

Yashoda Shikshan Prasarak Mandal's  
**Yashoda Technical Campus, Satara.**  
**CISCO-TALK MAGAZINE 2022-23**



**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: To provide knowledge of sound mathematical principles underlying various programming concepts.

PEO2: To develop an ability to understand complex issues in the analysis, design, implementation and operation of information systems.

PEO3: To provide knowledge of mechanisms for building large-scale computer-based systems.

PEO4: To develop an ability to provide computer-based solutions to the problems from other disciplines of science and engineering.

PEO5: To impart skills necessary for adapting rapid changes taking place in the field of information and communication technologies.

**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

<b>Sr. No.</b>	<b>Title of paper</b>	<b>Name of the author/s</b>	<b>ISSN Number</b>
1	A Review On Ethical Maze In AI Development	Ms. Karina V Rathod, Dr. S V Balshetwar	978-81-961931-1-9
2	A Review On Sorting Techniques Visualizer	Dr.S.V.Balshetwar, Muskan Hanif Shaikh	978-93-91535-44-5
3	Criminal Detection Through Facial Recognition	Nalawade Suraj, Shinde Ayush Sanjay, Ghorpade Utkarsh kishor, Navgane Aditya Suresh, Gaikwad Anuj Ajit,	2582-3932
4	A Review on Blue Eye Technology	Ms. Archana Ghadage, Dr S V Balshetwar	978-81-961931-0-2
5	A Review on AI based Restaurant Management System	Ms. Rutuja Chavan, Mrs. Dr. S. V. Balshetwar.	978-93-91535-44-5
6	A secure authentication protocol for healthcare service in IoT with Q-net based secret key generation	S V Balshetwar	2405-6456
7	Notification system using cloud	K P Jagtap	2582-3930

<b>Sr. No.</b>	<b>Title</b>	<b>Inventor's Name</b>	<b>ISSN Number</b>
<b>1</b>	<b>Content-based image retrieval shape features using deep learning</b>	<b>Dr. S.V. Balshetwar</b>	<b>202221011557</b>
<b>2</b>	<b>Waste Management System</b>	<b>Prof.H.O.Tapase</b>	<b>133836</b>

## 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.

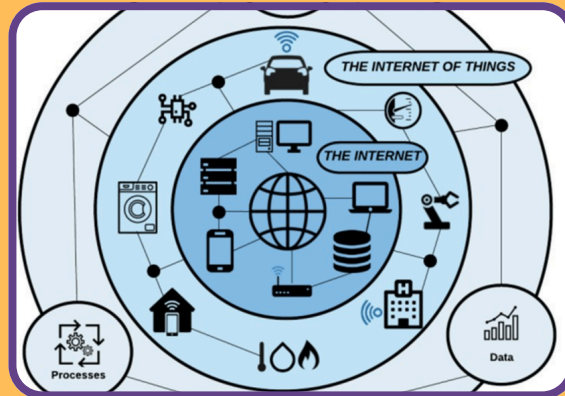
## Edge Computing and 5G Integration



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.



## 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.

## 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.

# Activities



**Python Programming  
with hands-on sessions**



**Farewell Program**



**Engineer's Day**



**Women's Day**



**Workshop**



**Seminar**



# Facilities



**Computer Lab**



**Library**



**Digital Classroom**



**Hostel**



**Transportation**



**Wi-Fi Campus**

- **Mr.Amerdip Pawar**
- **Mr.Abhishaikh Korde**
- **Mr.Ksjitij Bhoite**
- **Mr.Kajal Katker**
- **Prof. K P Jagtap**