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SREE RAMA ENGINEERING COLLEGE

JULY-DEC 2024 NEWSLETTER



Sri Mannem Rami Reddy M.A., H.D.C EX-E.C. MEMBER, SVU, TIRUPATI

CHAIRMAN'S MESSAGE

"The future belongs to those who believe in the beauty of their dreams."



Sri Aravind Kumar Reddy Mannem BE, M.Tech., MBA(UK) Director, SRET

DIRECTOR'S MESSAGE

Sree Rama Engineering College (SREC)

has a strong reputation for producing successful engineers.

The institution has grown significantly in recent years and focuses on academic excellence, student development, and preparing students for the future. SREC emphasizes hard work, discipline, and a competitive spirit while also fostering teamwork and creativity.

The college provides a safe and supportive environment for students to learn and grow.



Dr. K. Jaya Chandra M.Tech., PhD Principal, SRET

PRINCIPAL'S MESSAGE

Our goal is to change the world through education. It may sound idealistic, but this is precisely our long term goal. It is what motivates the work of everyone at the Sree Rama Engineering College — from faculty and staff, to students and alumni.

Our approach reflects the educational needs of the 21st century. We focus on our students by providing them with a world-class outcome based education and hands-on experience through training. There is continuous check on the implementation of planned academic activities with desired results in grooming our future generation for employment and for higher studies in India and abroad.



DR.NAGILETI DEEPAK KUMAR M.TECH, PH.D PROFESSOR

ABOUT THE DEPARTMENT

The department of Computer Science and Engineering (CSE) was established in the year 2008 with an intake of 60 in B.Tech. Over the years, the department has shown consistent growth and the current intake in B.Tech CSE is 240. The department also offers M.Tech in Computer Science and Engineering programme with an intake of 18 since 2011.

Department has committed, well-qualified, professionally active faculty members with good research strengths. The majority of the faculty members are pursuing Ph.D. in emerging areas like Artificial Intelligence, Machine Learning, Data Mining, Cyber Security, IOT, Data Science, and Block Chain, etc. The department is well-equipped with state-of-the-art laboratories.

The Department of Computer Science and Engineering meticulously strives to develop analytical & synthesizing skills, thus fostering the overall development of students. Department conducts the guest lectures and workshops by eminent subject experts from the IITs, reputed foreign Universities, and the proficient personalities from the corporate world. For the multi-dimensional growth of the students, various activities are also conducted in collaboration with professional bodies like CSI, ISTE, and IEEE. Faculty and students are encouraged to do certifications offered by Microsoft, NPTEL-SWAYAM, LinkedIn, etc, to move the needle on upgrading their proficiency and skill set in the interested areas.

Every year the department is showing outperforming placement track record. The department has vibrant alumni working in top-notch giants in the software industry like TCS, Wipro, CTS, HP, Accenture, Infosys, Amazon, Flipkart, etc

DEPARTMENT VISION & MISSION

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To excel in computer science engineering by fostering technical competence, enhancing the teaching-learning process, and ensuring student placement with social responsibility.



M1. Imparting quality teaching and value-based education to create competent computer science professionals.

M2. Equip professionals with interdisciplinary technical and managerial skills, and promote active industry-institute collaboration through advanced computing facilities.

M3. Foster effective communication, uphold professional ethics, and instill a strong sense of social responsibility in students.



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Webinar



A Webinar on Advancing Agriculture: New innovation and technology for sustainable future



Event Organized by: IIC of SRET Date: 24th July 2024 Audience: III B.Tech CSE (85 students)

We are excited to announce a virtual webinar focused "Advancing on Agriculture: Innovation and Technology for a Sustainable Future," organized by the Institutional Innovation Council (IIC) of SRET. This event aims to bring together thought leaders and visionaries from the agrifood sector to discuss the future of food and agriculture, exploring cuttingtechnologies innovative edae and approaches that will shape the future of the industry.

Event Highlights:

- Keynote Speakers from leading agriculture and technology sectors.
- Interactive Sessions focusing on sustainable farming, technology in agriculture, and the role of innovation in achieving global food security.
- Panel Discussions featuring experts sharing their experiences and future outlook on the agrifood sector.

This virtual program will serve as an excellent platform for students to learn from industry leaders and understand the challenges and opportunities in the evolving world of agriculture and technology.

Join us as we discuss how innovation and technology are transforming agriculture to ensure a sustainable future for generations to come.

We look forward to your participation and the valuable insights you will gain from this event.

MoE Innovation Cell Activity



MoE Innovation Cell activity - Guiding Framework for Creating and Engaging Trained Faculty



Session on: Guiding Framework for Creating and Engaging Innovation Ambassadors (IAs) Date: 29th July 2024 Organized by: IIC of SRET Audience: III B.Tech CSE (113 students)

We are excited to announce an important session organized by the Institutional Innovation Council (IIC) of SRET, focusing on the Guiding Framework for Creating and Engaging Innovation Ambassadors (IAs). This session, driven by the Ministry of Education (MoE) Innovation Cell, will provide crucial insights into the Innovation Ambassador (IA) Training Program for both faculty and students. **Key Focus Areas**:

 Role of Innovation Ambassadors (IAs): Learn how faculty and students can become key contributors to fostering innovation within the institution by becoming Innovation Ambassadors, guiding peers, and promoting a culture of innovation.

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- Framework for Training: A detailed framework for training faculty and students as IAs will be shared, including strategies to enhance their engagement and participation in innovation activities.
- Reward Mechanisms: Discover the rewarding systems in place to recognize and motivate Innovation Ambassadors, highlighting their importance in promoting a sustainable innovation ecosystem.

This session aims to provide faculty and students with the tools and knowledge to contribute to innovation efforts at SRET, while also encouraging leadership and a proactive approach towards developing an innovative environment.

We look forward to your active participation in this engaging session.

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MoE Innovation Cell Driven session SRET



MoE Innovation Cell activity – Strengthening IIC Linkages with ATLs and SICs in Schools and Framework



MoEInnovationCellSession:Strengthening IIC Linkages with ATLs andSICs in Schools

Organized by: IIC of SRET

Date: 31st July 2024 | Location: II B.Tech CSE

Participants: 98

The Ministry of Education's (MoE) Innovation Cell conducted a session on 31st July 2024 at SRET, aimed at strengthening the linkages between Innovation and Incubation Centres (IICs), Atal Tinkering Labs (ATLs), and Science Innovation Centres (SICs) in schools. The session, attended by 98 participants from II B.Tech CSE, focused on creating a collaborative framework to enhance innovation across educational levels.

Key Takeaways

- Strengthening Connections: Focused on building stronger linkages between IICs, ATLs, and SICs to improve innovation outcomes.
- Role of ATLs & SICs:
 - ATLs help students gain hands-on experience with technology.
 - SICs promote scientific thinking and problem-solving in students.
- Collaboration Framework: Introduced a practical framework to connect schools, ATLs, and IICs for collaborative projects, research, and innovation challenges.

Guidelines for Faculty & Students

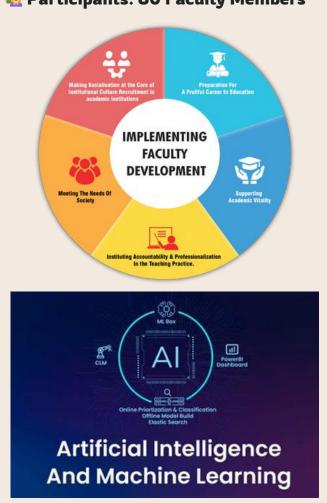
- For Faculty:
- Encourage student participation in innovation programs and challenges.
- Facilitate workshops and collaborative events with ATLs and SICs.
- For Students:
- Engage with ATLs and SICs for practical learning and innovation.
- Collaborate on cross-institutional projects and participate in innovation contests.

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A One week virtual Faculty Development programme



One-Week Virtual Faculty
 Development Programme
 on Recent Trends in Machine Learning &
 Artificial Intelligence
 Date: 08th July 2024 – 12th July 2024
 Participants: 80 Faculty Members



The Department of Computer Science & Engineering successfully organized a oneweek virtual Faculty Development Programme (FDP) on Recent Trends in Machine Learning & Artificial Intelligence from 8th July to 12th July 2024.

The primary objective of this FDP was to enhance the knowledge and skills of faculty members in Machine Learning (ML) and its practical applications. The sessions covered fundamental concepts, latest advancements, and real-world applications of Al and ML, equipping faculty with the necessary expertise to integrate these technologies into academics and research.

This initiative provided an interactive platform for faculty to explore innovative ideas, discuss challenges, and gain insights from experts in the field.

The FDP was well-received, with 80 faculty members actively participating, making it a successful and enriching experience.

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A Guest lecture program

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A session on Career Guidance Opportunity

Guest Lecture on "Career Guidance & Opportunities"

Date: 22nd August 2024

Participants: III B.Tech CSE (180 Students)



The Department of Computer Science & Engineering successfully organized a Guest Lecture on "Career Guidance æ **Opportunities**" on 22nd August 2024. The session aimed to enhance students' understanding of various career paths, industry trends, and opportunities in the field of Computer Science & Engineering. With 180 students from III B.Tech CSE attending, the lecture provided valuable insights into career planning, skill development, and strategies to excel in the competitive job market.

Experts from the industry shared their experiences and guided students on how to align their learning with evolving industry demands.

The session proved to be highly informative and inspiring, equipping students with the necessary knowledge to make informed career decisions.



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A Guest Lecture on "Trending Technologies"



A session on Trending Technologies in Computer Science Engineering

- **F** Guest Lecture on "Trending Technologies"
- Date: 31st August 2024
- Participants: III B.Tech CSE (180 Students)

The Department of Computer Science & Engineering successfully organized a Guest Lecture on "Trending Technologies" on 31st August 2024. The session aimed to enhance students' knowledge of emerging technologies and their impact on the IT industry and real-world applications.

With 180 students from III B.Tech CSE attending, the lecture provided valuable Artificial insights into Intelligence, Machine Learning. Blockchain, Cloud Computing, Cybersecurity, and more. Industry experts shared their perspectives on the latest trends, career opportunities, and the skills required

Top Strategic Technology Trends 2024 Al Trust, Risk Continuous Sustainable and Security Threat Exposure Technology Management Management Industry Cloud Platform AI-Augmented 4 Engineering Development Platforms Augmented Intelligent Democratized Connected Applications Generative AI Workforce 10 Machine Customers



to excel in the tech-driven world. This interactive session helped students stay updated on technological advancements and better prepare for their future careers.

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Brain Blast Challenge Quiz Competition on C, JAVA, PYTHON



Quiz Competition on C, JAVA, PYTHON

Plast Challenge – Quiz Competition
 Date: 29th August 2024

Participants: II B.Tech CSE (180 Students) ance.

The Department of Computer Science & Engineering successfully organized the Brain Blast Challenge – A Quiz Competition on C, Java, and Python on 29th August 2024.

With 180 students from II B.Tech CSE participating, the competition aimed to enhance programming knowledge and boost problem-solving skills. The quiz covered fundamentals, advanced concepts, and real-world applications of C, Java, and Python, encouraging students to sharpen their coding proficiency.



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This engaging event provided a platform for students to test their skills, learn from their peers, and gain confidence in competitive coding environments.

Y Winners were recognized and awarded for their outstanding perform



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An Expert lecture on Deep Learning

SRET

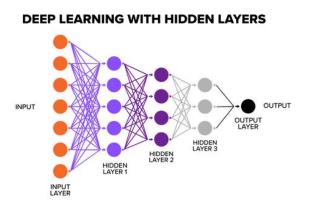


An Expert Lecture on Deep learning

- 👎 Expert Lecture on Deep Learning
- Date: 21st September 2024
- Participants: III B.Tech CSE (62 Students)

The Department of Artificial Intelligence & Data Science (AI&DS) successfully organized an Expert Lecture on Deep Learning on 21st September 2024.

The session aimed to enhance students' understanding of advanced Machine Learning algorithms, focusing on Deep Learning concepts, neural networks, and real-world applications. With 62 students from III B.Tech CSE participating, the lecture covered topics such as CNNs, RNNs, transformers, and deep learning model optimization.





The expert speaker provided insights into cutting-edge AI technologies, hands-on implementation strategies, and industry use cases, equipping students with the necessary knowledge to excel in AI-driven fields.

Such expert sessions help students stay ahead in the ever-evolving Al landscape!

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A Seminar on "Development of Sustainable and Bio Degradable Polymers"



A Seminar on "Development of Sustainable and Bio-Degradable Polymers"

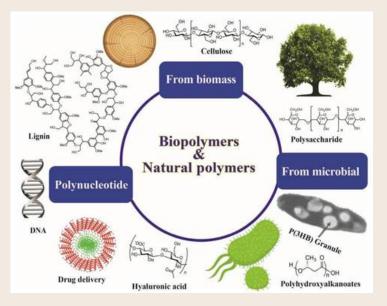
FISeminaron"DevelopmentofSustainableandBiodegradablePolymers"

Tote: 26th September 2024

Participants: I B.Tech CSE (460 Students)

The Department of Basic Sciences & Humanities (BS&H) successfully organized a seminar on "Development of Sustainable and Biodegradable Polymers" on 26th September 2024.

With 460 students from I B.Tech CSE attending, the seminar provided valuable insights into the importance of their biodegradable polymers and applications various fields, across particularly in medicine. Unlike conventional plastic polymers. biodegradable offer polymers environmentally friendly alternatives for medical implants, drug delivery systems. and other healthcare innovations.



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The expert speaker elaborated on cuttingedge research, advancements in polymer science, and their role in promoting sustainability, inspiring students to explore this transformative field.

Such knowledge-sharing initiatives help students stay informed about the latest scientific advancements!

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Internal Hackathon for Smart India Hackathon (SIH) 2024

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Internal Hackathon for Smart India
 Hackathon (SIH) 2024
 Date: 20th Sentember 2024

17 Date: 30th September 2024

Participants: All UG & PG Students of SRET (180 Students)

The Innovation & Incubation Cell (IIC), in association with the Department of Computer Science & Engineering (CSE), successfully organized an Internal Hackathon on 30th September 2024 as a preparatory event for the Smart India Hackathon (SIH) 2024. With 180 students from UG and PG programs participating, the event fostered innovation, problem-solving, and out-ofthe-box thinking. The primary objective of this hackathon was to institutionalize a model for harnessing students' creativity and technical expertise in tackling realworld challenges.

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Participants collaborated in teams to develop innovative solutions to problem statements, demonstrating their skills in coding, design, and system development.



The best-performing teams from this internal hackathon will have the opportunity to compete at the national level in SIH 2024.

Such initiatives encourage students to think beyond the classroom and drive technological innovation!

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Training & Placement Cell

SRET

Student Support Activities conducted by Training & Placement Cell



Tree Plantation by the Principal, SRET

Tree Plantation by the students of SRET

Training & Placement Cell Sree Rama Engineering College Training Programme on Verbal Skills Batch 1: 09th September – 14th September 2024 (III B.Tech, 300 Students) Batch 2: 17th September – 21st September 2024 (II B.Tech, 300 Students)



The Training & Placement Cell of Sree Rama Engineering College (SRET) successfully conducted a Training Programme on Verbal Skills in two phases for II & III B.Tech students.

The primary objective of this programme was to equip students with strong verbal communication skills. enhance their confidence, and prepare them for realworld challenges. The training focused on spoken English, grammar, public speaking, discussions. and interview group preparation, ensuring students are wellprepared for placements and career opportunities.

With 600 students participating across both batches, this initiative played a crucial role in boosting their career prospects and improving their overall communication proficiency.

Such training programs are essential for students to excel in competitive environments and secure better career opportunities!

Expert Lecture





An Expert Lecture on "How To prepare for GATE and ESE Examination"

Department of Computer Science & Engineering

Sree Rama Engineering College

Expert Lecture on "How to Prepare for GATE and ESE Examination"

Tote: 26th October 2024

Participants: III B.Tech CSE (180 Students)

The Department of Computer Science & Engineering (CSE) successfully organized an Expert Lecture on "How to Prepare for GATE and ESE Examination" on 26th October 2024.

With 180 students from III B.Tech CSE attending, the session aimed to enhance students' understanding of the GATE (Graduate Aptitude Test in Engineering) and ESE (Engineering Services Examination). The expert speaker provided valuable insights into: 🔽 Exam pattern and syllabus breakdown

Effective time management strategies

Best resources and study materials

V Tips for cracking technical and aptitude sections

Success stories and preparation roadmaps

The session proved to be highly beneficial in guiding students toward structured preparation, helping them boost their confidence for these competitive exams.

Such initiatives empower students to achieve excellence in their career aspirations!

How to Prepare ESE and GATE Simultaneously



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Training & Placement Cell

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Activities organized by Training & Placement Cell



Training programme on softskills

Placements in Bigworks Tech. Pvt. Ltd.,

Training & Placement Cell Sree Rama Engineering College T Training Program on Soft Skills Date: 30th September – 05th October 2024

Participants: IV B.Tech (250 Students) The Training & Placement Cell of Sree Rama Engineering College (SRET) successfully conducted a Training Program on Soft Skills for IV B.Tech students from 30th September to 5th October 2024.

With 250 students participating, the program aimed to develop essential interpersonal and communication skills that are critical for professional success. Key focus areas included:

Effective communication and public speaking

Teamwork and collaboration

Leadership and problem-solving skills
 Emotional intelligence and workplace
 etiquette

Time management and adaptability The training provided practical insights and interactive sessions to help students enhance their confidence, handle workplace challenges, and improve their employability prospects.

Such training programs play a vital role in shaping well-rounded professionals ready for the corporate world!



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Research Publication Highlight

 Title: A Hybrid Optimal Approach for Efficient Remote Monitoring and Avoidance of Train Collisions

SRET

- Author: Dr. S. Thulasee Krishna
- Journal: International Journal of Safety and Security Engineering
- Volume: 14, Issue: 5
- Publication Date: October 2024
- Pages: 1569-1575

Abstract & Overview:

This research proposes a hybrid optimal approach for enhancing the safety of railway transportation through remote monitoring and collision avoidance systems. The study integrates machine learning (ML), Internet of Things (IoT), and advanced optimization techniques to provide real-time monitoring and predictive analytics to prevent railway accidents.

Key Contributions & Findings:

Hybrid Optimization Model: Combines Al-based prediction models with loT-enabled sensor networks to detect potential train collisions in real time.

Remote Monitoring System: Utilizes cloud-based infrastructure for continuous tracking and analysis of train movements.

Algorithmic Efficiency: Introduces an optimized scheduling mechanism that reduces false alerts and improves response time.

Safety Enhancement: Demonstrates a significant reduction in collision risks and improved operational efficiency in railway systems.

Technological Approach Used:

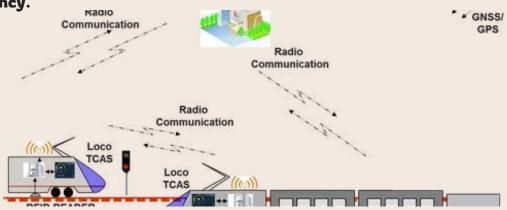
- Machine Learning (ML) for anomaly detection and predictive analysis.
- IoT-based smart sensors for real-time data collection.
- Hybrid optimization algorithms to improve system accuracy.
- Cloud computing for centralized monitoring and rapid response.

Impact & Future Scope:

This research provides a scalable and intelligent solution for railway safety, ensuring:

- S Real-time monitoring for improved decision-making.
- 🖬 Potential integration with national railway systems for large-scale deployment.

security and efficiency.



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