Sri SAI RAM ENGINEERING COLLEGE
An Autonomous Institution
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ARTIFICIAL INTELLIGENCE AND DATA SCIENCE NEWSLETTER

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EDITORIAL BOARD

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.

EPITOME OF OUR MISSION

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.

AIRO 2.0

The Department of Artificial Intelligence and Data Science, Sri Sairam Engineering College in association with the Marine Technology Society, organized its 1st INTERNATIONAL LEVEL SYMPOSIUM on February 3, 2023. The symposium aimed to give participants the opportunity to share their knowledge, concepts, innovations, and problem-solving strategies while presenting original research on all facets of new scientific approaches for technologies, computational processes, software, and hardware solutions pertaining to particular scientific fields.

The symposium began with the Opening note by Dr. Swagata Sarkar, Head of the Department of Artificial Intelligence and Data Science. Dr. J. Raja, Dean Academics, delivered the welcome address and felicitated the Chief Guests of the day, Ms. Zdenka Willis, President, Marine Technology Society, and Dr. R. Venkatesan, Chair, MTS India Section. To hold the memory of the event, a Souvenir was released by Dr. J. Raja, and Ms. Zdenka Willis received the first copy of it.

Ms. Zdenka Willis enlightened the participants with the need for technology in the field of marine, and Dr. R. Venkatesan highlighted the activities of the Marine Technology Society. Dr. B Shadaksharappa, Principal, Sri Sairam College of Engineering, Bengaluru, Karnataka, delivered the Presidential address for the day. On the day, the department Robot and App were launched by the Chief Guests. More than 300 participants benefited from the events organized.

As a mark of supporting the Sustainable Development Goal, the event organized a signing campaign for Goal 4 – Quality Education and Goal 9 – Industry, Innovation and Infrastructure. A panel discussion on the topic "Impact of Technology in Maritime Studies" was organized for the NCC Navy Cadets and Marine Project teams, and they got benefitted with the discussion they had with Ms. Zdenka Willis.

The technical symposium named AIRO-THON and EXPO-A-THON were conducted to enhance the technical performance of students. Two non-technical symposiums named BUSINESS MAN and 100% MY FILM were also organized.

In the evening, a valedictory session was conducted, and prizes and certificates were distributed to all the winners and participants. Finally, the event came to an end with a vote of thanks by Mrs. D. Jena Catherine

Bel, Assistant Professor, AI-DS & Coordinator AIRO 2.0. Overall, the symposium was a grand success in terms of bringing together scholars, innovators, and experts from different fields under one roof.

Hands-on Training on UiPath Robotic Process Automation

The Hands-on Training on UiPath Robotic Process Automation was organized by the Department of Computer Science and Engineering, Rajalakshmi Engineering College. The training program was held on 8th and 15th February 2023 and was coordinated by Mr. U. Jayachandiran, with Mr. B. Bhuvaneshwaran as the organizer and speaker. The two-day training program aimed to provide students with the knowledge and skills required to become proficient in UiPath Studio and create efficient automation processes.

Day 1 of the training program focused on introducing the students to the basics of UiPath RPA. The session began with an overview of RPA and its benefits, followed by a brief introduction to UiPath Studio. The session covered various topics such as installing and setting up UiPath Studio, creating a new project and its components, working with variables and data types, understanding control flow and decision making, debugging and error handling, and building a basic automation process. At the end

of the day, students were given a task to create a basic automation process using UiPath Studio.

Day 2 of the training program delved deeper into UiPath RPA and covered advanced topics such as working with Excel and CSV files, web automation, email automation, Citrix automation, and Orchestrator basics. Students were also introduced to the UiPath Community, which provides access to a vast library of pre-built components, tutorials, and support forums. The session concluded with a hands-on activity where students created a more complex automation process that utilized the advanced features of UiPath Studio.

The training program was a great success, and the students gained valuable knowledge and skills that will help them become proficient in UiPath RPA. The program was well-organized, and the speaker, Mr. B. Bhuvaneshwaran, was very knowledgeable and provided excellent guidance to the students. The training program was also interactive, with students given the opportunity to ask questions and seek clarifications from the speaker.

In conclusion, the Hands-on Training on UiPath Robotic Process Automation was an excellent program that provided students with a solid foundation in UiPath RPA. The training program will undoubtedly help students create automation processes that are efficient and effective, thereby improving the way businesses operate. The training program was well-received, and the organizers deserve commendation for their efforts in making the program a great success

Five Day Virtual Self-Paced FDP on “JAVA”

From February 6th to 10th, 2023, the Department of Artificial Intelligence and Data science at our institution hosted a five-day virtual self-paced Faculty Development Program (FDP) on "Java." The event was aimed at providing an opportunity for faculty members to enhance their knowledge and skills in Java programming.

The event was organized in collaboration with IIT Bombay Spoken Tutorial and was conducted by Mr. S. Sivamurugan, an experienced trainer and expert in Java programming.

The FDP was designed to be self-paced, allowing the participants to learn at their own pace and convenience. The FDP covered a range of topics, including the basics of Java programming, object-oriented programming concepts, GUI programming, and web application development.

The event concluded with a feedback session, where the participants shared their experiences and provided suggestions for improvement. The participants expressed their satisfaction with the quality of the content and the delivery of the FDP.

In conclusion, the five-day virtual self-paced FDP on "Java" was a great success, providing faculty members with an opportunity to enhance their skills and knowledge in Java programming. The event was well-organized, and the participants appreciated the flexibility offered by the self-paced format. We thank IIT Bombay Spoken Tutorial and Mr. S. Sivamurugan for their valuable contribution to the event's success.

Bootcamp Series VI on “Hands on Training on AR VR”

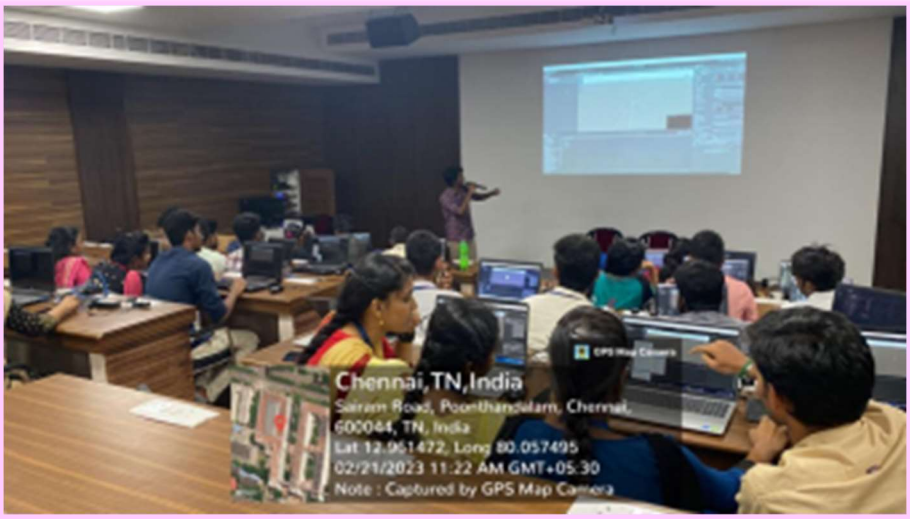
The BOOTCAMP SERIES VI on “Hands-on Training on AR VR” was conducted on 20th and 21st February 2023. The event was organized by the Department of Artificial Intelligence and Data Science. The objective of the event was to provide participants with practical experience on

Augmented Reality (AR) and Virtual Reality (VR) technologies, and their applications.

The event was addressed by Mr. Lelin, who is an experienced R&D Engineer with a specialization in AR and VR technologies. He provided participants with a comprehensive understanding of the fundamentals of AR and VR technologies, along with their practical applications.

The event was coordinated by Mrs. C. Esther and Mr. V. Arun, who are faculty members of the Department of Computer Science and Engineering. They were responsible for organizing the event and ensuring its smooth execution.

The event was graced by the presence of Dr. Rene Robin, who is a renowned expert in the field of AR and VR technologies. He was the special chief guest of the event and delivered a keynote address on the importance of AR and VR technologies in the current technological landscape.



The BOOTCAMP SERIES VI on "Hands-on Training on AR VR" was conducted in two sessions, each of which lasted for four hours. The first session focused on the theoretical aspects of AR and VR technologies, covering topics such as the basics of AR and VR, their differences, and their applications in various fields.

The second session was dedicated to hands-on training, where participants were provided with practical experience in using AR and VR technologies. The participants were divided into groups and were given the opportunity to work on projects related to AR and VR technologies.

The BOOTCAMP SERIES VI on "Hands-on Training on AR VR" was a successful event that provided participants with practical experience in using AR and VR technologies. The event was well-received by the participants, who gained valuable knowledge and skills that will help them in their future endeavors.

Hands on Training for Lab Technicians on "Python Programming"

Hands-on training program on "Python Programming" was conducted by Mrs. P. Kalaiselvi at our organization from February 20, 2023, to March 04, 2023. The event was organized under the supervision of Mrs. G. Gomathy, who served as the coordinator of the training program.

The training program aimed to equip the lab technicians with basic programming skills using Python. The program was designed to start with the basics of Python programming, including data types, variables, and operators. The training also included essential programming concepts such as loops, functions, and conditional statements.

The second week of the program focused on advanced Python programming concepts, such as object-oriented programming, modules, and packages, and file handling. The training also covered the use of Python libraries and frameworks, such as NumPy, Pandas, and Matplotlib, for scientific data analysis and visualization.

The training sessions were interactive, and participants had access to hands-on practical exercises and case studies. The trainer ensured that all participants were actively engaged in the learning process and provided a conducive learning environment for all attendees.

Mrs. P. Kalaiselvi, the speaker for the training program, is a seasoned Python programmer

in software development. Her expertise in the field ensured that the participants received the best knowledge and hands-on experience in Python programming.

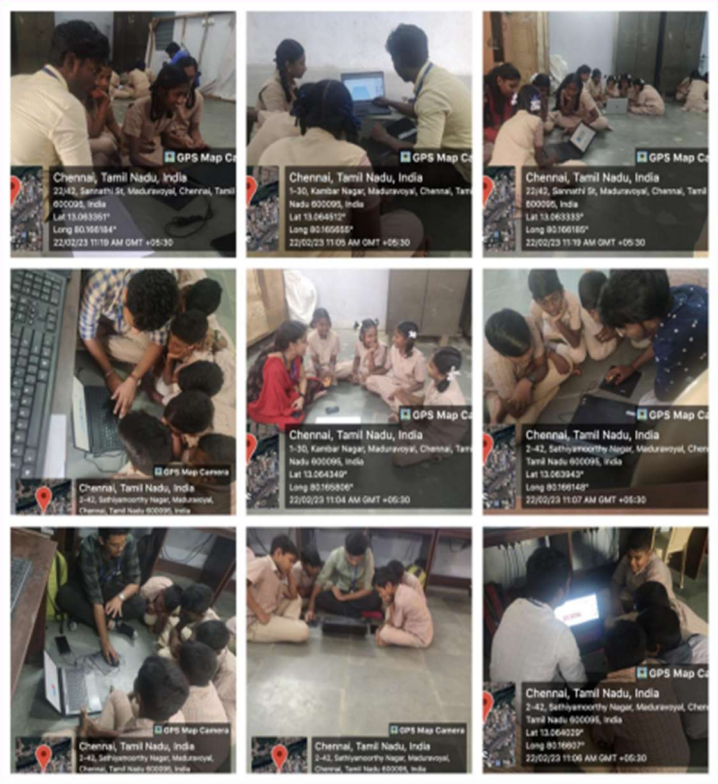
The training program was attended by 3 laboratory technicians from our organization, all of whom showed enthusiasm and active participation throughout the training program.

The training program was successful, with all participants gaining practical knowledge and skills in Python programming. The participants gained confidence in using Python programming in their daily tasks and were satisfied with the learning experience.

The training program on "Python Programming" was a success, thanks to the expertise of Mrs. P. Kalaiselvi and the coordination of Mrs. G. Gomathy. The program provided a platform for laboratory technicians to learn and improve their skills in Python programming, thus enhancing their overall productivity in their daily tasks.

AR VR Training for School Students

The AR VR Training for School Students event was conducted on 22nd February 2023. The event was organized by the Department of Artificial Intelligence and Data Science students in collaboration with the Marine Technology Society. The objective of the event was to introduce school students to the basics of Augmented Reality (AR) and Virtual Reality (VR) technologies and their applications.



The event was addressed by Mr. Lelin, an experienced R&D Engineer specializing in AR and VR technologies. He provided the students with a comprehensive understanding of the fundamentals of AR and VR technologies, along with their practical applications.

The event was coordinated by Mrs. D. Jena Catherine Bel, a faculty member of the Department of Department of Artificial Intelligence and Data Science. She was responsible for organizing the event and ensuring its smooth execution.

The event was supported by the Marine Technology Society students who served as trainers for the school students. They assisted the school students in understanding the concepts of AR and VR technologies and also helped them in carrying out the hands-on training activities.

The AR VR Training for School Students event was conducted in a single session, which lasted for three hours. The session began with a brief introduction to AR

and VR technologies, followed by a presentation on the differences between AR and VR, and their practical applications.

The students were then provided with hands-on training in using AR and VR technologies. They were divided into groups and were given the opportunity to work on projects related to AR and VR technologies. The Marine Technology Society students provided guidance and support to the school students throughout the training.

The AR VR Training for School Students event was a successful event that introduced school students to the basics of AR and VR technologies and their applications. The event was well-received by the school students, who gained valuable knowledge and skills that will help them in their future endeavors.

Machine Learning And its Tools

On February 24th, 2023, the Department of Artificial Intelligence and Data Science Engineering hosted an event on "Machine Learning and its Tools" at our campus. The event was attended by students, faculty members, and researchers from various universities and institutions.

The event began with the opening remarks from Mrs. C. Esther, the event coordinator, who welcomed the participants and highlighted the importance of machine learning in today's world. She

also introduced the keynote speaker, Mr. P. Suresh, Assistant Professor of Artificial Intelligence, who was invited to deliver a talk on the topic.

Mr. Suresh's talk focused on the basics of machine learning and its different tools, including Python libraries such as TensorFlow, Keras, and Scikit-learn. He provided a comprehensive overview of machine learning, its history, and the different types of machine learning algorithms used in the industry. He also discussed the importance of data pre-processing and how it affects the accuracy of a machine learning model.

During the talk, Mr. Suresh also demonstrated the use of different tools and techniques for data analysis and model training. He explained how to create a machine learning model using Python libraries, and how to optimize the model's accuracy. He also discussed the importance of feature selection and the different techniques for it.

The session was interactive, and the participants asked several questions related to the topic, which were addressed by Mr. Suresh. The talk ended with a vote of thanks from Mrs. C. Esther, who thanked Mr. Suresh for sharing his knowledge and expertise with the participants.

In conclusion, the event provided an excellent opportunity for participants to learn about the basics of machine learning and its tools. The talk was informative and engaging, and the participants appreciated the opportunity to interact with an expert in the field. The event was a success, and we look forward to hosting more such events in the future

Process of Innovation in Startup

On February 24th, 2023, our institution hosted an event on the "Process of Innovation in Startup." The event was aimed at providing students and faculty members with insights into the innovation process and its importance in startup success.

The event was coordinated by Mrs. C. Esther, Assistant Professor of Artificial Intelligence. The keynote speaker for the event was Mr. Venkatesh Prabhu, an experienced entrepreneur and innovation expert, who shared his insights on the topic.

Mr. Prabhu began the session by emphasizing the importance of innovation in startup success. He explained the process of innovation and how it could be used to create a unique value proposition for a startup. He also shared his experiences as an entrepreneur and the challenges he faced in the innovation process.

Mr. Prabhu also discussed the different stages of the innovation process, including ideation, validation, and implementation. He shared practical examples and case studies of startups that had successfully implemented the innovation process to achieve their goals.

During the interactive session, the participants asked several questions related to the topic, which were addressed by Mr. Prabhu. He also provided insights into the different funding options available for startups and the importance of building a strong network.

The event ended with a vote of thanks from Mrs. C. Esther, who thanked Mr. Prabhu for sharing his knowledge and experience with the participants. She also encouraged the participants to apply the insights gained from the event in their entrepreneurial ventures.

In conclusion, the event provided an excellent platform for participants to gain insights into the process of innovation in startups. The session was informative and interactive, and the participants appreciated the opportunity to interact with an experienced entrepreneur. The event was a success, and we look forward to hosting more such events in the future.

THANK YOU