash Dude	State Level Dnyanavishkar-2024	3rd Rank in State Level Research Paper Presentation
9	Kunal Pharande	State Level Dnyanavishkar-2024	3rd Rank in State LevelResearch Paper Presentation
10	Rohan Gaikwad	State Level Yashotech Fest 2024	First Prize in State Level Quiz Competition

SOLDIER HEALTH & POSITION TRACKING SYSTEM

Best Project of the Year

Our soldiers, crucial guardians of our nation, face immense challenges in the battlefield. Tracking their location and monitoring their health amidst the chaos is a formidable task for military bases. Thus, we've devised a solution employing various sensors to measure longitude and latitude, pinpointing the soldier's exact position. A GSM modem ensures seamless communication with the base station, relaying vital health and location data to registered mobile numbers. The Soldier Health and Position Tracking System enables real-time monitoring of a soldier's GPS coordinates along with key health metrics such as body temperature and heart rate. Additionally, it includes a distress signal feature allowing soldiers to manually request assistance or alert the military in times of need. Through GPS modems transmitting latitude and longitude coordinates, military personnel can precisely track soldier positions. This system significantly aids in promptly assessing a soldier's health status and providing necessary assistance.-**Nikhita Nikam, Najiya Mulani,, Sakshi Shinde, Aishwarya Ghorpade, Ajinkya Chavan (Best Project of the Year)**

Ecosense: Smart Green House Monitoring System

Best Project of the Year

The EcoSense system emerges as a cost-effective greenhouse monitoring solution that harnesses the power of IoT technology to gather crucial environmental data, including temperature, humidity, moisture, and CO_2 levels. This innovative system also incorporates automation features, such as an automatic water sprinkler and automatic temperature regulation using a fan. The collected data is seamlessly presented on a user-friendly desktop interface, empowering farmers to monitor and control the greenhouse environment remotely.

The EcoSense system's significance lies in its transformative potential to revolutionize greenhouse management practices, fostering enhanced efficiency and promoting sustainability. By integrating IoT technologies, the system facilitates real-time monitoring, control, and in-depth data analysis, enabling precise and automated management of greenhouse conditions. This innovative approach aligns with the growing body of research on IoT-enabled smart greenhouses, which offer a multitude of benefits, including optimized resource utilization, improved crop productivity, and reduced environmental impact.

The EcoSense system stands as a promising solution for farmers seeking to streamline their greenhouse management practices while minimizing costs and promoting environmental sustainability. Its ability to provide real-time insights into critical ecological parameters, coupled with its automated control capabilities, positions the EcoSense system as a valuable tool for enhancing agricultural practices and promoting sustainable greenhouse management.- **Raviraj Katkar, Anand Shinde,Yash Dhobdhabe, Shravani Katkar**

Responsible:AI

The rapid advancement of technology such as Artificial Intelligence (AI) has brought about transformative changes in various sectors, which has led to rise in significant concerns about ethical, legal, social, and technical implications. Responsible AI development has emerged as a crucial model to address these concerns, emphasizing the ethical use of AI systems in collaboration with human values. This paper synthesizes existing literature on responsible AI, examining key challenges, emerging frameworks, and future directions. It delves into ethical considerations such as fairness, transparency, and accountability, alongside legal and regulatory frameworks governing AI deployment. Societal implications, including impacts on employment and human rights, are also discussed, as well as technical challenges such as bias mitigation and privacy preservation. Drawing upon interdisciplinary perspectives, this highlights the need for collaborative efforts among stakeholders to ensure responsible AI development and deployment. Furthermore, it identifies future research directions aimed for addressing existing gaps and advancing the responsible use of AI technologies-**Karina Rathod (TY),Sakshi Kokate (TY),Kiran Salunkhe (TY),Rukkaiya Jamadar (TY)**

Activities

Sr. No.	Title / Event Name	Resource person with designation	Name of the Industry/ Organization/ Institute	Period/ Date Jan–jun 24
1	National level online FDP on Recent Trends in Teaching and Learning Pedagogy (Multidisciplinary)	1) Dr. Yalagi P.S., Associate Professor 2) Dr. Phutane, Associate Professor 3) Dr. Radhika Kulkarni, Associate Professor 4) Dr. Girija Chidarwar, Associate Professor 5) Dr. Vinay Kulkarni, Associate Professor	1) WIT 2) JJMCOE 3) VIT 4) MMCOE 5) DYP	16/01/2024 to 20/01/2024
2	SDP on IOT With hands on Session	Mr. Rahul Gupta, Founder and Director	Institute of Futuristic Technologies (IOFT)	08/03/2024
3	Industrial Visit	Ms. Nayan Shinde, Coordinator	Walstar Technologies Pvt. Ltd	09/03/24
4	Industrial Visit	Mr. Amol Gursali, Coordinator	PHN Technologies Pvt. Ltd.	14/03/24

Activities

Sr. No.	Title / Event Name	Resource person with designation	Name of the Industry/ Organization/ Institute	Period/Date Jan–Jun 24
5	Workshop on Gryphon Industry Programming	Ms. Amruta Munkar, Leadership Trainer Lifecoach	Gryphon	18/03/2024 to 23/03/2024
6	Workshop on VIOSA_AI Powered corporate training program	Mr. M. Saquib Kazi, Director	VIOSA_AI	05/04/2024 to 27/04/2024
7	Alumni Interaction on Software Testing	Mr. Sumit Shinde, QA/QC Engineer	RockWell Automation	27/04/2024
8	Alumni Meet 2023-24	Balshetwar S.V., HOD CSE	Yashoda Technical Campus	29/06/2024

Activities

National level online FDP on Recent Trends in Teaching and Learning Pedagogy (Multidisciplinary) on 16/01/2024 to 20/01/2024

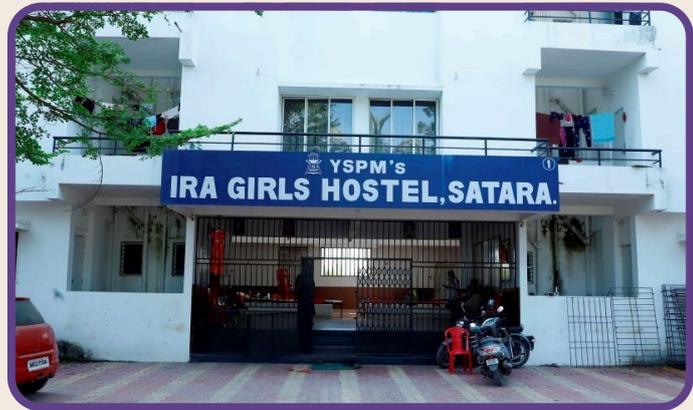**Industrial Visit at PHN Technologies Pvt. Ltd. on 14/03/2024**

Facilities

Computer Lab

Library

Digital Classroom

Hostel

Transportation

Wi-Fi Campus

Editor Team

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- **Vaishnavi Pachupate-** T.Y. CSE,CISCO
- **Prof. K P Jagtap**