Message from Chairman's Desk

Sri C. Gopal Reddy

Chairman

It is rightly said by our Bharat Ratna, Dr. APJ Abdul Kalam "Dream is not that which you see while sleeping, it is something that does not let you sleep." Yes!!! Indeed, it was my dream, goal and ambition, to establish a Knowledge Center, a Temple of learning, i.e., "CMR Group of Institutions", which can be witnessed today on sprawling area of 70 acres on Medchal Road, Hyderabad. Currently under CMR Group of Institutions, which was established in the year 2002, have 04 Engineering Colleges and 01 Pharmacy College with over 16000 students studying in various streams of Engineering, Management and Pharmacy.The thirst for Excellence & Service has never subdued among us, thus we wish to make deeper inroads in the field of education by venturing into university, named "CMR Global University", which will be seeing the light of day soon.

As it is said, Rome is not built in a day; CMR is also not built in a day. 20 years of dedication, commitment and hard work has resulted in CMR Group of Institutions.One of the strength of CMRGI is its strong Alumni. Till date, CMRGI has successfully produced over 18000 Engineers and 4500 Managers and 1200 Pharmacists. As the Tagline of the Group goes, "Think Placements, Think CMR", we have been the pioneers in training and placing the students in many reputed companies with good packages. I feel proud to see my students' donning prominent roles in many of the reputed companies.

Message from Secretary's Desk

Smt. C. Vasantha Latha
Secretary

As narrated by Swami Vivekananda, **"We want the education by which character is formed, the strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet"**, we at CMR Technical Campus, believe quality education has the power to transform not only individuals but societies and the nation in large.

Our endeavor at CMRTC is to provide the right blend of education and all such necessary components which make students stay in the campus fruitful. The existence of various associations and Clubs, Departmental Associations, Professional Chapters in the campus ensure all-round development which an individual requires. Being in the field of Education for more than a decade, I strongly feel, **Education is the key for women to achieve economic independence**. CMRTC strongly supports women's education and all such measures for their safety are taken care by our well functional Women Empowerment Cell of the institute.

About Director

Dr. A.Raji Reddy
Professor & Director

Dr. A. Raji Reddy, is a **1990 Batch Mechanical Engineer** from Nagpur University. He obtained his **Masters' Degree** from **Regional Engineering College [NIT]** Warangal in the year 1992 and Doctoral degree from **Osmania University in Mechanical Engineering** with Solar Energy as specialization in the **year 2008**.

In his **28 years of service,** he has served in various capacities of administration, research, and academic roles. He even has two years of **Industrial experiences in M/s. Ashok LeyLand Ltd., (Ductron Casting Unit),** Uppal, Hyderabad.

Currently he has **10 Patents filed** on his name and is Investigator of **03 Research Projects** to the tune of **Rs. 90 Lakhs Grant** from Govt. of India. He has successfully guided **10 M.Tech. Projects** and is currently guiding **03 Research Scholars** for their Ph.D. His research areas include solar thermal applications, Biomass conversion technologies, solar cooking and Heat transfer. There are over **40 Research Articles** to his credit in peer reviewed & reputed Journals & Conferences. He is reviewer of few Elsevier published Journals.

Recognitions and awards have been part of his career, which highlights the dedication and commitment he has laid down in fulfilling the responsibilities assigned to him. He is entitled as life member of Indian Society for Technical Education, Solar Energy Society of India and International Solar Energy Society of India. It was indeed a venue to receive **an award from Deputy Chief Minister of Telangana** for effective leadership qualities in 2018. Received **Acharya Ratna Award** from Indian Servers in the year 2019.

About Dean Academics

Dr. D.T.V. Dharamajee Rao
Professor, Mentor of Department CSE[AI&ML], Dean Academics

Dr. D.T.V. Dharamajee Rao is currently working as Professor in the Department of CSM and Dean (Academics) at CMR Technical Campus, Kandlakoya (V), Medchal Road, Hyderabad-501401. He received B.Tech. degree in Computer Science and Engineering in 1993 and M.Tech. degree in Computer Science and Technology in 2001 from Andhra University Visakhapatnam and Ph.D. degree in Computer Science and Engineering on the topic "Computational Acceleration of Deep Neural Network Training Algorithm for Data Classification" in 2020 from JNT University, Kakinada, Andhra Pradesh.

He has over **26 years of teaching experience**. During his teaching career, he taught various subjects like AI&ML, Data Mining, Computer Networks, Database Management Systems, Operating Systems, C, C++, and JAVA Programming, etc.

He got published more than **24 papers in National, International Conferences and Journals.** His current Research interests include Artificial Intelligence, Machine Learning, Deep Learning, Data Mining and High Performance Computing (OpenMP, MPI, PThreads, CBLAS, CUBLAS, and CUDA). He guided 38 B.Tech. Students Project Batches and 20 M.Tech. Students. He played an active role in organizing a couple of FDPs, seminars and conferences in the field of Computer Science and Engineering, convened various technical and cultural fests and annual day celebrations successfully. Further, he has actively monitored the entire campus ICT Networking process for several years in the previous organization.

He was involved and played a key role in four cycles of NBA, two cycles of NAAC accreditation processes and also in two cycles UGC Autonomous status during his previous service. He is a paper setter for various private Engineering colleges. He is Life Member of various Professional bodies like **ISTE (LM 55943), CSI (00174203), IE (I) (M-145250-3).**

About Head of the Department

Dr. S Rao Chintalapudi

Professor & HOD CSE [AI&ML]

Dr. S Rao Chintalapudi currently working as a Professor and Heading the department of CSE(Artificial Intelligence & Machine Learning). He received B.Tech degree from JNTU Hyderabad,M.Tech degree from JNTU Kakinada. He did his Ph.D – Full Time in Data Mining from JNTUK Kakinada under the guidance of Dr. M. H. M Krishna Prasad.His research areas are Data Mining, Social Network Analysis, Machine Learning, Deep Learning, Big Data Analytics and High Performance Computing. Presently, he is guiding one Ph.D scholar in the area of machine learning in e-commerce under JNTUK Kakinada.

He is having over **12 Years of teaching experience**. He published **17 publications** in international indexed journals, Conferences and Book chapters. He is a member of Board of Studies in JNTUK Kakinada, BVC Engineering College Odalarevu, Ideal institute of Arts and Sciences Kakinada.

He received a grant of **32 lakhs** from the Department of Science & Technology (DST) as a Principal Investigator. He applied for **2 patents** in the area of machine learning.Previously, he worked as a Head of AI and Deep Learning Research Group under leadingindia.ai project. He acted as a resource person for various workshops, FDPs and STTPs in institutes like MIT Manipal, CET Bhubaneshwar, MIT Pune. He organized several guest lectures, workshops, FDPs in the areas like Big Data Analytics, High Performance Computing, Artificial Intelligence and Deep Learning.

His teams selected for Smart India Hackathon Grand Finale three consecutive yearsi.e, 2018,2019,2020. He is a reviewer for several prominent journals like IEEE Transactions on Knowledge and Data Engineering, Springer-International Journal of Information Technology, Taylor & Francis- Journal of Experimental &Theoretical Artificial Intelligence and so on. He is a member of several professional bodies like IEEE, ACM, CSI, IAENG and so on. He was completed several online certification courses provided by Coursera, NPTEL such as Mining Massive Datasets, Social Networks, Introduction to Machine Learning, Deep Learning, Fundamentals of Deep Learning for Computer Vision and so on. He received Topper certificate for the course **"Introduction to Machine Learning"** offered by NPTEL. He received Elite Academician award from AICTE, DST and Texas Instruments. He qualified in several competitive exams like GATE, APSET, FET. He received merit award in B.Tech for his Academic Excellence.

Department of CSE [AI&ML]
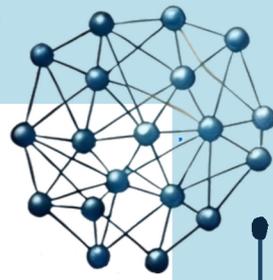
Vision of Department:

To excel in Artificial Intelligence and Machine Learning education and research to develop ethical AI solutions for societal and industrial advancement.

Mission of Department:

- To provide a state-of-the-art learning environment to develop AI&ML expertise for solving real-world problems.
- To promote industry-oriented research and innovation while upholding ethical and professional values.
- To cultivate lifelong learning, teamwork and leadership skills for global technological challenges.

Program Educational Objectives (PEOs):

PEO 1 - Graduates will have the ability to solve real-world problems using Artificial Intelligence and Machine Learning.

**PEO 2** - Graduates will have the ability to pursue research and higher education in AI domain.

PEO 3 - Graduates will become ethically driven leaders and entrepreneurs in the field of Artificial Intelligence.

Program Specific Outcomes (PSOs):

PSO 1 - Apply the principles and conduct investigations in Artificial Intelligence and Machine Learning for sustainable development. .

PSO 2 - Design and develop intelligent solutions using AI technologies.

PSO 3 - Adopt lifelong learning and continuous improvement in ethical and responsible AI solutions.
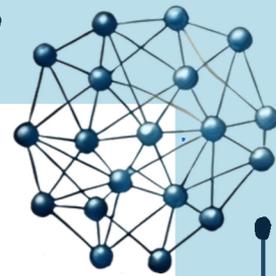
Program Outcomes (POs)

PO 1: Engineering Knowledge: Apply knowledge of mathematics, natural science computing, engineering fundamentals and an engineering specialization to develop to the solution of complex engineering problems.

PO 2: Problem Analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions with consideration for sustainable development.

PO 3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required.

PO 4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions.

PO 5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems.

PO 6: The Engineer and The Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws.

PO 9: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO 10: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning Differences.

PO 11: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.
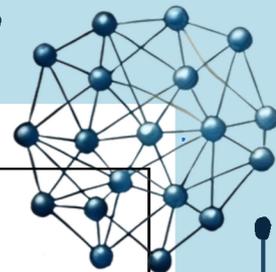
PO 12: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change.

# Faculty Achievements
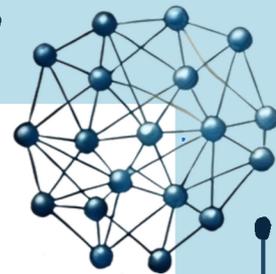
List of Journal Papers Published :

S.No	Author Name	Title of the Page	DOI	ISSN / ISBN	Journal Name, Publisher & Indexing	Month / Year
1	Dr.Mahesh Kotha	Bigdata Framework for Effective Performance based Deep Reinforcement Learning in Cloud Environments.	10.17148/ IARSET.2023. 10106	2394-1588	International Advanced Research Journal in Science, Engineering and Technology & UGC Care	Jan 2023
2	Swaroopa Rani	Wireless Communication Based Heart Rate Detection Using Wearable Device.	10.47750/PNR. 2023.14.02.394	0976-9234	Journal of Pharmaceutical Negative Results	Feb 2023
3	Swaroopa rani B	Artificial Intelligence for Media Ecological Integration and Knowledge Management.	10.3390/ systems110502 22	2079-8954	Systems,MDPI & Peer Review	Apr 2023
4	Dr. G. Vinoda Reddy	Human Action Recognition Using Difference of Gaussian and Difference of Wavelet.	10.26599/bdma .2022.9020040	2096-0654	Big Data Mining And Analytics & Scopus	Apr 2023
5	Dr.Mahesh Kotha	Frameworks for Industrial Internet Of Things by Using Open Source Machine learning techniques.	10.17148/iarjse t.2023.10614	2394-1588	International Advanced Research Journal in Science , Engineering and Technology & UGC Care	Jun 2023

6	Dr.Mahesh kotha	Integration Of IOT and Cloud Computing to Manage The Patient E-Prescription.	10.17148/ IJIREEICE.202 3. 11601	2321-5526	International Journal Of Innovative Research Electrical, Electronics , Instrumentatio n and Control Engineering & UGC Care	Jun 2023
7	Dr. Mahesh kotha	Optimization of Irrigation and Herbicides Using Artificial Intelligence in Agriculture	11.3/ijisae.503 –518	2147-6799	International Journal of Intelligent Systems and Applications in Engineering & Scopus	Jun 2023

List of conference Papers Published

| S.No	Author	Title of the Paper	DOI	ISSN/ISBN	Conference Name & Publisher	Month/Year
1	Dr.Mahesh Kotha	Big data analytics and machine learning techniques	10.1109/ICCCI 56745.2023.10 128623	979-8-3503-4822-4	International Conference on Computer Communication and Informatics (ICCCI) & IEEE	Jan 2023
2	Vankudothu Malsoru	An Efficient SFLA and CUCKOO Search Hybridization	10.1109/ICICA CS57338.2023. 10100133	979-8-3503-9847-2	IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS)	Feb 2023
3	Swaroopa rani B	Political Optimizer based Automated machine Learning	10.1007/978-981-19-9228-5	978-981-19-9228-5	Proceedings of Third International Conference on Advances in Computer Engineering and Communication Systems & Springer	Mar 2023
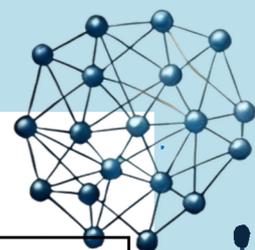
List of Books / Book Chapters Published :

S.No	Name of the Authors	Book Title/ Book Chapter Title	Publication House & ISBN No.	Volume No. Issue No.	Page no	Month & Year of Publication
1	Dr. G Vinoda Reddy	Artificial Intelligence and Blockchain in Digital Forensics	River Publisher & 9788770226882	vol.no:1 issue:1	55-68	Feb 2023
2	Dr. G Vinoda Reddy	Big Data Analytics	Scientific International Publishing House & 9789357570688	vol.no:1 issue:1	275	Mar 2023
3	Dr. G.Vinoda Reddy, Dr. Kotha Mahesh	Fundamentals Of Internet Of Things And Its Applications	Scientific International Publishing House & 9789357571883	Vol:1	216	Jun 2023

# List of Faculty Support in Student Innovative Projects :

S.No	Name of the faculty	Name of the Event	Date of Event	Place of Event
1	Dr.S Rao Chintalapudi	MEGATHON	2023	IIT, Hyderabad
2	Dr. G. Vinod Reddy	Model United Nations 2023 NNRG-MUN	15-03-2023, 16-03-2023	Nalla Narsimha Reddy Education Society's Group of Institutions-Integrated Campus
3	Dr. K. Mahesh	TechTrek-A National Level Industry Driven Hackathon	20-01-2023	Siddartha Academy of Higher Education Vijayawada
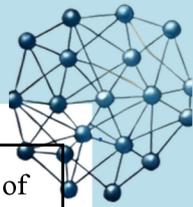
4	G.Parvathi Devi	Hack Revolution	7/1/2023	MuffaKham Jah College of Engineering & Technology
5	Dr.V.Malsoru	Hack Revolution	7/1/2023	MuffaKham Jah College of Engineering & Technology
6	Dr.Md.Shareef	TechTrek-A National Level Industry Driven Hackathon	20-01-2023	Siddartha Academy of Higher Education, Vijayawada
7	M.Ravindran	TechTrek-A National Level Industry Driven Hackathon	20-01-2023	Siddartha Academy of Higher Education , Vijayawada

List of Faculty Internship / Training / Collaboration :

S.No	Name of the Faculty	Name of the Internship/ Training / Collaboration	Name of the Internship/ Training / Collaboration	Duration	Outcomes of the Internship/ Training / Collaboration
1	Swaroopa Rani	Training on Essentials of Cloud Computing	Infosys	5 Days	1 Student completed certification course in Infosys
2	Swaroopa Rani	Training on Introduction to Machine Learning	Infosys	5 Days	1 Student completed certification course in Infosys
3	Dr. Md. Shareef	Training on Fundamentals of Information Security	Infosys	5 Days	2 Students completed certification course in Infosys
4	M. Ravindran	Training on Python Data Structures and Algorithms	Infosys	5 Days	2 Students completed certification course in Infosys
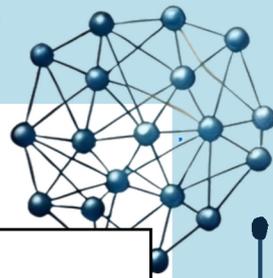
List of Faculty Development Programs Organized :

S.No	Name of the Program	Date of the Program	Duration of the Program	Name of the Speaker & Designation and Organization	No. of People Attended
1	One Week FDP on "SCILAB (Science/Engineering)" in association with IIT Bombay Spoken Tutorials	29nd May – 06th June 2023	10 Days	Prof Kannan M Moudgalya, IIT Bombay	100
2	One Week FDP on "Python (Computer Applications)" in association with IIT Bombay Spoken Tutorials	12th June – 17th June 2023	1 Week	Thirumalesh H S, IIT Bombay	100
3	One Week FDP on "Arduino (Robotics)" in association with IIT Bombay Spoken Tutorials	05th June – 10th June 2023	5 Days	Nirmala Venkat, IIT Bombay	100

Consultancy Work Details :

S.No	PI Name	Co-PI Name	Project Title	Funding Agency	Duration	Amount (In Rupees)
1	Dr. V. Malsoru	B. Swaroopa Rani	Medical Billing System	Vsion Tech Park Pvt. Ltd.	5 Months	1,45,800

List of faculty members received seed money or internal research grant from the institution :

| S.NO	Faculty Name	Project title/ support for activity	Duration	Amount (Lakhs)	Amount Utilised	Outcome of the project
1	B Swaroopa Rani	Political Optimizer based Automated machine Learning for Skin Lesion Data	3 MONTHS	0.3	0.3	One paper Published in Third International Conference on Advances in Computer Engineering and Communi cation System

Student Achievements
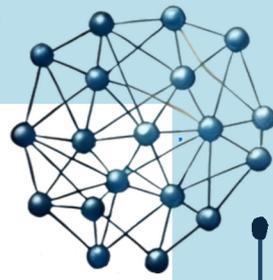
Certification :

- **88** students successfully completed the **NPTEL Onine Certification** Course on Distributed Systems

- **31** students successfully completed the **Google Cloud Career Readiness Program** (ACE Track) 2022–2023

- **26** students successfully completed the **IIT Bombay Spoken Tutorial Certification Program**, enhancing their proficiency in various open-source software technologies

- **37** students successfully completed certification programs through **EduSkills**, gaining valuable industry-oriented skills and practical exposure

- **28** students earned certifications through **Infosys Springboard**, strengthening their tecical expertise and career readiness
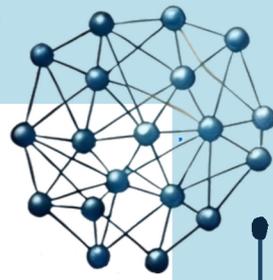
Notable Student Achievements

- Completed the Airforce Attachment Camp, Bidar,Karnataka 2023.

- Completed the Ek Bharat Shreshtha Bharat – Special National Integration Camp, Srinagar 2023 and represented Andhra Pradesh and Telangana Directorate in National Integration Awareness Presentation Competition and received silver medal.

Events Organized

- Guest Lecture on Drone Technology & Innovation

- Techgenix 2K23 – Paper Presentation

- National Youth Day Celebrations
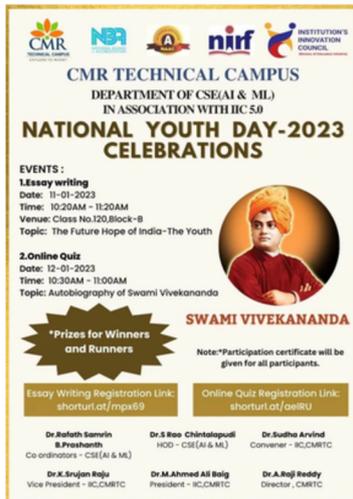
- Innovation and Entrepreneurship Outreach School Program

- Incubation Centre Visit at IIIT Hyderabad

- One Day WorkShop on React JS

- One day workshop on "Machine Learning with Python" in association with AI Club on
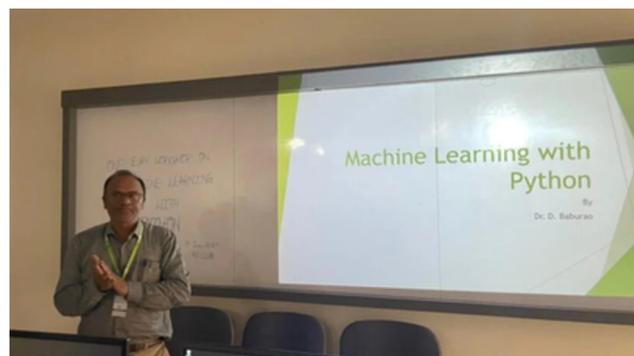
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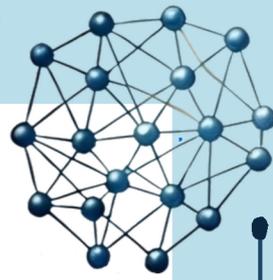
Greetings to all! ,

The department is cheerful to present the fourth edition of the department of CSE (AI&ML) newsletter. It motivates, enlightens and enables the Student & Staff community to focus on their goals and achieve more. This issue explores the hidden talents, commitment, involvement and achievements of the Department Students and Staff Community in their Extra and Co-Curricular activities to the world.

The newsletter of the Department of CSE (AI&ML) covers the information about the Faculty Development Program, faculty achievement, student activities and events.

We look forward to your continued contribution and participation in this Newsletter. Your good ideas, comments or valuable suggestions about this Newsletter are welcome. This may lead to enhance the quality and professionalism of this newsletter in forth coming editions. Thank you for choosing and spending time with this newsletter. We hope, this Newsletter encourage you to conquer more in your field.

Sd/-
Editorial

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