# 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.

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NBA NATIONAL BOARD OF ACCREDITATION

# 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

- John Livingston, S; Deepa Kanmani, S; Shamila Ebenezer, A; Dahlia Sam; Joshi, A. (2023). An ensembled method for air quality monitoring and control using machine learning. Measurement: Sensors. 30 (Special Issue), p. 1-6. https://doi.org/10.1016/j.measen.2023.100914.

- Arun Kumar; Aziz Nanthaamornphong; Selvi, R; Venkatesh, J; Mohammed, H; Alsharif; Peerapong Uthansakul; Monthippa Uthansakul. (2023).Evaluation of 5G techniques affecting the deployment of smart hospital infrastructure: Understanding 5G, AI and IoT role in smart hospital. Alexandria Engineering Journal. 82, p. 335-354. https://doi.org/10.1016/j.aej.2023.10.065.

- Mr. N. Jeysankar, Mr. R. Ramesh, Mr. Thomas Abragam Walker, Ms. Kaviya. (2023). Real Time Big Data Analytics in Dynamic Systems: Characteristics, Challenges, Life Cycle and Emerging Technologies. Journal of the Asiatic Society of Mumbai. 2023/XCVI/31,2023

- Hariharan, S.D., Sridharan, D., Kalaiyarasi, R., Mohanaprakash, T.A., Tamilselvi, C. & Dahlia Sam. Real-time Monitoring and Early Detection of Diabetes with Bioactive and Biological Impedance Sensors using Hybrid Machine Learning Algorithm. (2023). 4th International Conference for Emerging Technology (INCET), Belgaum, India, 2023, pp. 1-8, doi: 10.1109/INCET57972.2023.10170610.

- Dahlia Sam; M. Ganesan; S. Ilavarasan; T. John Victor. Hiring and Recruitment Process Using Machine Learning. (2023). 2023 International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering (ICECONF), Chennai, India. doi: https://doi.org/10.1109/ICECONF57129.2023.10084133.

- A. Joshi, Dahlia Sam, S. Sendilvelan, K. Jayanthi, N. Kanya, N. Ethiraj. (2023). Manufacturing Data Performance Prediction and Optimization, Computational Intelligence based Optimization of Manufacturing Process for Sustainable Materials, ISBN: 9781003257714

- Dahlia Sam., Nithya, K., Deepa Kanmani, S., Adlin Sheeba., Shamila Ebenezer, A., Uma Maheswari, B. & Jennifer Daffodils Amesh. (2023). Survey of risks and threats in online learning applications, Secure Data Management for Online Learning Applications, ISBN: 978-1-032-20642-4 (hbk) ISBN: 978-1-032-20643-1 (pbk) ISBN: 978-1-003-26453-8 (ebk).

- Sujatha Kesavan; Kalaivani Anbarasan; Tamilselvi Chandrasekharan; Dahlia Sam; Nalinashini Ganesamoorthi; Kamatchi Chandrasekar; Krishna Kumar Ramaraj; Nallamilli Pushpa Ganga Bhavani; Srividhya Veerabathran; Rengammal Sankari, B; Gujjula Jhansi. (2023). Enhanced Machine Learning Techniques for Pest Control and Leaf Disease Identification. Future Farming: Advancing Agriculture with Artificial Intelligence. p 1-22, ISBN (Online): 978-981-5124-72-9; ISBN (Print): 978-981-5124-73-6; ISBN (Paperback): 978-981-5124-74-3.
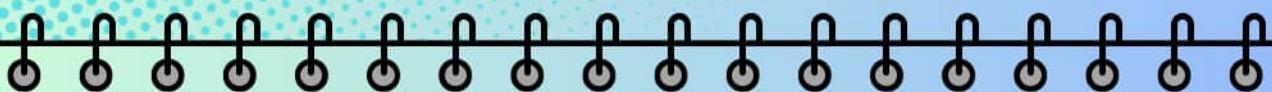
# *Events Corner*

**Event Title: Faculty Development Programme on "Deep Dive Into Data Science"**
Date: 09.10.2023 to 13.10.2023
Venue: Online mode
Speaker: Dr. A. G. Vijayanarayanan, Assistant Professor, PG and Research Department of Commerce, DG Vaishnav College.and Dr. S. Dhanasekar,Assistant Professor,School of Advanced Sciences, Vellore Institute of Technology-Chennai

**Event Title: Technology Talk on " The Ideation of Project to Startup"**
Date: 18.011.2023
Venue: University Auditorium
Speaker: Dr.C.R.Rene Robin,Professor and Dean-Innovation, Sairam Group of Institutions.

**Event Title: Alumni Interation series XII on " In pursuit of Corporate Lifestyle"**
Date: 25.11.2023
Venue: Online mode
Speaker: Mr .M. Deepak,Batch 2008-2012. Administrative officer,Solvosoft.

**Event Title: Inter Disciplinary Lecture on "Food is the Best Medicine"**
Date: 29.11.2023
Venue: University Auditorium
Speaker:Dr. Gomathi. K, Dean-ASC Professor and Deputy Head Dept of Biotechnology

**Event Title: Guest Lecture on "Stone to Diamond"**
Date: 29.11.2023 & 30.11.2023
Venue: University Auditorium
Speaker: Mr . Ajay Rathnam, Cine Actor, Motivational Speaker.

**Event Title: Alumni Interation series XIII on " Tech update to meet Industry Needs"**
Date: 15.12.2023
Venue: Online mode
Speaker: Mr .Imran Shariff. A, Batch 2013-2017,Founder- INFIS,Chennai.

**Event Title: International Webinar on "Data Science- The New Future"**
Date: 22-12-2023
Venue: Online mode
Speaker: Mr . Vishnu Ram Venkataraman, Vice President, Engineering at Credit Karma,San Francisco, California, United States.

# ALUMNI CORNER

## Nanda Kishore KV

**Assistant Consultant at
Tata Consultancy Services**
Batch : 2002-2006

Very happy and grateful to share my four years journey at MGR.
Four years of engineering at MGR University have been full of
learnings which was truly the foundation of my career. I came to
this University with a dream of becoming an IT professional.
Every semester has been a step towards achieving my dream.
We the students had lot of opportunities to explore our talents
through numerous department activities. This includes
organizing various events within the campus or representing our
University at inter college competitions. Our Head of the
department and all the department faculty were always friendly
and encouraging. MGR University has played a major role in
shaping me into who I am today. I will always cherish those
moments in my life. I am so glad and proud to be an alumni of
this great institute.

# PLACEMENTS

**MR. KASIREDDI RAMESH**
REG NO: 201121101036

Got Selected in "OJ COMMERCE"
Role: Trainee-Operations with Stipend
Duration: 3 months

**MR.PRAVEEN KUMAR J**
REG NO: 201121101052

Got Selected in "Sutherland"
Role: Customer Support Association

**MR. CHALLA UMA MAHESWARA REDDY**
REG NO: 201121101016

Got Selected in "Q Spiders"
Position: Software testing/Software Development

**MR.V. GUNA ATHITHAN**
REG NO: 201121101026

Got Selected in "Sutherland"
Role: Customer Support Association

**MR.ABHISHEK KUMAR**
REG NO: 201121101002

Got Selected in "Sutherland"
Role: Customer Support Association

**MR.MANNURU MAHESH**
REG NO: 20112110104

Got Selected in "Q Spiders"
Position: Software testing/Software Development

**MR. MADHAN.K**
REG NO: 201121101040

Got Selected in "Q Spiders"
Position: Software testing/Software Development

**MR.ABDUL QUAVI**
REG NO: 201121101610

Got Selected in " technook"
Position: Academic Counsellor

**MS.VARSHINI**
REG NO: 201121101081

Got Selected in "Sutherland"
Role: Customer Support Association

**MS. SWATI KUMARI**
REG NO: 201121101077

Got Selected in "Sutherland"
Role: Customer Support Association

# AWARDS & ACHEIVEMENTS

>>> ## Faculty Acheivements:

**PATENT:**

Applicants : K Sujatha, V. Srividhya, A Kalaivani, M. Sujitha, Subbiah Swaminathan, C Tamilselvi, A. Ganesan, S. Nivetha, Kamatchi C

Title of Design: IOT Based Wearable Health Monitoring Device

Indian Patent Application No.: 377210-001

Date of Registration: 11/11/2023

>>> ## Student Acheivements:

- **Himanth.B of III Yr** won 1st prize and a cash award of Rs. 1000 in BIS Quiz conducted by Mayiladudurai Book Fair
- **Sharvathan Of II  year** Secured 2nd place in Mono Acting held at Chengalpattu Medical College.

# • • • • • • • STUDENT CORNER • • • • • • •

**Robotic Process Automation (RPA):**

Robotic Process Automation (RPA) has emerged as a game-changer in the realm of business operations, offering a streamlined approach to repetitive and rule-based tasks. RPA technology employs software robots or "bots" to automate mundane tasks, allowing employees to focus on more complex and strategic activities.One of the key benefits of RPA is its ability to improve operational efficiency by reducing human errors and processing time. Tasks such as data entry, invoice processing, and report generation can be automated with precision and accuracy, leading to faster turnaround times and cost savings for organizations.

By : Pranava Kumar.I

B.Tech -IT- II Year

**Edge Analytics:**

Edge Analytics is a cutting-edge technology that revolutionizes how data is processed and analyzed. By bringing data processing closer to the point of data generation, Edge Analytics reduces latency and enables real-time insights. This approach is particularly valuable in applications such as autonomous vehicles, industrial automation, and IoT systems, where immediate decision-making is crucial for operational efficiency and safety. Moreover, Edge Analytics enhances security and privacy by minimizing data transfer over networks, making it a preferred choice for organizations looking to protect sensitive information and comply with data regulations.

By : Gopika.V

B.Tech -IT- II Year

# DEPARTMENT MEET

**DATE: 02.12.2023**
**VENUE: Sun Java Lab**
**TIME: 2.00 P.M**

## MINUTES OF 2ND QUARTERLY IQAC MEETING ODD - SEM (JUL 2023–DEC 2023)



### AGENDA :

- **Structured feedback mechanism for curriculum and its transactions**
- **E- Content developed by teachers**
- **Capacity development & skill enhancement initiatives for soft skills, language, communication skills, life skills, etc..**
- **New teaching methodology and innovative teaching practices followed and adopted in each department**
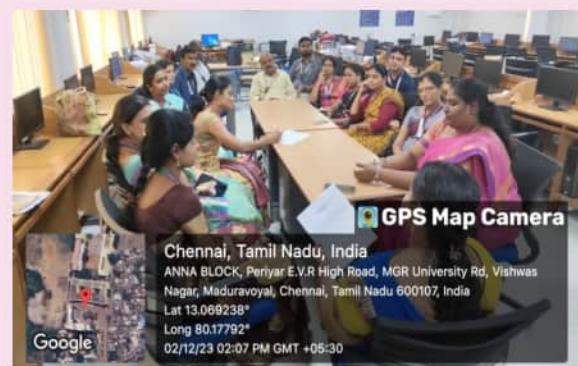
# SIR C V RAMAN RESEARCH COUNCIL

## DEPARTMENT RESEARCH FORUM MEETING MINUTES

**Research Forum Name: SRIDHAR VEMBU RESEARCH FORUM**
**DATE: 19.12.2023**



### AGENDA:

- **Sharing of "My Experiences in Publication" by Mrs. C.TamilSelvi, Assistant Professor**
- **Talk on "From Idea to Publication" by Dr. V.Cyrilraj, Additional Registrar (Admin) & Professor, Department of CSE.**
- **Open Forum Discussion to clarify the Member Queries.**
- **Progress Review of IT Department by Dr. Dahlia Sam.**
- **Publication Target & Research Publication Progress Review.**

# Star of Q4

## Faculty Star



**C.TAMILSELVI**

## Student Star



**V.KAVIYA**

**B.TECH IT** IV **YEAR**

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**Dr.Dahlia Sam**
Professor

**Mr. A.Kameshwaran**
Assistant Professor

## STUDENT COORDINATORS

**Dharania.T**
B.Tech II Year

**Pranava Kumar.I**
B.Tech II Year

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