

# ***ARTIFICIAL INTELLIGENCE***

***AND***

***DATA SCIENCE***

**NEWSLETTER**

**THE ARTIFICIAL**

**June 2023, Volume 2, Issue 6**

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**FACULTY INCHARGE:** Mr. Muthamil Selvan S

**DEPARTMENT HoD:** Dr. Swagata Sarkar



# **Vision / Mission of College**

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## **Vision**

To emerge as a “Centre for excellence” offering Technical Education and Research Opportunities of very high standards to students, develop the total personality of the individual, and instil high levels of discipline and strive to set global standards, making our students technologically superior and ethically strong, who in turn shall contribute to the advancement of society and humankind.

## **Mission**

We dedicate and commit ourselves to achieve, sustain and foster unmatched excellence in Technical Education. To this end, we will pursue continuous development of infrastructure and enhance state-of-the art equipment to provide our students a technologically up-to date and intellectually inspiring environment of learning, research, creativity, innovation and professional activity and inculcate in them ethical and moral values.

## **Quality Policy**

We at Sri Sairam Engineering College are committed to build a better nation through Quality Education with team spirit. Our students are enabled to excel in all values of Life and become Good Citizens. We continually improve the System, Infrastructure and Services to satisfy the Students, Parents, Industry and Society.



# VISION / MISSION OF DEPARTMENT

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## **Vision**

To emerge as a “Centre of Excellence in the field of Artificial Intelligence and Data Science”, The Department is committed to inculcate discipline, offering best Technical Education and Research Opportunities and ethically strong to meet the global challenges, who in turn shall contribute to the advancement and welfare of the society.

## **Mission**

- To produce students with a sound understanding of the fundamentals of the theory and practise of Artificial Intelligence, Machine Learning and Data Science.
- To enable students to become leaders in the Industry and Academia Nationally as well as Internationally.
- To meet the pressing demands of the nation in the areas of Artificial Intelligence and Data Science.



## **EPITOME OF OUR MISSION**

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The Department of Artificial Intelligence and Data Science emerged in the year 2020 in Sai Ram Institutions with the intake of exiguous students. It has now evolved quintessentially with an admirable admission of about 60 aspiring students in 2020, 120 in 2021, 180 in 2022 and gradually increasing each year, joining hands with a dedicated team of erudite faculty.



## HANDS ON TRAINING ON DESIGN THINKING FOR IDEA LAB

Department of Artificial Intelligence and Data Science, in association with AICTE - Idea Lab, successfully organized a week-long hands-on training program on Design Thinking. The training took place from 1st June 2023 to 8th June 2023 at the Innovation Centre. The program aimed to equip participants with essential skills and knowledge in the field of design thinking, fostering innovation and creativity.

Dr. Swagata Sarkar, the Head of Department for AI & DS, and Dr. S. Parvathi, Assistant Professor for AI & DS, were the esteemed resource persons for the training. Their expertise and experience in the field ensured a comprehensive and insightful learning experience for all participants.

The training program covered various aspects of design thinking, providing participants with a step-by-step approach to problem-solving and innovation. The sessions focused on developing a deep understanding of user needs, ideation techniques, prototyping, and testing. Practical exercises and group activities were integrated into the program, allowing participants to apply the concepts learned and gain hands-on experience.

The participants consisted of individuals from diverse backgrounds, including students, professionals, and entrepreneurs, all with a keen interest in leveraging design thinking for ideation and innovation. The

**Sairam INSTITUTIONS**

DEPARTMENT OF  
**ARTIFICIAL INTELLIGENCE & DATA SCIENCE**

in association with  
**AICTE - IDEA LAB**

Organizes  
**HANDS ON TRAINING ON  
Design Thinking  
for Idea Lab**

**Resource Person**

- Dr. Swagata Sarkar**  
HOD / AI & DS
- Dr. S. Parvathi**  
AP / AI & DS

01.06.2023 to 08.06.2023  
Venue: Innovation Centre

Ms. G Gomathy  
Co-ordinator

Dr. N. Mani  
Co-ordinator, Idea Lab

Dr. K. Porkumaran  
Principal

Dr. Sai Prakash LeoMuthu  
Chairman & CEO  
Sairam Institutions

Logos: RASE, FOM, SDG, AICTE, NIF, etc.



interactive sessions encouraged collaboration and exchange of ideas among participants, creating a dynamic learning environment.

The Innovation Centre, the chosen venue for the training, provided an inspiring and conducive atmosphere for ideation and creativity. Its state-of-the-art facilities and resources further enhanced the learning experience, allowing participants to explore and experiment with different design thinking methodologies.

Overall, the hands-on training on design thinking organized by the Department of Artificial Intelligence and Data Science, in association with AICTE - Idea Lab, was a resounding success. The participants gained valuable insights and practical skills in design thinking, which will undoubtedly empower them to approach problem-solving and innovation in a more structured and creative manner. The training program served as a stepping stone for fostering a culture of innovation and entrepreneurship, ultimately contributing to the growth and development of the AI and DS community.

## **IDEATHON 3.0**

The Solvathon 3.0 was an event that aimed at providing a platform for students to solve real-world problems using technology that focused on achieving the United Nations' Sustainable Development Goals. The shortlisted teams had to present their ideas to the jury members on. All the teams had presented their ideas in such a way that their projects supported the Sustainable Development Goals of the United Nations. The overall championship of solvathon 3.0 was bagged by the following students:

- 1) Lochini - 1st year, AI&DS - B
- 2) Gopika - 1st year, AI&DS - B
- 3) Srinivasan - 1st year, AI&DS - B
- 4) Aishwarya - 1st year, AI&DS - B

The overall second prize was bagged by,

- 1) Thrisala - 1st year, AI&DS - C



- 2) Pradeep - 1st year, AI&DS - C
- 3) Hariprasadh - 1st year, AI&DS - A
- 4) Rohith krishanan - 1st year, AI&DS - C
- 5) Sanjeev - 1st year, AI&DS - B
- 6) Krithika - 1st year, AI&DS - C
- 7) Naveen - 1st year, AI&DS - C
- 8) Raja - 1st year, AI&DS - C
- 9) Surya Prakash - 1st year, AI&DS - C

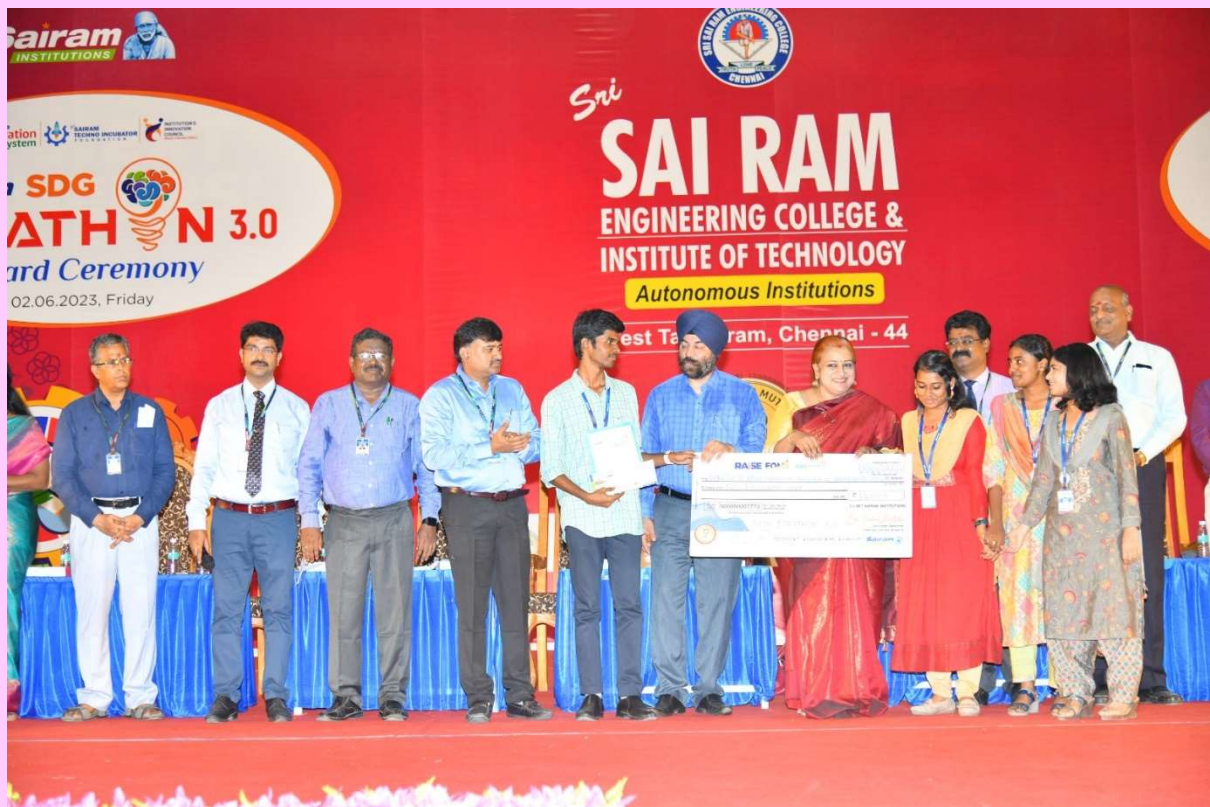


The team members expressed their excitement and gratitude for winning the Solvathon 3.0 challenge. They mentioned that the event provided an excellent opportunity to apply their technical skills to real-world problems and contribute to society. They also highlighted the significance of the challenge in addressing the various issues of SDG.











Thus, the Solvathon 3.0 was a grand success, with enthusiastic participation from students and experts from the field of technology. The event provided an excellent platform for students to solve real-world problems and contribute to achieving the Sustainable Development Goals. Such events play a vital role in promoting innovation and inspiring students to make a positive impact on society.

## IEEE INTERNATIONAL CONFERENCE REVIEWER



Dr. Swagata Sarkar from Sri Sairam Engineering College was recognized as a reviewer at the 2nd IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics. With their expertise in the field, Dr. Sarkar played a vital role in





maintaining the conference's high standards by meticulously evaluating research papers. Their valuable feedback and suggestions helped refine the presented work, contributing to academic excellence and pushing the boundaries of knowledge in electrical circuits and electronics. This achievement highlights Dr. Sarkar's commitment to advancing the field and establishes their reputation as a respected thought leader in the academic community.

## PALS VALEDICTORY FUNCTION

The PALS (Promoting Academic and Leadership Skills) valedictory function marked the culmination of an enriching journey for the graduating students. The event celebrated their accomplishments and bid farewell to the



students as they ventured into the next chapter of their lives. The valedictory function was filled with nostalgia, inspiring speeches, and heartfelt moments of gratitude. Students were acknowledged for their academic achievements and leadership skills nurtured throughout their time in PALS. It was a bittersweet occasion, filled with pride and emotions. The event served as a reminder of the growth, camaraderie, and memories forged during their PALS journey, leaving an indelible mark on their lives.

## ONE DAY INTER-COLLEGIATE MATHEMATICS CONTEST PAPER PRESENTATION JUDGE

Mathophilia 2023, the 6th One-Day Inter-Collegiate Mathematics Contest, invites Dr. Swagata Sarkar, Professor and Head of the Department of AI&DS at Sri Sairam Engineering College, to serve as the



Judge for the paper presentation event. The contest aims to celebrate mathematical excellence and innovation among students. Dr. Sarkar's expertise in AI&DS brings immense credibility to the event. As the Judge, she will provide critical evaluation and guidance to participants, inspiring them to present their best work. Mathophilia 2023 is a platform that fosters collaboration, problem-solving, and effective communication of mathematical concepts. Dr. Sarkar's presence adds prestige and encourages aspiring mathematicians to excel in the field.

## SEC IEEE EDUCATION SOCIETY WORKSHOP ON DATA SCIENCE

**Sairam RAISE EOMS** **ARIIA** **nirf** **IEEE Education Society**

**SAI RAM ENGINEERING COLLEGE**  
An Autonomous Institution | Affiliated to Anna University & Approved by AICTE, New Delhi  
Sai Leo Nagar, West Tambaram, Chennai - 600 044. www.sairam.edu.in

**workshop**

SEC IEEE Education Society Presents  
**WORKSHOP ON DATA SCIENCE**

**ALL YOU NEED TO KNOW ABOUT DATA SCIENCE FROM BASICS**

**Resource Person**  
**Dharshini S**  
AI & DS - 2nd Year

**Organizers:**  
**Somasundaram R**  
**Sahana KV**

<http://meet.google.com/wzz-vmif-hpp>  
Session 1: 10-06-2023  
Every Saturday from 7-8 PM

**Dr. S. Sankari**  
SEC EDUSOC SB  
Chapter Advisor  
Associate professor IT

**Dr. K. Porkumaran**  
Principal / SEC  
Chairman, IEEE Madras

**Dr. Sai Prakash Leo**  
Muthu  
CEO  
SAIRAM INSTITUTIONS

The IEEE Education Society recently organized a workshop on data science, presented by Dharshini S, a second-year student studying Artificial Intelligence and Data Science. The workshop, held on 10th June 2023, aimed to introduce participants to the basics of data science. Dharshini, with her expertise in the field, shared insights into the fundamental concepts and techniques used in data science. Her interactive session provided valuable knowledge and practical understanding to the attendees, empowering them to explore the world of data science further. The workshop served as a stepping

stone for participants to enhance their skills and delve deeper into this rapidly evolving field.



## AWARENESS PROGRAM ON RED HAT LINUX

On 13th June 2023, an awareness program on Red Hat Linux had been organized. The event aimed to educate participants about the features, benefits, and applications of Red Hat Linux, with a specific focus on its cloud infrastructure. The program featured Mr. Prithviraj Gangai, a renowned expert in Red Hat technologies, as the resource person.

Mr. Prithviraj Gangai took the stage and started the program by introducing Red Hat Linux. He provided an overview of its history, highlighting its significance in the technology industry. He also emphasized the benefits of open-source software and shed light on Red Hat's contributions to the Linux community.

The session then transitioned to the core topic of the event, Red Hat Cloud Infrastructure. The speaker delved into the architecture, features, and advantages of Red Hat's cloud infrastructure. He explained various cloud deployment models, including public, private, and hybrid clouds, and demonstrated how Red Hat Linux enables organizations to effectively build and manage their cloud environments. Participants gained insights into the scalability, flexibility, and cost-saving potential of Red Hat's cloud solutions.

Later, the speaker focused on Red Hat Linux security. He discussed the importance of securing systems and applications and highlighted the security measures incorporated by Red Hat to protect sensitive data and mitigate vulnerabilities. The session provided attendees with a comprehensive understanding of the robust security features offered by Red Hat Linux.

RAISE FOMs SDG nif

Sairam INSTITUTIONS

DEPARTMENT OF  
ARTIFICIAL INTELLIGENCE &  
DATA SCIENCE

**AWARENESS PROGRAM ON**

**redhat Linux**

13.06.2023 | 9:00 AM - 4:00 PM

**Resource Person**  
**Mr. PRITHVIRAJ GANGAI**  
Redhat Cloud Infrastructure

Ms. K. P. Aishwarya  
Co-ordinator

Dr. Swagata Sarkar  
HOD / AI&DS

Dr. K. Porkumaran  
Principal

Dr. Sai Prakash LeoMuthu  
Chairman & CEO  
Sairam Institutions





The program concluded with a question-and-answer session, where participants had the chance to seek clarification on any doubts they had and further expand their knowledge. The organizers expressed their gratitude to Mr. Prithviraj Gangai for his valuable insights and thanked all the participants for their active participation. The event proved to be a success, equipping attendees with comprehensive knowledge about Red Hat Linux, its cloud infrastructure, and security features. It is expected that the knowledge gained from this program will empower participants to effectively utilize Red Hat Linux in their respective organizations and enhance their skills in the field of Linux and cloud computing.

Overall, the awareness program on Red Hat Linux held on 13th June 2023 provided a valuable learning opportunity for participants. The combination of informative sessions, and interactions with an expert in the field ensured a well-rounded experience. The event successfully achieved its goal of raising awareness about Red Hat Linux, equipping participants with the necessary knowledge to leverage its capabilities in the cloud infrastructure domain.

## STARTIFY EVENT AT ANNA UNIVERSITY



The Startify event took place on the 14th of April 2023 at Anna University, Chennai. The event aimed to showcase various innovative projects and demonstrations by students from different

departments, with a particular focus on SEC - AI-DS students. Participants included KrithikRaghav V, Mohamed Suhail Y, Somasundaraman R, Prabakaran G S, Parasuraman S from SEC - AI-DS, as well as students from CSE, IT, and SIT - AI-DS.

The event featured several impressive project demonstrations, highlighting the diverse skills and talents of the participating students. Here are the showcased projects:



### 1. AR/VR Game Demonstration with TOOFAN Application:

KrithikRaghav V, Mohamed Suhail Y, and Somasundaraman R presented an augmented reality/virtual reality (AR/VR) game demonstration utilizing the TOOFAN application. This project showcased the fusion of immersive technologies with gaming, offering an engaging and interactive experience.

### 2. Drone Demonstration:

Prabakaran G S and Parasuraman S demonstrated the capabilities of a drone. They showcased the practical applications of drones in various fields, emphasizing their potential in areas such as aerial photography, surveillance, and delivery services.

### 3. Pond Quality Management:

Participants, Aishvarya and team, presented a project on pond quality management. This demonstration likely focused on utilizing artificial intelligence and data science techniques to monitor and improve the water quality in ponds, contributing to environmental conservation and sustainable practices.



### 4. Mushroom Cultivation:

Another project, carried out by Farwesh, Viswath and team were focused on mushroom cultivation. This demonstration likely involved



showcasing techniques for cultivating mushrooms using advanced methods and technologies, such as controlled environments and optimized growth conditions.

### 5. Object Detection:

Participants are Neha, Swathi and Rishika from SIT- AI-DS, demonstrated an object detection project. This project likely involved the application of computer vision and machine learning algorithms to detect and classify objects in images or real-time video, highlighting the potential for automation and improved object recognition systems.

The Startify event at Anna University brought together students from various disciplines and showcased their remarkable projects. The event provided a platform for knowledge exchange, collaboration, and appreciation of innovation. The demonstrated projects encompassed a wide range of fields, including gaming, aerial technology, environmental management, agriculture, and computer vision.

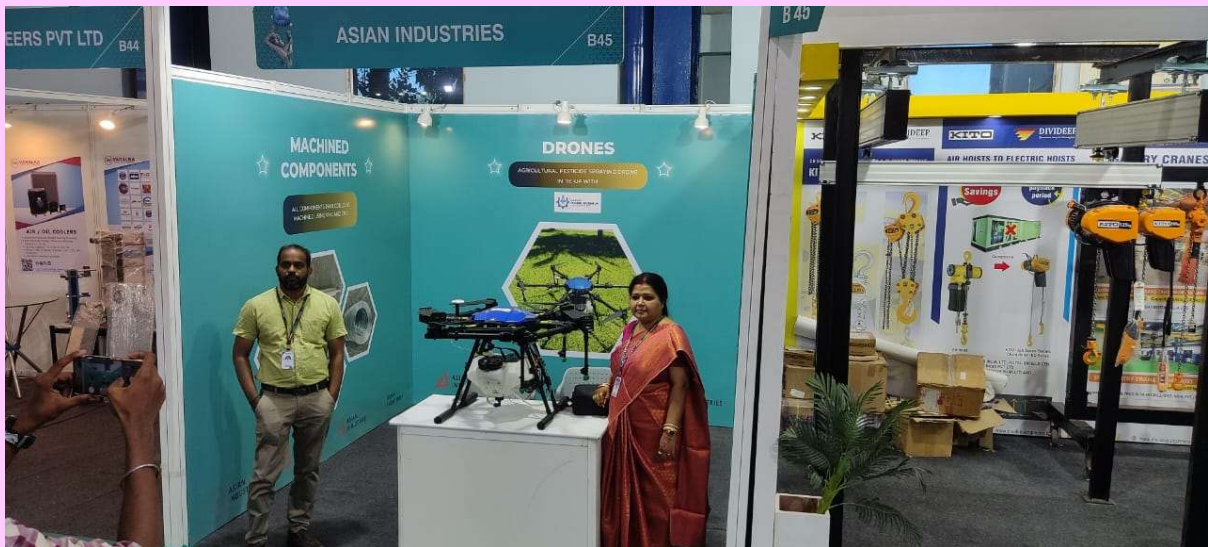
The event was a success, encouraging creativity, fostering interdisciplinary collaboration, and inspiring further exploration of cutting-edge technologies among the participating students.

## ACMEE STALL AT CHENNAI TRADE CENTER

The ACMEE Workshop took place from the 15th to the 19th of April 2023 at the Chennai Trade Centre in Nandhambakkam, Chennai. The workshop aimed to bring together professionals, researchers, and students in the field of advanced manufacturing and engineering to exchange knowledge and explore the latest developments in the industry.







Participants from various industries, educational institutions, and research organizations attended the workshop, contributing to a diverse and vibrant learning environment. Among the attendees were SEC - AI-DS students, including KrithikRaghav V, Mohamed Suhail Y, Somasundaraman R, Prabakaran G S, Parasuraman S, Aishvarya, Farwesh, and Vishwath, who actively participated in the event.

The SEC - AI-DS students showcased their projects in dedicated stalls at the workshop, providing demonstrations and insights into their innovative work. The projects presented were as follows:



### 1. AR/VR:

KrithikRaghav V, Mohamed Suhail Y, and Somasundaraman R demonstrated their expertise in augmented reality/virtual reality (AR/VR). They showcased their projects like military shooting simulation in VR and free revolving game in VR and they also showcased the TOOFAN



AR projects and applications, highlighting the potential of these immersive technologies in various industries.



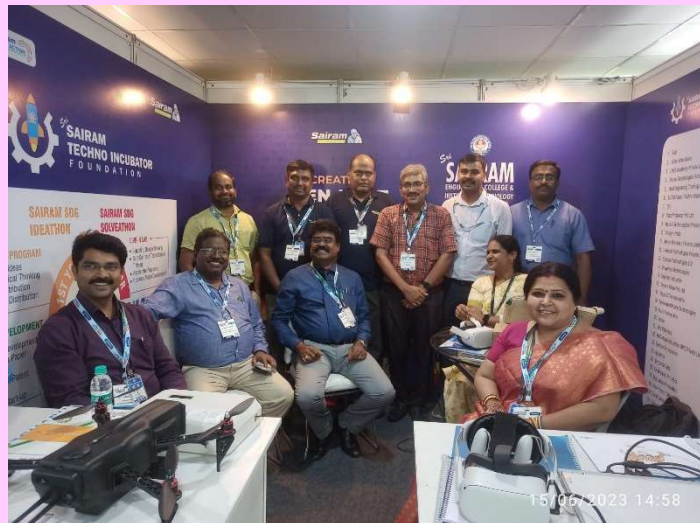
## 2. Drone Collaboration:

Prabakaran G S and Parasuraman S collaborated with Asian industries to present their work on drone technology. They showcased the capabilities and applications of drones, emphasizing their role in industrial settings, aerial

photography, surveillance, and other relevant fields.

## 3. Pond Quality Management:

Aishvarya and her team presented their project on pond quality management. They likely shared insights into the application of data science and artificial intelligence techniques to monitor and improve the quality of ponds, contributing to environmental conservation and sustainability.



## 4. Mushroom Cultivation:

Farwesh and Vishwath focused on mushroom cultivation, sharing their knowledge and techniques for optimized mushroom growth. They likely showcased innovative methods and technologies used in the cultivation process, highlighting the potential for sustainable and efficient mushroom production.





Additionally, on the second day of the workshop, the SEC - AI-DS students took the opportunity to visit the stalls of other participants at the ACMEE Workshop. This allowed them to explore a wide range of projects and engage with professionals and researchers from different areas of advanced

manufacturing and engineering.

The ACMEE Workshop at Chennai Trade Centre provided an excellent platform for knowledge sharing, collaboration, and networking.

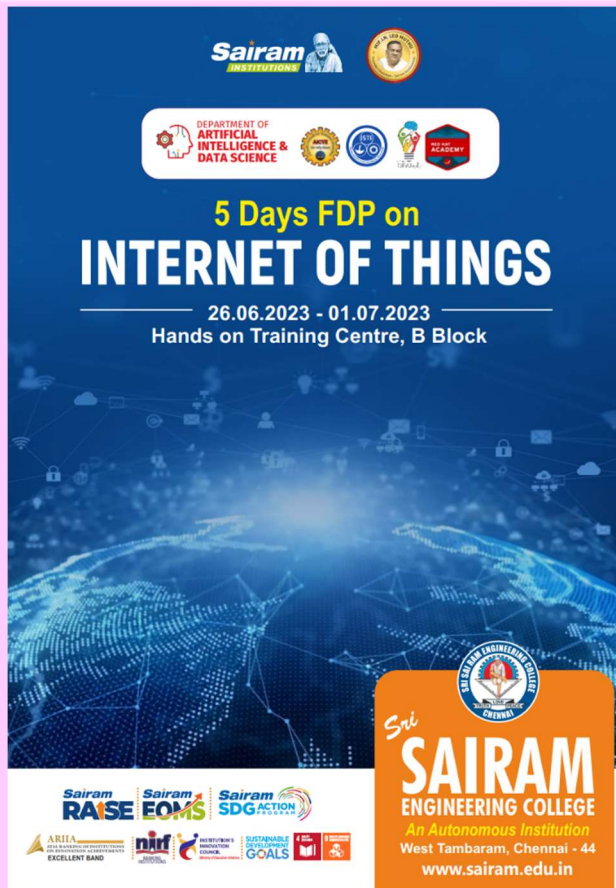
The participation of SEC - AI-DS students and their engaging demonstrations contributed to the overall success of the event. The

workshop facilitated the exchange of ideas, sparked discussions, and fostered connections among participants, fostering growth and innovation in the field of advanced manufacturing and engineering.



## 5 DAYS FDP ON INTERNET OF THINGS

The 5-day Faculty Development Program (FDP) on Internet of Things (IoT) held from 26th June 2023 to 1st July 2023 was an enlightening and transformative experience. Organized with the aim of equipping faculty



members with the necessary knowledge and skills in IoT, the program provided a comprehensive understanding of this rapidly evolving field.

The FDP commenced with an insightful introduction to IoT, highlighting its significance in the modern world. Over the course of five days, participants engaged in interactive sessions, hands-on workshops, and expert-led discussions. They delved into various aspects of IoT, including sensors and actuators, data analytics, connectivity protocols, and security considerations.

Renowned industry experts and academicians served as facilitators, sharing their expertise and best practices. Practical demonstrations and case studies enriched the learning experience, enabling participants to witness real-world applications of IoT.

The FDP fostered an environment of collaboration and knowledge sharing. Participants were encouraged to exchange ideas, discuss challenges, and explore potential research opportunities in IoT. The program also emphasized the importance of interdisciplinary approaches, showcasing how IoT intersects with fields such as data science, artificial intelligence, and cloud computing.

As the FDP concluded, participants gained a holistic understanding of IoT and its transformative potential across various domains, including healthcare, agriculture, transportation, and smart cities. They acquired hands-on skills in building IoT prototypes, designing sensor networks, and leveraging data analytics for actionable insights.

The impact of the FDP extended beyond the program duration. Participants were equipped with the tools and resources needed to integrate IoT concepts into their curriculum, fostering innovation and



industry readiness among students. The program empowered faculty members to stay updated with the latest trends and advancements in IoT, enabling them to contribute to cutting-edge research and development.

In conclusion, the 5-day FDP on Internet of Things served as a catalyst for faculty members to embrace the potential of IoT and stay abreast of its transformative capabilities. By providing comprehensive knowledge, practical skills, and valuable networking opportunities, the program ensured that educators are well-equipped to guide and inspire the next generation of IoT professionals. The impact of this FDP will undoubtedly resonate in classrooms and research labs, driving innovation and shaping the future of IoT-enabled technologies.

## INTRODUCTION TO OOP AND JAVA FUNDAMENTALS

**Sri SAI RAM ENGINEERING COLLEGE**  
An Autonomous Institution  
West Tambaram, Chennai - 44  
www.sairam.edu.in

**Department of Artificial Intelligence and Data Science**  
in association with  
**INSTITUTIONS INNOVATION COUNCIL**

**INTRODUCTION TO OOP & JAVA FUNDAMENTALS**

**Mrs. Jena Catherine Bel D**  
Assistant professor/AI-DS  
Sri Sairam Engineering College

**DATE : 16.06.2023**  
**TIME : 7 PM TO 8:30 PM**  
**GMEET**

Mrs. Esther C Co-ordinator | Dr. Swagata Sarkar Head/AI-DS | Dr. K. Porkumaran Principal | Dr. Sai Prakash LeoMuthu Chairman & CEO Sairam Institutions

**Sairam RAISE EOMS** **ARIHA** **nirf** **GOALS**

The Department of AI & DS and the Institutions Innovation Council present an interactive session on "Introduction to Object-Oriented Programming (OOP) & Java Fundamentals." Led by Mrs. Jena Catherine Bel D., the session aims to provide students and faculty with a solid foundation in OOP principles and Java programming. Scheduled for 16th June 2023, from 7:00 PM to 8:30 PM, participants will explore key concepts such as classes, objects, inheritance, and polymorphism, along with Java syntax, data types, and control structures. Attendees can expect an

engaging learning experience, enabling them to enhance their programming skills and broaden their academic and professional horizons.





## NPTEL STARS



Congratulations to Dr. Swagata Sarkar from the AI-DS Department on being awarded the NPTEL Domain Scholars and NPTEL – BELIEVERS for Jan-Apr 2023. This recognition highlights Dr. Sarkar's exceptional expertise in Artificial Intelligence and Data Science. Her dedication to research and teaching has made a significant impact in the field. As an esteemed faculty member, Dr. Sarkar's achievements reflect the high standards of excellence upheld by Sri Sairam Engineering College. Her recognition as an NPTEL Domain Scholar serves as an inspiration to both students and faculty. We congratulate Dr. Swagata Sarkar on this well-deserved honor and anticipate her continued contributions to the

advancement of AI and DS education.

## NPTEL STARS VISIT AT IIT MADRAS



The NPTEL stars for Jan-Apr 2023, including Dr. Swagata Sarkar from the AI-DS Department, were honored with a visit to IIT Madras for the certificate presentation ceremony by the IEEE Madras Section. This event celebrated their outstanding achievements in the field of online learning

and education. The presence of these esteemed individuals at IIT Madras



showcased the collaboration and recognition between prestigious institutions and organizations. It provided an opportunity for the NPTEL stars to connect with fellow scholars, exchange ideas, and further strengthen their professional networks. The certificate



presentation ceremony was a moment of pride and encouragement, acknowledging their dedication and expertise in their respective domains.

# THANK

# YOU