



Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE DEEMED TO BE UNIVERSITY

University with Graded Autonomy Status

(An ISO 21001 : 2018 Certified Institution)

Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.



FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY



TECH

VOICE

VISION

- To create technology proficient and ethically enriched IT professionals through holistic and state of art curriculum.

MISSION

- To update the IT skills of students and faculty adapting recent technology developments in the curriculum as recommended by academicians, industry experts and alumni.
- To establish equipped laboratories to present excellent education in the conventional and modern vicinity of Information Technology.
- To create responsible IT professionals with ethical values and social responsibilities. To stimulate entrepreneurial mind-set among the students and enhance competency through regular industrial exposure.
- To utilize the family of alma mater through strong interaction and networking making them instrumental for development of academic and industrial linkage.

PROGRAM EDUCATIONAL OBJECTIVES[PEO'S]

Graduates will be able to:

- PEO 1: Excel by taking up key roles in IT and related industries, Government organizations and academia through strong leadership skills.
- PEO 2: Undertake higher studies and/or research in the field of Information Technology, management or other related domains.
- PEO 3: Develop innovative products and implement novel solutions to real world problems in IT and related interdisciplinary areas.
- PEO 4: Understand the societal impact of IT services and use their skills in an ethical, responsible and professional manner.
- PEO 5: Be updated with continuous learning and have a global perspective, so as to remain current in their profession while meeting the needs of the industry and nation at large.

PROGRAM SPECIFIC OUTCOMES[PSO'S]

- Ability to augment the understanding of broad themes of STEM using Information Technology.
- Ability to analyse, design, develop and implement sustained IT solutions as a team to improve the productivity of the organization with social and economic constraints.
- Ability to apply ethical decision making, use IT industry recognized best practices and standards in the development, implementation and management of IT system integrating multiple domains.
- Ability to understand and update current trends in web technology, distributed infrastructure, data management, software engineering, system engineering and secured applications.

HOD'S DESK



It gives me great pleasure to give my best wishes to "TECH VOICE", a newsletter from Department of Information Technology of Dr.M.G.R Educational and Research Institute. It is a technical platform to bring out the hidden talents of students and faculty. The students and faculties of

department are always proactive in taking initiatives in technical, cultural and social events. I hope that this newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best. Wishing you all the best. I take this opportunity to congratulate the students editorial team and our staff editors Dr.Dahlia Sam and Mr A.Kameshwaran for their great effort to make this news letter as a reality. Also I invite the readers of "TECH VOICE" for their contribution and suggestions for the forthcoming issues. I wish good luck to the entire team of editor and look forward for your kind patronage to our newsletter.

Dr.N.Kanya

PUBLICATIONS

Journals :

- Uma Maheswari, B; **Dahlia Sam**; Nitin Mittal; Abhishek Sharma; Sandeep Kaur; Askar, S S & Mohamed Abouhawwash. (2024). Explainable deep-neural-network supported scheme for tuberculosis detection from chest radiographs. BMC Medical Imaging. 24 (32), p.1-19.
- **R. Ramesh, N; Jeysankar**; Thomas Abraham Walker & Kaviya. (2023). Realtime Big Data Analytics in Dynamic Systems: Characteristics, Challenges, Life Cycle and Engineering Technologies, Journal of the Asiatic Society of Mumbai, 2023/XCVI/31, 2023, ISSN - 0972-0766.

Conferences :

- Selvameen, R; **Dahlia Sam**; Victo Sudha George, G & Cyrilraj, V. Lemon Tree Leaf Disease Classification and Identification Accuracy Precision Analysis for R-CNN Method. (2024). Proceedings of The 7th International Conference on Intelligent Computing (IConIC), Chennai, India, 22nd & 23rd March, 2024.
- **R. Ramesh**. Artificial Intelligence Stimulated Transmission Scheduled in Intellectual Vehicular Communication and Networks. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Viswapriya, Eswar.P, Challa Uma Maheshwara Reddy**. Skin Cancer Detection using Image Processing. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Dinesh Arokia Raj; Kanya, N & Dahlia Sam**. Automatic Content Checker using Unstructured Text Analysis. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Dahlia Sam; Thomas Abragam Walker, R & Infanta Jose Mary, P**. Machine Learning Based Bipolar Syndrome Detection System in a Multimodal Way. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Dahlia Sam**. Strategic Traffic Analysis Safeguarding Networks in Real Time. (2024). Proceedings of The 7th International Conference on Intelligent Computing (IConIC), Chennai, India, 22nd & 23rd March, 2024.
- **Joshi Vinay Kumar & Dahlia Sam**. A comprehensive Review of Intelligent Recommendation System. (2024). Proceedings of The 7th International Conference on Intelligent Computing (IConIC), Chennai, India, 22nd & 23rd March, 2024.
- **Vijayarasu, Selvi, R**. Smart Strategy Cloud Mechanism for Network Information Security of IoT Entities. (2024). 14th International Conference on Science & Innovative Engineering - 2024, Chennai, India, 27th & 28th April, 2024.

PUBLICATIONS

- **Santhanalakshmi, S.** Smart Delivery Robot. (2024). Proceedings of The 7th International Conference on Intelligent Computing (IConIC), Chennai, India, 22nd & 23rd March, 2024.
- **Santhanalakshmi, S.** Smart Delivery Robot. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Sharmila, C.** Forensic Face Sketch Construction and Recognition. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Sharmila, C.** Resume Builder with Job Automation. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Selvi, R.** Study of Deep Learning Based Object Detection Using Different Leaves Diseases. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Selvi, R.** Verifying and Accessing Student Project Application. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Ramesh, R.** Academic Project Tracking System using Web Based Application. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Ramesh, R.** Data Poison Detection Schemes for Distributed Machine Learning. (2024). Proceedings of The 9th National Conference on SmartGov : Shaping the Future of E-Governance (ICON 24), Chennai, India, 20th & 21st of March, 2024.
- **Madhura, D.** Privacy Preserving Data Encryption Strategy for Big Data in Mobile Cloud Computing. (2024). Proceedings of The 7th International Conference on Intelligent Computing (IConIC), Chennai, India, 22nd & 23rd March, 2024.

ALUMNI CORNER



Vishnu Prakash K

Systems Analyst at Hexware
Technologies McLean

Batch : 2003-2007

My experience at Dr.MGR Educational and Research Institute have been full of learnings which was truly the foundation of my career and my personality today. Being a student of MGR was an outstanding experience in my four years of engineering. With the big dream of becoming an IT professional and getting placed in a reputed organization I have entered in my first year which has really come true only because of my teachers at MGR and because of the fact that the university had offered me a great place not only for learning but gave me a wide exposure on research and development. It was a phenomenal four years where we had lot of awareness programs, guest lectures, webinar, alumni interactions and career development programs. I truly miss all those days. I thank all my staff members who had moulded me and got me to this level today. I am always grateful to this great institution.

Student Article



QUANTUM COMPUTING :

Quantum computing is a multidisciplinary field comprising aspects of computer science, physics, and mathematics that utilizes quantum mechanics to solve complex problems faster than on classical computers. The field of quantum computing includes hardware research and application development. Quantum computers are able to solve certain types of problems faster than classical computers by taking advantage of quantum mechanical effects, such as superposition and quantum interference. Some applications where quantum computers can provide such a speed boost include machine learning (ML), optimization, and simulation of physical systems.

K. John Paul Mathews
B.Tech III Yr

GREEN COMPUTING :

Green computing (also known as green IT or sustainable IT) is the design, manufacture, use and disposal of computers, chips, other technology components and peripherals in a way that limits the harmful impact on the environment, which include reducing carbon emissions and energy consumption by manufacturers, data centers and end-users. Green computing also encompasses choosing sustainably sourced raw materials, reducing electronic waste and promoting sustainability through the use of renewable resources.

Dharania.T
B.Tech - III Yr



DATA ENCRYPTION:

Data encryption translates data into another form, or code, so that only people with access to a secret key (formally called a decryption key) or password can read it. Encrypted data is commonly referred to as ciphertext, while unencrypted data is called plaintext. Currently, encryption is one of the most popular and effective data security methods used by organizations. Two main types of data encryption exist – asymmetric encryption, also known as public-key encryption, and symmetric encryption.

Uvanesh.R
B.Tech - III Yr

DEPARTMENT MEET

IV QUARTERLY DEPARTMENTAL IQAC MEETINGS

Minutes of the Meeting

AGENDA:

- Improving the number and quality of Publications
- Increasing Funded & Interdisciplinary Research
- Meeting Sustainable Development Goals through Interdisciplinary Quality Research



Department Research Forum Meeting Minutes

Research Forum Name: SRIDHAR VEMBU RESEARCH FORUM

AGENDA:

- Welcome address by Dr. Dahlia Sam
- Introduction about Speaker by Dr. Selvi Ram
- Presentation on "How to become a successful researcher?", by Dr. Chandran, Department of CSE & Mechanical, Dr. M.G.R. Educational and Research Institute
- Open Forum Discussion to clarify the Member Queries.



EVENTS CORNER

Event Title: HARDWARE BOOT CAMP "Toolbox Tune-Up"

Date: 17.04.2024 to 22.04.2024

Venue: Database and Multimedia Lab

Speaker: Mr. S. Paramasivam, System Administrator, Department of CSE, Dr. MGR Educational and Research Institute, Chennai. & Mr. S. Mohanamanoj, System Administrator, Department of IT, Dr. MGR Educational and Research Institute, Chennai.

Event Title: Certificate Training Program II

Date: 06.05.2024 to 10.05.2024

Venue: SunJava Lab

Speakers : Bezaleel .S , Founder & Robotics Engineer, ENLIGHT Wisdom., Prithiviraj, Red Hat Certified Instructor (RHCI), Vectra Technosoft Pvt. Ltd. (Advantage Pro - Red Hat Academy), VALLIKANNUNAGAPPAN, Trainer in Corporate Sector, NLTVC Education SdnBhd

Event Title: Faculty Development Programme on "Intellectual Property Rights and Patents"

Date: 20.05.2024 to 24.05.2024

Venue: Online

Speakers : Dr. T. PAVAN KUMAR, Senior Scientist, CSIR-IMMT, Bhubaneswar, Dr. Kapil Arya , Principal Scientist, CSIR-IPU New, Delhi , Dr. Yogesh Dhoble , Sr Principal Scientist, CSIR-IPU, New Delhi , Dr. Lipika Pattnaik , Sr Principal Scientist, CSIR-IPU, New Delhi

Event Title: Hands-on workshop on "Hustle & Design: UI/UX Edition"

Date: 27.05.2024

Venue: Database & Multimedia Lab

Speakers : Mr. Jayasurya Gnanavel , Founder & CEO , Cybernaut Edu-Tech LLP

Event Title: Technical Talk on "Machine Learning Applications in Industry"

Date: 29.05.2024

Venue: University Auditorium

Speakers : Mr. Pradeep. VM, Chief Technology Officer, Gleam Cloud Security Solutions LLP.

Event Title: International seminar on "Data Science and management of Data"

Date: 12.06.2024

Venue: University Auditorium

Speakers : Dr. Sundresan Perumal , Associate Professor, Director, Entrepreneurship Cell (PKUU), Universiti Sains Islam Malaysia



Student Achievement



On July 12, 2024, Our Dr.MGR Educational and Research Institute university participated in "A Dialogue with Yuva," a drug awareness event held at Women's Christian College, Chennai. The event aimed to raise awareness and promote discussion among students about drug abuse



The members of Yuva MGR Chapter participated in the Yuva Olympics held on 7th July at SDAT, Nehru Park, securing multiple prizes and winning the overall trophy in the men's category.



Our Students Won the “BEST PROJECT AWARD” For AI project Facial Expression Recognition Using Deep Learning Techniques

STAR OF Q2

Faculty Star



Dr.M.Kiruthiga Devi
Associate Professor

Student Stars



Hemachandiran P D
B.Tech IV - A



Sharvathan S
B.Tech IV - C



Balaji S
B.Tech IV - A

EDITORIAL BOARD

STAFF COORDINATORS

Dr.Dahlia Sam
Professor

Mr. A.Kameshwaran
Assistant Professor

STUDENT COORDINATORS

Dharania.T
B.Tech II Year

John Paul Mathew
B.Tech II Year



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https://www.youtube.com/channel/UVmpKsHxQM P91vO_o1Cb_oSg

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