



# ARTIFICIAL INTELLIGENCE



# DATA SCIENCE

## NEWSLETTER

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#### August 2023, Volume 2, Issue 8

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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 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. Out 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 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.



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.



## INTEL UNNATI INDUSTRIAL TRAINING – SUMMER 2023



In an era where theoretical knowledge must seamlessly with real-world blend application, the Intel Unnati Industrial Training Summer 2023 program emerges as a vital bridge between academia and industry. One exceptional student from Sri Sairam Engineering College stood out in a fierce competition, earning the privilege to participate under the mentorship of Dr. Swagata Sarkar, Head of the AI-DS department. Their journey to Intel Chennai is a testament dedication. to collaboration, and innovation.

Intel Unnati thrives on its commitment to nurturing emerging talent, offering participants a rare opportunity to witness technology in action. The selection process is rigorous, assessing technical acumen and problem-solving abilities. This student's victory reflects not only their aptitude but also the guidance provided by Dr. Swagata Sarkar, whose

expertise extends beyond the academic realm, enriching the student's overall growth.

Embedded within Intel's culture of innovation, the student experienced firsthand the convergence of cutting-edge research and practical application.





Collaborative projects amplified their skill set while encouraging creativity. The fusion of structured learning and independent exploration was pivotal in cultivating a holistic understanding of the tech landscape.

The journey culminated in a presentation that underscored the student's evolution, from selection to thriving in Intel's dynamic environment. This triumph serves as a beacon, illuminating the potential of programs like Intel Unnati in shaping the future of technology. As academia and industry continue to harmonize, such initiatives undoubtedly pave the way for the trailblazers of tomorrow.

#### **BEST PRESENTER AWARD**

Mrs. Rehash Rushmi Pavitra, an exceptional talent from the AI-DS department at Sri Sairam Engineering College, has earned the esteemed Best Presenter Award at an intra-college Paper Presentation Event. Her



triumph showcases the fusion of insightful research and adept presentation skills in the academic realm.

Navigating a competitive landscape, Mrs. Pavitra's paper not only delved into cutting-edge AI-DS topics but also demonstrated her adeptness at conveying complex ideas with clarity. Her presentation, a blend of technical finesse and engaging delivery, captivated judges and peers alike.



Her achievement is a testament to dedicated research and unyielding commitment to her field. Sri Sairam Engineering College's supportive academic environment and emphasis on innovation and communication have undoubtedly played a role in her success.

The Best Presenter Award isn't just a personal accolade; it's a tribute to her diligence, reflecting the college's commitment to nurturing holistic development. As a beacon of success, Mrs. Pavitra inspires peers and future presenters, illuminating the path of excellence in academia and beyond.



#### PALS VISIT BY MRS. SANGEETHA V

In a proactive pursuit of enhancing the educational experience, Mrs. Sangeetha V from the AI-DS department embarked on an insightful visit to the PALS (Peer-Assisted Learning System) initiative. This endeavor underscores the department's dedication to fostering collaborative and comprehensive learning environments.



During her visit, Mrs. Sangeetha V delved into the intricacies of the PALS program, which promotes peer-assisted learning as a catalyst for academic growth. By immersing herself in the initiative, she seeks to harness its potential to augment the educational approaches within her department.

Her active participation in this visit reflects not only her commitment to her profession but also the department's ethos of continuous improvement and innovation. Exploring innovative teaching methodologies, like the PALS system, is a testament to the AI-DS department's dedication to staying at the forefront of education in the dynamic field of artificial intelligence and data science.

Mrs. Sangeetha V's engagement with the PALS initiative is a significant step towards enhancing collaborative learning opportunities for students. It exemplifies educators' role as learners themselves, consistently seeking ways to refine their teaching methods. As the AI-DS department continues to champion progressive pedagogical approaches, this visit promises to contribute to the evolution of an enriched educational experience for all involved.

#### **STRESS BUSTER PROGRAM WINNER**



In a world where the pressures of modern life often take their toll, the significance of relief stress programs cannot be overstated. The AI-DS (Artificial Intelligence and Data Science) department's stress buster initiative stands out as a commendable effort to promote well-being among its members. The recent victory of Divya, a nonteaching staff member, who secured the first prize in this program, further reinforces its effectiveness.

Divya's accomplishment sheds light on the program's impact in offering



participants a much-needed respite from their daily grind. Stress, an almost ubiquitous companion in today's fast-paced environment, can dampen spirits and hinder productivity. The AI-DS department's proactive approach in organizing stress relief activities underscores its commitment to fostering a healthy and motivated workforce.

Divya's success story is a testament to the program's effectiveness in providing participants with effective stress management tools. Her victory highlights the positive outcomes that can be achieved when individuals prioritize self-care and engage in activities that promote relaxation and mental well-being.

This achievement also reflects the supportive and inclusive atmosphere fostered within the AI-DS department. The recognition of non-teaching staff members like Divya underscores the department's holistic approach to acknowledging the contributions of every team member.

As Divya basks in the glory of her victory, the AI-DS department stands united in celebrating not only her achievement but also the success of the stress buster program. In an era where well-being is paramount, initiatives like these serve as a beacon of hope, reminding us all of the importance of taking time to unwind and recharge.

## EXPERT TALK ON JAVA FX

The dynamic world of programming witnessed an enlightening event on August 26, 2023, as the GOJAN School of Business and Technology hosted an expert talk on Java FX. The distinguished guest speaker, Jaya Lakshmi A, an Assistant Professor in the Department of Computer Science and Engineering, captured the audience's attention with her insights into this powerful framework.

Java FX, a versatile platform for creating rich desktop applications, took center stage during the event. Jaya Lakshmi A's profound understanding and experience in the subject illuminated its intricacies and potential applications. Her engaging discourse delved into various aspects, from designing interactive user interfaces to incorporating multimedia elements, captivating both novice learners and seasoned programmers.





The event, coordinated by the Institution's Innovation Council, exemplified the institution's commitment fostering to cutting-edge learning experiences. providing a By platform for experts like Jaya Lakshmi share Α to their knowledge, the council continues facilitate to the exchange of ideas that drive technological advancements.

As participants absorbed the nuances of Java FX, they not only expanded their technical horizons but also gained insights that can prove invaluable in real-world

applications. The talk served as a reminder that in the ever-evolving landscape of technology, platforms like Java FX hold the potential to transform user experiences and open new avenues of innovation.

In conclusion, the expert talk on Java FX by Jaya Lakshmi A was a resounding success, shedding light on a versatile tool in the programmer's arsenal. The event's orchestration by the Institution's Innovation Council underscores the institution's dedication to nurturing a culture of learning, innovation, and technical exploration.

#### **EXPERT TALK ON STATISTICS IN R**

A captivating journey into the realm of statistics unfolded as Dr. Deepa N, Assistant Professor in the Department of Augmented Reality and Virtual Reality at the Institute of Computer Science and Engineering, Saveetha School of Engineering, SIMATS Chennai, took the stage. The expert talk, centered around harnessing the power of statistics using the R programming language, left attendees enlightened and empowered.



With statistics as the backbone of data-driven decision-making, Dr. Deepa N's presentation offered a comprehensive view of the subject's application using the versatile programming R language. The talk adeptly navigated through the essentials of statistical analysis, data visualization, and manipulation, showcasing R's prowess handling in complex data sets.

The event not only highlighted Dr. Deepa N's profound expertise but also underlined the institution's commitment to providing students with



holistic learning experiences. The intersection of statistics and programming, particularly in R, is a critical skill set in today's data-driven world, and the expert talk aimed to bridge the gap between theory and practice.

Dr. Deepa N's insights not only broadened attendees' horizons but also instilled the confidence to approach statistical challenges with the aid of R. As the realm of data science continues to evolve, the expertise shared during this event equips students with a competitive edge in their academic and professional pursuits.

In conclusion, the expert talk on statistics in R by Dr. Deepa N was a testament to the institution's dedication to fostering well-rounded education. Attendees departed with enriched knowledge, ready to wield the power of statistics through the lens of R programming, as they step into a world where data-driven insights reign supreme.



## IEEE WIE PROGRAM AN INTERNATIONAL LEADERSHIP SUMMIT



Dedication, aspiration, and a thirst for knowledge led Somasundaram, a bright 3rd-year student of the AI-DS (Artificial Intelligence and Data Science) department, on a remarkable journey. Somasundaram's voyage took them all the way to Chhattisgarh, where they participated in the IEEE WIE (Women in Engineering) International Leadership Summit 2023 on August 25th.



The IEEE WIE is program renowned for empowering women in the field of engineering and technology. This international summit brought together bright minds.

inspiring speakers, and thought-provoking discussions aimed at fostering leadership, innovation, and professional growth.



Somasundaram's participation in the summit signifies their commitment to continuous learning and personal development. It reflects not only their dedication to their chosen field but also their willingness to explore new avenues and push boundaries. Attending an event of this magnitude is a testament to Somasundaram's determination to excel and make a mark in the tech world.

The AI-DS department at Somasundaram's institution deserves recognition for nurturing students who are not only academically astute but also actively engaged in the wider professional community. Such initiatives reinforce the importance of holistic education and the relevance of real-world exposure.

As Somasundaram returns from the IEEE WIE International Leadership Summit, they carry with them wealth of ิล knowledge, newfound inspiration, and network of а like-minded



individuals. Their journey serves as an inspiration to their peers, highlighting the significance of seeking opportunities beyond the classroom and embracing challenges that lead to personal and professional growth.

In conclusion, Somasundaram's participation in the IEEE WIE International Leadership Summit 2023 is a testament to their passion for learning, their drive to excel, and their dedication to the AI-DS field. As they continue to shine brightly, their journey underscores the value of such global events in shaping the technologists and leaders of tomorrow.



#### **DESIGN THINKING FOR IDEA LAB**



In an era where drives innovation AI-DS progress. the (Artificial Intelligence and Science) Data department. under the expert guidance of Dr. Swagata Sarkar, Head of Department, embarked on a transformative journey. Collaborating with the AICTE Idea Lab. an dedicated initiative to fostering creativity and entrepreneurship, the department organized a hands-on training session design on thinking.

Design thinking, a

methodology that prioritizes user-centric problem-solving, was at the heart of this enlightening event. Dr. Swagata Sarkar, known for her expertise in AI and data science, extended her proficiency to the realm of innovative ideation. Participants were exposed to the intricacies of

identifying challenges, ideating solutions, and prototyping ideas, all while focusing on user needs and experiences.

The collaboration between the AI-DS department and AICTE Idea Lab exemplifies their joint commitment







to nurturing a culture of innovation. The training not only provided participants with practical tools but also instilled a mindset that seeks creative solutions to real-world problems.

As participants engaged in interactive sessions and collaborative exercises, they imbibed

the principles of design thinking under Dr. Swagata Sarkar's expert guidance. The event not only enriched their problem-solving skills but also sparked the flames of entrepreneurship and innovation within them.



In conclusion, the hands-on training on design thinking orchestrated by Dr. Swagata Sarkar and organized in partnership with AICTE Idea Lab stands as a beacon of innovation and collaboration. The event showcases the AI-DS department's dedication to fostering well-rounded technologists equipped with not just technical prowess, but also the ability to drive transformative change through creativity and empathy.



# ORIENTATION PROGRAM FOR 2<sup>ND</sup> YEAR STUDENTS



Education is not just about acquiring knowledge; it's about nurturing well-rounded individuals equipped to navigate the complexities of the modern world. Recognizing this, the AI-DS (Artificial Intelligence and Data Science) department organized an elaborate orientation program for its 2nd-year students. This program, spanning various crucial



aspects, was a remarkable effort to equip students with both academic and life skills.

The orientation program unfolded under the adept guidance of esteemed faculty members, each addressing a distinct facet of personal and professional development. Dr.



V Sumathi, an eminent figure, initiated the proceedings with an insightful discourse on universal human resources. Emphasizing values, empathy, and inclusivity, Dr. Sumathi set the tone for holistic growth, highlighting the importance of interpersonal skills beyond the technical realm.

Dr. Ν Sivakami's session NPTEL on (National Programme Technology on Enhanced Learning) underscored the importance of continuous learning. NPTEL's resources, which offer a platform for high-quality education. resonated with the department's



commitment to staying current in the ever-evolving field of AI-DS. Dr. Sivakami's talk emphasized the role of self-directed learning in today's competitive landscape.



The concept of an innovation ecosystem took center stage as Dr. C R Rene Robin took the floor. His enlightening discussion delved into creating an environment conducive to creative thinking and problemsolving. Dr. Robin's insights echoed the

department's commitment to fostering innovation, aligning with its mission to produce not just tech experts but also innovators.



Dr. S Sankari's session on Ui Path and ICT (Information and Communication Technology)

resonated with the digital age's demands. The interactive discourse delved into automation, artificial intelligence, and the role of technology in reshaping industries.



Dr. Sankari's talk painted a vivid picture of the technological landscape awaiting the students.



The crucial subjects of Pals (Peer-Assisted Learning System) and Gate exams were Dr. addressed bv Т Poreselvi. Her guidance shed light on effective studv techniques, strategies for acing exams, and leveraging Pals for comprehensive The learning. session

provided invaluable insights, not just for academics but also for personal growth.

Mrs. Renukadevi's segment centered around the clubs and cells that enrich the student experience. From coding clubs to women's empowerment cells, her talk highlighted the opportunities for extracurricular engagement.



Page | 15



These platforms enhance skills, foster community, and provide a holistic education beyond the classroom.



Dr. G Puthilibai's session on captivating patents was a intellectual exploration of property. As the department encourages innovation. her insights into safeguarding ideas resonated. Understanding the patent system equips students protect and share their to innovations with the world.

The AI-DS department's orientation program was a testament to its commitment to comprehensive education. It encapsulated technical expertise, soft skills, and personal growth, creating a well-rounded educational experience. Each faculty member's contribution not only offered valuable insights but also underscored the department's dedication to nurturing future-ready professionals.

As the 2nd-year students absorbed these insights, they were exposed to a spectrum of ideas that extend beyond textbooks. The orientation program aimed not just to educate but to inspire, molding individuals who are equipped to thrive in an evolving world. This initiative is a reflection of the department's mission to produce AI-DS experts who are not just technically proficient but also well-rounded contributors to society.

In conclusion, the AI-DS department's orientation program stands as a beacon of holistic education. By embracing multiple dimensions of learning, from technical expertise to personal growth, the program empowers students to become well-rounded professionals. The dedication of the faculty members, who expertly guided the sessions, underscores the department's commitment to shaping future leaders in the field of AI-DS.



## EXPERT TALK ON PROJECT MANAGEMENT ON DATA SCIENCE

In the ever-evolving landscape of data science. effective project management is the linchpin that turns ideas into tangible solutions. Α illuminating expert talk bv Crayon, hosted at the IITM Research Park. delved into the of nuances



managing data science projects with finesse.

Crayon's discourse brought to light the critical role project management plays in the success of data science endeavours. The talk provided attendees with a comprehensive understanding of methodologies, tools, and strategies that streamline the process from data collection to actionable insights.

Held within the prestigious IITM Research Park, the event attracted enthusiasts, students, and professionals keen on honing their project management skills. Crayon's insights encapsulated years of industry experience, offering real-world examples and best practices that transcend the theoretical realm.

The expert talk was not just an exploration of methodologies, but a testament to the collaborative spirit that thrives in such events. Attendees had the opportunity to interact with Crayon's representatives, fostering knowledge exchange and networking within the data science community.

In conclusion, Crayon's expert talk at IITM Research Park was a beacon of enlightenment for those navigating the complex landscape of data science project management. The event not only enriched participants'



knowledge but also catalysed a culture of effective management within the data-driven innovation sphere.

# SYNERGIA WINNERS: TEAM BIOCYCLE WARRIORS



In the pursuit of personal and career development, а revolutionary initiative named "Synergia" emerged as a transformative force. This platform, designed to nurture young talents and equip with the them skills to thrive in an ever-evolving world, recently witnessed а triumphant victory by the Al-DS team "Biocycle Warriors."

The AI-DS

department's team, comprising the talented trio Jeyasri Siva Pathrakali K, Ilakkiya S, and Monicka M, emerged as the vanguards of the "Biocycle Warriors" in the Synergia competition. Their victory serves as a testament to the department's commitment to holistic development, technical prowess, and collaborative innovation.



"Biocycle Warriors" showcased their expertise, blending AI-DS prowess with a creative approach. The competition, which likely tested not only their technical acumen but also their problem-solving finesse, stands as a reflection of the dynamic challenges the AI-DS field presents.

The synergy of skills, as exemplified by "Biocycle Warriors," underscores the holistic nature of AI-DS. The department's nurturing environment, coupled with the dedication of these bright minds, propelled them to victory, redefining personal and career development.

In conclusion, "Synergia" stands as a pioneering stride towards personal and career development. The triumph of the AI-DS team "Biocycle Warriors" encapsulates the department's vision, the prowess of the young talents, and the infinite possibilities that arise when determination meets innovation.

## AWARENESS PROGRAM ON SKILLRACK

In the quest to nurture skill-based learning, an enlightening

awareness program on SkillRack brought together the voices of our talented student speakers. Hemanth M, Adhish S, Abhinav, Adarsh V, Dhinesh Babbu, and Shrinithi shared their perspectives on this transformative platform.

SkillRack, a hub for honing skills through coding challenges and tech-based exercises, found its





spotlight during this program. Our student speakers shed light on its potential to enhance problem-solving, critical thinking, and coding prowess.

Hemanth M and Adhish S emphasized how SkillRack offers a playground for learners to apply classroom knowledge in real-world scenarios. Abhinav highlighted its role in building a strong foundation in coding, while Adarsh V spoke about its interactive learning environment.

Dhinesh Babbu underscored SkillRack's role in fostering a competitive spirit and pushing boundaries, while Shrinithi discussed its relevance in preparing students for industry demands.

In conclusion, the awareness program brought together insights from our bright minds, portraying SkillRack as a beacon of skill enhancement. The student speakers' perspectives showcased the platform's transformative potential in shaping well-rounded tech professionals.

