



ARTIFICIAL INTELLIGENCE AND DATA SCIENCE NEWSLETTER

December 2023, Volume 3, Issue12

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Vision/Mission of College

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 in still 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 human kind.

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

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 practice 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

The Department of Artificial Intelligence and Data Science emerged in the year 2020 in Sairam 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, join in the hands with a dedicated team of erudite faculty.

Tamil Medium Students Engage in Insightful Group Discussion on Artificial Intelligence at Innovation Centre

The Department of Artificial Intelligence and Data Science at SAI RAM Engineering College hosted a compelling and informative group discussion centered on Artificial Intelligence (AI) exclusively for Tamil medium students. The event took place on December 21, 2023, at the institution's Innovation Centre, attracting a keen audience eager to delve into the world of AI.

The session, tailored specifically for Tamil-speaking students, aimed to bridge language barriers and provide an inclusive platform for exploring the



The poster features a central image of a group of students sitting in a circle on a large orange sofa in a modern, brightly lit room with a glass ceiling. The text is overlaid on this image. At the top, there are logos for SAI RAM Engineering College and various accreditation bodies including RAISE, EOMS, SDG ACTION, Sairam Institutions, AICTE, NIRF, NER, and AACSB. Below these, the text reads 'Presents' followed by 'GROUP DISCUSSION For Tamil Students' in large, bold letters. The topic 'TOPIC : AI' is highlighted in yellow. At the bottom, the date, time, and place are listed. The footer contains the names and titles of the staff coordinator, HOD, Principal, and Chairman & CEO.

SAI RAM
ENGINEERING COLLEGE
An Autonomous Institution
West Tambaram, Chennai - 44
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DEPARTMENT OF
**ARTIFICIAL INTELLIGENCE
& DATA SCIENCE**

Presents

GROUP DISCUSSION
For
Tamil Students
TOPIC : AI

📅 DATE : 21/12/2023 (Thursday)
🕒 TIME : 9:50 AM - 11:45 AM
📍 PLACE : INNOVATION CENTRE

Mrs.Gomathy.G
Staff coordinator

Dr.Swagata Sarkar
HOD / AI&DS

Dr.K.Porkumaran
Principal - SEC

Dr.Sai Prakash Leo Muthu
Chairman & CEO
Sairam institutions

nuances of AI. This initiative by the department reflects SAIRAM Engineering College's commitment to fostering comprehensive learning experiences for all students, irrespective of linguistic backgrounds.

The discussion unfolded in a vibrant atmosphere, with students actively engaging in conversations about AI, its applications, and its potential impact across various industries. The department's faculty members, well-versed in AI technologies, led the discourse, ensuring that complex concepts were explained in Tamil, enabling better understanding and participation among the attendees.

The participants had the opportunity to gain insights into the fundamentals of AI, its significance in today's technological landscape, and its role in shaping the future. Real-world examples and case studies were presented in Tamil, facilitating a deeper comprehension of AI's practical implications.

Dr. Swagata Sarkar , the head of the Department of Artificial Intelligence and Data Science, expressed delight at the enthusiastic response from the students.

It's imperative to break language barriers and ensure that every student, irrespective of their medium of instruction, has access to knowledge in emerging fields like AI. This session was a step towards making AI more accessible and comprehensible for Tamil medium students.

The interactive nature of the discussion encouraged students to ask questions, share their perspectives, and brainstorm potential applications of AI in various domains. Attendees left the session with a heightened curiosity and a clearer understanding of AI, laying a strong foundation for further exploration and learning in this transformative field.

SAIRAM Engineering College's Department of Artificial Intelligence and Data Science's initiative to conduct a discussion exclusively for Tamil medium students stands as a testament to the institution's commitment to inclusive education and knowledge dissemination, ensuring that language doesn't act as a barrier to learning cutting-edge technologies like AI.

SAIRAM ENGINEERING COLLEGE

Collaborates with MoE's Institution Innovation Council for Transformative Workshop

SAIRAM Engineering College, known for its commitment to fostering innovation and academic excellence, has joined hands with the Ministry of Education's (MoE) Institution Innovation Council (IIC) to organize a pioneering workshop aimed at cultivating critical thinking and innovation design among students.

Scheduled
from
December
18th to



December 22nd, 2023, the workshop titled "Design Thinking, Critical Thinking, and Innovation Design" will run from 9:00 AM to 4:00 PM daily at the institution's Incubation Centre. This collaboration signifies a concerted effort by SAIRAM Engineering College to enhance the innovation quotient among its student community.

The MoE's Innovation Cell, in collaboration with SAIRAM Engineering College's Institution Innovation Council, has curated a comprehensive program that delves into the core aspects of design thinking, critical analysis, and innovative design methodologies. This initiative aims to equip students with the tools and mindset necessary to tackle real-world problems through innovative and unconventional approaches.

The workshop will feature a series of engaging sessions, hands-on activities, and interactive discussions led by industry experts, academic scholars, and seasoned practitioners in the field of innovation and design thinking. Participants will have the opportunity to immerse themselves in practical exercises, case studies, and group projects designed to stimulate creative thinking and problem-solving skills.

Dr. (Name), the esteemed organizer of the workshop and head of SAIRAM Engineering College's IIC, expressed enthusiasm about the collaboration, stating, "This workshop marks a significant milestone in our endeavour to nurture a culture of innovation and creativity among our students. We are thrilled to partner with the MoE's Innovation Cell to provide a platform that empowers our students to think critically and embrace innovative approaches in their academic pursuits."

The event has garnered substantial anticipation and excitement among students and faculty members, who view it as a unique opportunity to enhance their skills and explore new horizons in the realm of innovation.

SAIRAM Engineering College's association with the MoE's IIC for this transformative workshop underscores its dedication to fostering a forward-thinking environment that encourages innovation, problem-solving, and creative ideation among its students.

The workshop is expected to empower participants with valuable insights and practical skills that will undoubtedly shape their future endeavours in the dynamic landscape of technology and innovation.

SKILL ENHANCEMENT TRAINING

The skill enhancement training conducted by our department focused on the basics of the C programming language over a span of five days. The venue for this offline training was SSR Hall. Mr. Krishna Vamsi, an experienced lecturer, spearheaded the sessions, ensuring a comprehensive coverage of fundamental concepts in C programming.

The training commenced with an overview of the language's syntax and structure, gradually progressing to more complex topics such as control flow, functions, and data structures. Participants were actively engaged through hands-on exercises and coding challenges, fostering a practical understanding of the concepts.

Emphasis was placed on real-world applications of C programming, aligning the training with industry needs. Mr. Krishna Vamsi provided insights into common programming paradigms and best practices, empowering participants to write efficient and maintainable code.

Interactive sessions encouraged participants to seek clarification on doubts and share their experiences. This collaborative approach enhanced the overall learning experience, making the training both informative and engaging. The department's commitment to continuous skill enhancement was evident through the well-organized and expertly delivered program, ensuring that participants left with valuable insights and practical skills to apply in their professional endeavours.

Dr. Swagata Sarkar Acknowledged with Certificate of Appreciation for Exceptional Contribution as Reviewer at ICIICS-2023

Dr. Swagata Sarkar, a respected academician and a prominent figure in the field of engineering, was honoured with a Certificate of Appreciation for her exceptional efforts and commitment as a Reviewer during the groundbreaking ICIICS-2023 conference. Her dedication and expertise significantly contributed to the success of the event, which aimed to explore the integrated realms of intelligence and communication systems in the technological landscape.



The conference, organized by Sharnbasva University, Kalaburagi, brought together scholars, researchers, and professionals from around the world to discuss and exchange ideas on the latest advancements and challenges in integrated intelligence and communication systems. Dr. Swagata Sarkar pivotal role as a Reviewer ensured the meticulous scrutiny of academic papers, ensuring the conference maintained the highest standards of quality and academic rigor.

Her discerning insights and comprehensive assessments reflected a deep understanding of the subject matter, offering invaluable guidance to authors and contributing significantly to the scholarly discourse. Dr. Swagata Sarkar's involvement exemplifies her commitment to academic excellence and her dedication to fostering advancements in the field.

Expressing her gratitude, Dr. Swagata Sarkar shared, "It's truly an honour to have been a part of such a prestigious conference and to have contributed as a Reviewer. The exchange of innovative ideas and the opportunity to evaluate cutting-edge research papers was immensely rewarding."

The Certificate of Appreciation bestowed upon Dr. Swagata Sarkar stands as a testament to her scholarly eminence and unwavering commitment to advancing the field

of integrated intelligence and communication systems. Her exemplary contribution as a Reviewer significantly enriched the academic discussions and furthered the conference's objectives.

The recognition of Dr. Swagata Sarkar efforts underscores her significance in the academic community, inspiring fellow scholars and researchers to continue striving for excellence in their respective fields.

Industrial Visit to TAMCOE at Tidel Park

On December 1st, 2023, a group of participants embarked on an enlightening industrial visit to the Tamil Nadu Advance Manufacturing Centre of Excellence (TAMCOE) located within Tidel Park, Tharamani. TAMCOE, established by the government of Tamil Nadu, stands as a beacon of innovation and research in the field of advanced manufacturing. The visit proved to be an exceptional opportunity for attendees to immerse themselves in the realm of cutting-edge research and development.



During the visit, engaging interactions with industry experts and scholars provided invaluable insights into the prevailing trends and potential advancements within the manufacturing sector. The experts' perspectives shed light on the intricate dynamics of the industry, offering a glimpse into the future of manufacturing technologies and processes. Moreover, the visit underscored the unwavering commitment

of the government to foster research and development. TAMCOE's multifaceted approach, evident in its strategies to tackle contemporary challenges, served as a testament to the government's dedication to driving innovation and addressing industry-specific issues through a robust framework of research and development initiatives. Overall, the visit to TAMCOE at Tidel Park was an enriching experience that broadened the understanding of industry trends and showcased the government's steadfast commitment to advancing the manufacturing landscape in Tamil Nadu.

DRONE TechUnity

On the 13th of December 2023, the collaboration between the Bureau of Indian Standards (BIS) and the Department of Artificial Intelligence and Data Science culminated in a series of insightful events collectively named "DRONE TechUnity." This confluence of events aimed to delve into the realms of drone technology, robotics, and artificial intelligence, fostering a platform for comprehensive exploration and knowledge dissemination. The events comprised a diverse range of activities, including a technical quiz focusing on drones and robotics, an illuminating project expo

showcasing innovative projects, a comprehensive presentation on drone standards, and a poster presentation cantered around the integration of AI in drone technology.



The poster for the DRONE TechUnity event features a background image of a city skyline with several drones flying over it. The event is presented by Sri SAI RAM ENGINEERING COLLEGE, an Autonomous Institution in West Tambaram, Chennai - 44, with the website www.sairam.edu.in. It is organized by the Department of Artificial Intelligence & Data Science, Sairam Institutions, in collaboration with the Bureau of Indian Standards (National Standards Body of India), Chennai Branch Office. The event is scheduled for 13.12.2023 from 10:00 AM to 3:00 PM. The poster lists four events: 1. Technical quiz on drone & robotics, 2. Project expo, 3. Drone standard presentation, and 4. AI for drone - Poster presentation. It also lists four cash prizes: 1. First prize - 1000 /-, 2. Second prize - 750 /-, 3. Third prize - 500 /-, and 4. Fourth prize - 250 /-. A QR code is provided for registration. The poster also mentions the standard club number SC - 5373 and lists the organizing committee members: Mrs. Kalaiselvi.P (BIS Mentor), Dr. Swagata Sarkar (Head Of Department (AI&DS)), Dr. A. Rajendra Prasad (Dean (student affairs)), Dr. K. Porkumaran (Principal / SEC), and Dr. Sai Prakash Leo Muthu (Chairman & CEO Sairam Institutions).

Events

1. Technical quiz on drone & robotics
2. Project expo
3. Drone standard presentation
4. AI for drone - Poster presentation

CashPrizes

1. First prize - 1000 /-
2. Second prize - 750 /-
3. Third prize - 500 /-
4. Fourth prize - 250 /-

Scan to register

13.12.2023 10:00 AM - 3:00 PM

Mrs. Kalaiselvi.P
BIS Mentor

Dr. Swagata Sarkar
Head Of Department
(AI&DS)

Dr. A. Rajendra Prasad
Dean (student affairs)

Dr. K. Porkumaran
Principal / SEC

Dr. Sai Prakash Leo Muthu
Chairman & CEO
Sairam Institutions

The presence of distinguished personalities, including Dr. A. Rajendra Prasad, Dean (Student Affairs), Dr. Swagata Sarkar, Head of the Department, and Mrs. P. Kalaiselvi, the BIS Mentor, added significant value to the proceedings.



Their expertise and guidance enriched the event, offering invaluable insights into the burgeoning field of drone technology. The technical quiz provided a stimulating platform for participants to showcase their knowledge while the project expo served as a testament to the innovative endeavors within the domain. Additionally, the presentations on drone standards and the incorporation of AI in drones shed light on the regulatory frameworks and the promising advancements steering the future of this rapidly evolving industry. "DRONE TechUnity" served as a pivotal convergence point, fostering collaboration, and knowledge exchange among experts, scholars, and enthusiasts in the exciting spheres of drones, robotics, and artificial intelligence.

Envisioning Technological Frontiers: Exploring Neyveli Lignite Corporation India Limited

On December 15, a cohort of pioneering minds from the AI & DS department, comprising third-year students of B section, embarked on an illuminating journey to Neyveli Lignite Corporation India Limited (NIC India Ltd.). This select group sought to unravel the technological marvels propelling India's energy domain.

The day commenced with an insightful briefing that contextualized

NIC India Ltd.'s historical significance and its transformative role in the nation's energy evolution. As the students set foot onto the expansive grounds, the magnitude of the lignite mines and power plants beckoned, promising a firsthand encounter with cutting-edge technology.



Navigating through the facilities, the focus extended beyond the routine; it delved into the interplay of AI and DS in energy production. Witnessing the fusion of innovative technologies with traditional energy processes served as an eye-opener, illuminating the potential for AI-driven optimization within the sector.



However, the visit wasn't just about technological marvels; it also spotlighted the corporation's commitment to integrating sustainable practices with technological

advancements. Engaging discussions shed light on how AI & DS can further catalyze eco-conscious initiatives in energy production.

Interactions with experts and professionals not only unveiled the challenges but also ignited sparks of inspiration among the students, encouraging them to ponder over the vast possibilities awaiting integration between AI, DS, and sustainable energy solutions.

Departing from NIC India Ltd., these budding technologists carried back not just theoretical insights but a pragmatic understanding of how AI & DS intersect with industrial operations, igniting aspirations for leveraging technology towards a sustainable future.

T H A N K

YOU