



EAST  
POINT

COLLEGE OF ENGINEERING &  
TECHNOLOGY



# Algnite

DEPARTMENT OF ARTIFICIAL INTELLIGENCE  
AND DATA SCIENCE



VOLUME - 1  
ISSUE - 1



# **PREFACE:**

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## **DEPARTMENT OF AI & DS**

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### **VISION**

The department orients towards identifying and exploring emerging global trends in the fields of Artificial Intelligence and Data Science through academic excellence and quality research, producing proficient professionals for a flourishing society.

### **MISSION**

- M1. To nurture students with quality education, life-long learning, values and ethics.
- M2. To produce ethical and competent professionals through comprehensive and holistic methodologies that align with the global industry demands in Artificial Intelligence and Data Science.

## **Program Educational Objectives (PEOs)**

- PEO1 : Graduates will possess the ability to apply their knowledge of fundamental engineering, Computer Science and Data Science.
- PEO 2 : Graduates will have sound intercommunication skills, ethical values and responsibilities to work and serve for the development of the society.
- PEO 3 : Graduates will be able to understand, interpret, model and implement the Artificial Intelligence and Data Science based solutions for real world problems.





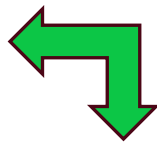
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**DEPARTMENT OF AI & DS**

## Program Specific Outcomes (PSOs)

- PSO 1. To cater and enhance the analytical and technical skills of the graduates in order to be ready for the professional development, research and pursue higher education.
- PSO 2. To formulate solutions for the real-world problems with the application of basic engineering principles and technical skills of Artificial Intelligence and Data Science.



# FROM EDITORIAL TEAM

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Dear Readers,

As members of the Artificial Intelligence and Data Science Department, we are thrilled to present the latest edition of our newsletter. Our team, comprising four dedicated students and guided by the expertise of our esteemed faculty member, aims to bring you insightful updates and perspectives from the forefront of AI and data science.

Expertise in AI algorithms, data analysis, and implementing AI solutions. We have achieved notable milestones with several patents in AI and data analytics, reflecting our innovative research. Faculty have earned accolades for their research and contributions, showcasing our department's excellence. Students have received significant recognition and awards, highlighting their outstanding capabilities. Events Conducted such as webinar on AI tools for product companies, Generative AI applications, and mastering MongoDB And Guest lectures regarding the Insights from industry leaders on AI and Data Science trends And Club Events such as Practical applications in AI and Data Science.

We hope you find this newsletter informative and inspiring as we continue to explore the limitless possibilities of AI and data science together.

# THE EDITORIAL TEAM

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Dr Vanshika  
Rastogi



Dhakshil Reddy C  
| EP22AD015



Kushi P  
| EP22AD030



Chandana V  
| EP22AD012



Divya Chethana  
| EP22AD016



## ABOUT THE DEPARTMENT

The Department of Artificial Intelligence and Data Science was established in the year 2021 with a vision of exploring the emerging trends in the domain of AI and training the students as professionals who can excel in the field and help for the betterment of the society. The Department has a team of well qualified and experienced faculty members who deliver the required skills to the students through a 360' teaching-learning environment. The faculty members are dedicated to impart not only the curriculum based formal education but also teaches beyond the curriculum to make the students ready for the upcoming challenges in the market. The Department faculty members have a good interest in research and have several publications in reputed journals, conferences and multiple patents to their name.

The students of the Department are continuously mentored and motivated by the faculty members for the continuous improvement and participation in different activities. The students are motivated not only for academic excellence but also for the research & development. Also, the students are facilitated with the placement training sessions for a better opportunity.

# MESSAGE FROM HOD

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Dr. Anand R HOD, Dept. of AI & DS  
East Point College of Engineering  
and Technology, Bangalore-49.  
M: 9845671299  
Email: [hod.ai.ds@eastpoint.ac.in](mailto:hod.ai.ds@eastpoint.ac.in)

I am pleased to share this message in our department newsletter, highlighting recent events and achievements of our students and faculty. These updates inspire participation in various activities and competitions.

We have successfully organized guest lectures, workshops, conferences, and competitions, with our students winning numerous accolades. These experiences help them develop valuable skills and expertise in the latest technologies.

Our AI & DS team is dedicated to nurturing student's strengths and fostering their growth into well-rounded individuals. This newsletter aims to communicate the positive developments within our department, creating a vibrant and encouraging environment.

I extend my sincere gratitude to our students and faculty for their dedication and efforts. Wishing you all continued success!



**Title**:- A system and Method of Variable Masking Pattern-Based QR Codes for High Security of Information

Inventor Name: Dr. Anand R

Publication Date: 23-02-2024

Published Patent Link:

<https://search.ipindia.gov.in/IPOJournal/Journal/Patent>



Dr Anand R  
Professor &  
Head Of The Department (HOD)

Introducing a groundbreaking innovation in information security, the patented system and method of variable masking pattern-based QR codes significantly enhance the security of QR codes by employing dynamically generated masking patterns. This technology ensures each QR code is unique, preventing duplication and tampering, and is ideal for secure applications such as financial transactions and confidential data sharing.

**Title:-** IOT and Artificial Intelligence enhanced  
Comprehensive Monthly Bill Management System

Inventor Name: Prof. Sudhanshu Saurabh

Publication Date: 12-01-2024

Published Patent Link:

<https://search.ipindia.gov.in/IPOJournal/Journal/Patent>



Prof. Sudhanshu Saurabh  
Professor

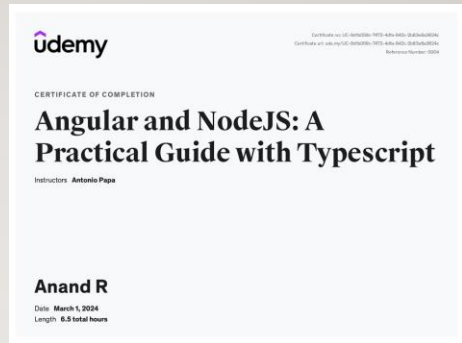
Introducing a cutting-edge innovation in financial technology, the IoT and Artificial Intelligence-enhanced Comprehensive Monthly Bill Management System revolutionizes the way users manage their expenses. By leveraging the power of IoT devices and advanced AI algorithms, this system automates the tracking, categorization, and payment of monthly bills, providing users with seamless, real-time insights into their financial status. With features like predictive analytics for future expenses, automated reminders, and secure payment gateways, this system ensures efficient and stress-free bill management, empowering users to maintain financial stability effortlessly.

# FACULTY

SL NO.	NAME	DESIGNATION
1.	Dr Anand R	Professor & HOD
2.	Dr Sudhanshu Saurabh	Associate Professor
3.	Dr Vanshika Rastogi	Associate Professor
4.	Prof Anil Kumar S	Assistant Professor
5.	Prof Harsha N	Assistant Professor
6.	Prof Sumitra PP	Assistant Professor
7.	Prof Pooja PP	Assistant Professor
8.	Prof Sonu Sabir	Assistant Professor
9.	Prof Mamtha C	Assistant Professor



# FACULTY ACHIEVEMENTS



# STUDENTS ACHIEVEMENTS



# EVENTS CONDUCTED

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## GUEST LECTURE

**Department:** Artificial Intelligence and Data Science

**Event Title:** Data Science and AI Tools for Product Companies

**Date:** 10<sup>th</sup> Feb 2024

**Time:** 10:00 AM – 12:00 PM

**Program Objective:** To make the students aware about the different AI Tools used in Product Companies

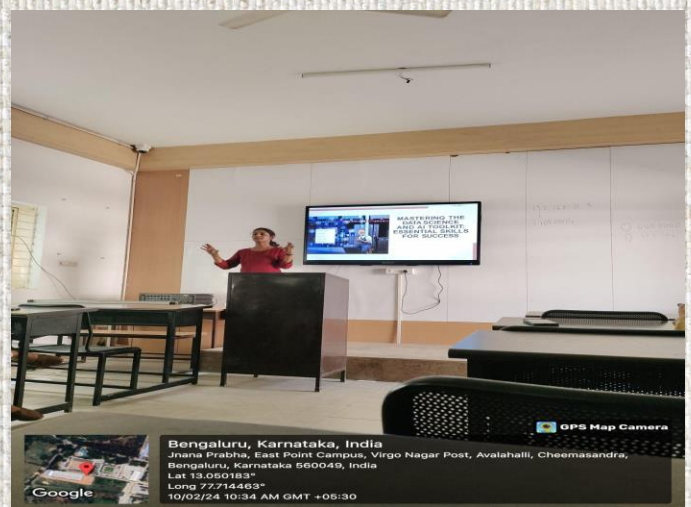
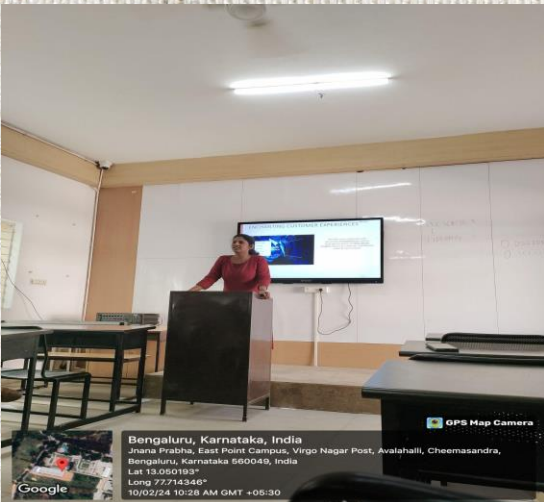
1. Names of the Resource Persons/Chief Guests/guests/Guests of Honors//Other's Mention : Dr Suganya Srinivasan
2. Designation/s : Data Scientist-Technical Lead
3. Company's Name/Associations : Rolls-Royce Data Labs, Bangalore





# EVENTS CONDUCTED

## GUEST LECTURE (PHOTOS)



# EVENTS CONDUCTED

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## WEBINAR

**Department:** Artificial Intelligence and Data Science

**Event Title:** Applications of Generative AI

**Date:** 25<sup>th</sup> May 2024

**Time:** 2:00 PM – 4:00 PM

**Program Objective:** To make the students aware about Generative AI and its Applications

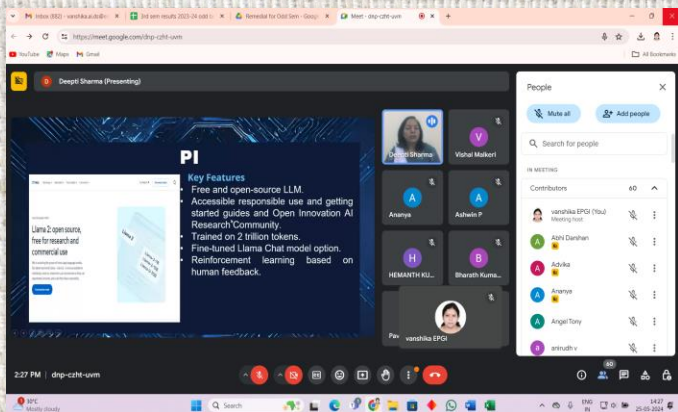
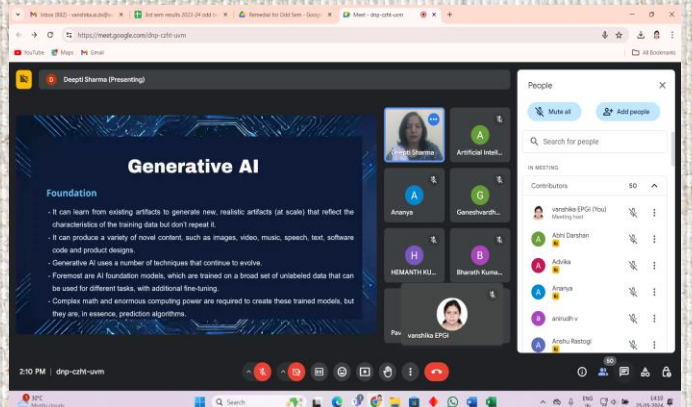
1. Names of the Resource Persons/Chief Guests/guests/Guests of Honors//Other's Mention : Dr Deepti Sharma
2. Designation/s : Professor
3. Company's Name/Associations : Chandigarh University





# EVENTS CONDUCTED

## WEBINAR (PHOTOS)





# EVENTS CONDUCTED

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## WEBINAR

**Department:** Artificial Intelligence and Data Science

**Event Title:** Mastering Mongo DB

**Date:** 8<sup>th</sup> June 2024

**Time:** 10:00 AM – 12:00 PM

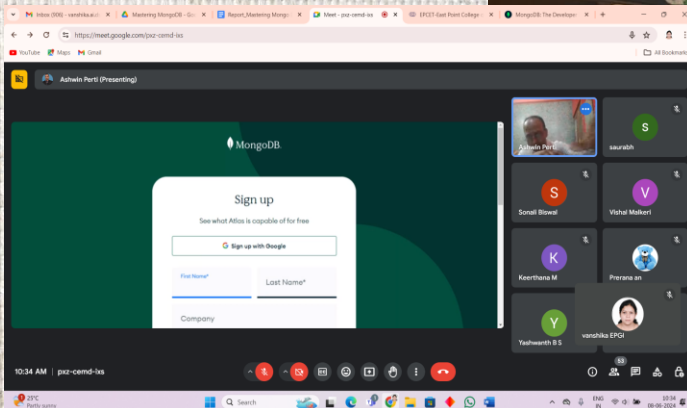
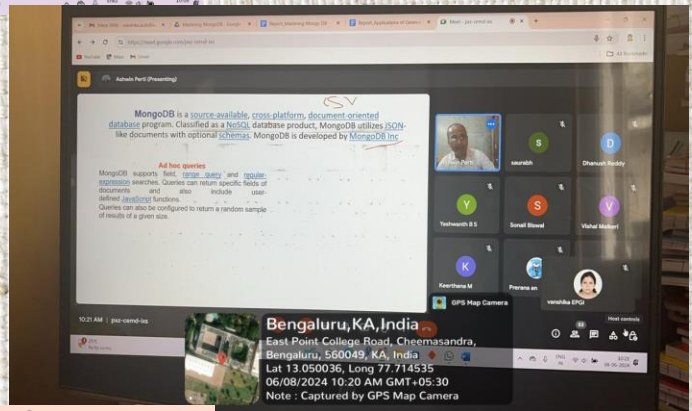
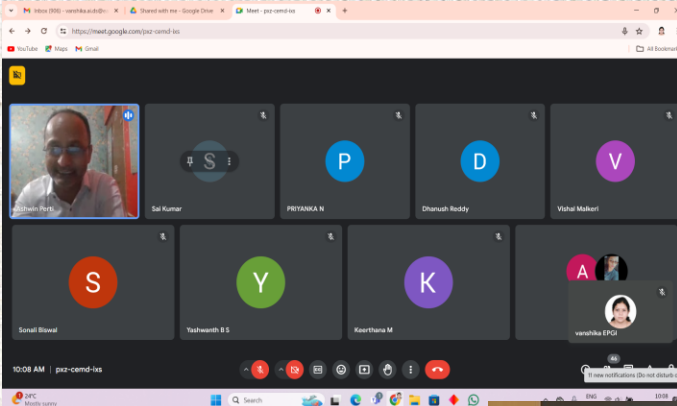
**Program Objective:** To make the students give a Hands – On Session and Awareness

1. Names of the Resource Persons/Chief Guests/guests/Guests of Honors//Other's Mention : Mr Ashwin Perti
2. Designation/s : Assistant Professor
3. Company's Name/Associations : Galgotia University, Greater Noida



# EVENTS CONDUCTED

## WEBINAR (PHOTOS)





# EVENTS CONDUCTED

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## GUEST LECTURE

**Department:** Artificial Intelligence and Data Science

**Event Title:** Awareness of Design Registration and Filing

**Date:** 8<sup>th</sup> Jan 2024

**Time:** 10:00 AM – 12:00 PM

**Program Objective:** To make the students aware about the importance of Design Registration and Filing

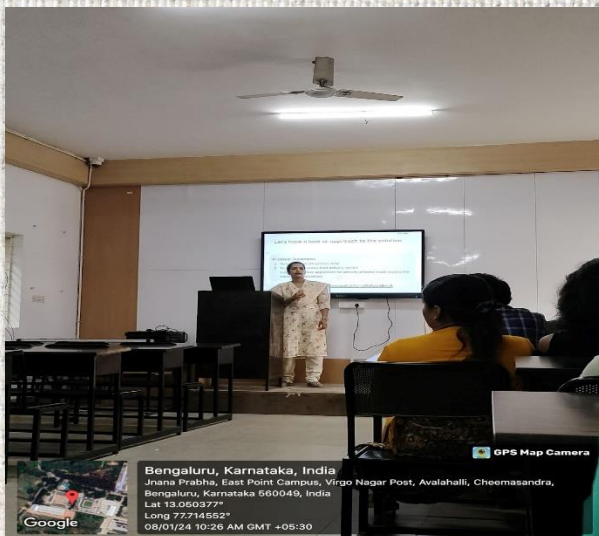
1. Names of the Resource Persons/Chief Guests/guests/Guests of Honors//Other's Mention : Dr Sudha D
2. Designation/s : Associate Professor
3. Company's Name/Associations : Dayanand Sagar University, Bangalore





# EVENTS CONDUCTED

## WEBINAR (PHOTOS)







# CLUB EVENTS

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## WORKSHOP ON NUMPY AND PANDA LIBRARIES

### **INTRODUCTION:**

In the contemporary landscape of data science and numerical computing, the ability to efficiently manage and analyze large datasets is crucial. Two of the most essential tools for this purpose in the Python ecosystem are NumPy and Pandas. This workshop is designed to introduce participants to these powerful libraries, providing them with the skills necessary to handle a wide range of data manipulation and analysis tasks. About the libraries:

### **NumPy Library:**

NumPy, short for Numerical Python, is the foundational library for numerical computations in Python. It offers efficient support for large multidimensional arrays and matrices, along with a comprehensive collection of mathematical functions to operate on these arrays. NumPy's performance and ease of use make it a staple for data scientists, engineers, and researchers involved in numerical and scientific computing.

### **Panda Library:**

Pandas, on the other hand, is a higher-level data manipulation tool built on top of NumPy. It provides data structures such as Series and Data Frame, which are designed to handle structured data intuitively and efficiently. Pandas is particularly renowned for its capabilities in data cleaning, preparation, and analysis, making it indispensable for tasks ranging from data wrangling to exploratory data analysis.





# CLUB EVENTS

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## WORKSHOP ON NUMPY AND PANDA LIBRARIES

### **OUTCOMES OF THE WORKSHOP EVENT:**

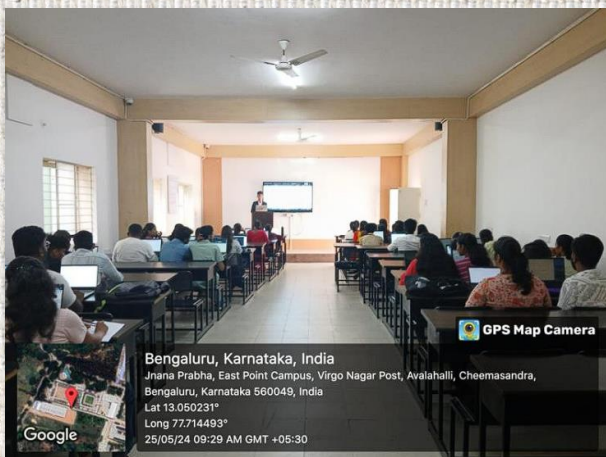
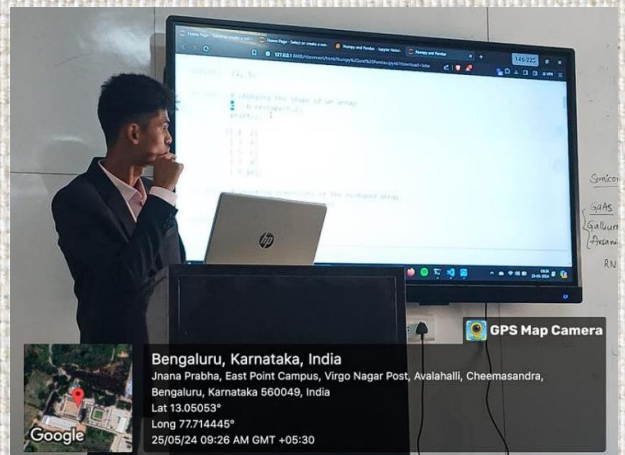
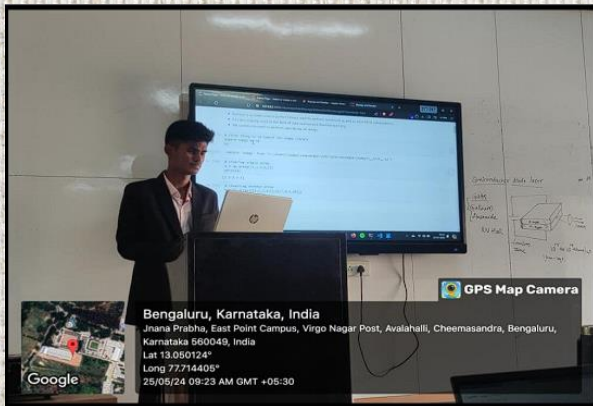
In this workshop, participants have gained a foundational understanding of the NumPy and Pandas libraries, learning how to import and set them up for use. They have mastered the basics of NumPy, including array creation, manipulation and performing essential mathematical and statistical operations. Additionally, they have learned to work with Pandas, focusing on creating and manipulating Series and Data Frames, handling and transforming data, and conducting basic data analysis through grouping, merging, and pivoting. Throughout the session, participants have applied these skills to real-world data problems, integrating NumPy and Pandas into their data science workflows to enhance efficiency. This experience has equipped them with the analytical thinking necessary to analyze datasets, uncover patterns, and make data-driven decisions. Moreover, the knowledge gained serves as a solid foundation for exploring advanced topics in data science and machine learning.





# CLUB EVENTS

## WORKSHOP ON NUMPY AND PANDA LIBRARIES PHOTOS







# CLUB EVENTS

## TECH CRIME INVESTIGATION EVENT

Date: 13<sup>th</sup> January 2024

Location: ECE Seminar Hall, East Point College of Engineering and Technology (EPCET)/DBMS Lab, B Block

Time: 10:00 AM to 12:00 PM

Title: Tech Crime Investigation

Organized by : Department of Artificial Intelligence and Data Science

Target Audience: Students

Summary: The event started with the Launch of the Club Logo by Dr. S Prakash, SVP, EPGI and Dr. Anand R, HOD, AI &DS. Dr. S Prakash focused on the importance of a technical club in the stream of Artificial Intelligence and Data Science. He appreciated the club title and also the efforts put in by the team. Later, the event, “Tech Crime Investigation” started with a total of 24 teams registered. The complete portal for the event was designed by the students of AI & DS. The event consisted of 2 rounds where the teams had to decrypt the code and solve the mystery.

The winner of the event was **Team 007 (Kushal and Sanjay, CSE)** while the runner-up team was **Team Alpha (Anirudh, Yashwanth and Vasanth, AI & DS)**.





# CLUB EVENTS

## TECH CRIME INVESTIGATION EVENT PHOTOS







# EAST POINT COLLEGE OF ENGINEERING AND TECHNOLOGY

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