

Information Technology Department

March-April
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About GMRIT

Newsletter Issue-2

www.gmr.it.org

GMR Institute of Technology is situated at Rajam, a small industrial town about 100 KMs from the 'city of destiny', Visakhapatnam in Andhra Pradesh. The campus of the institute is spread over sprawling 117 acres of land. The lush sylvan and idyllic surroundings at the heart of the agricultural belt, offer an ideal setting for higher studies. The institute is affiliated to the Jawaharlal Nehru Technological University, Kakinada and is approved by AICTE New Delhi. The institute has been accredited NAAC – 'A' grade of UGC. The institution is also having ISO 9001:2008 Quality Systems. The department of EEE has been accredited by National Board of accreditation (NBA). GMRIT offers 4-year B.Tech. Programs in seven core disciplines, 2-year M. Tech programs in six specializations. The approved annual intake of the institute is 1038 students. The institution received the grant extension of autonomous status for a period of ten years w.e.f 2018-19 to 2027-2028.

About IT Department

Vision

To be a preferred department of learning for students and teachers alike, with dual commitment to academics and research, serving students in an atmosphere of innovation and critical thinking.

Mission

To provide adoptable education for the graduates in preparing them for a rewarding career to develop academic and research in collaboration with industry and other institutions in the field of Information Technology. **(M1)**

To prepare the students as thinking professionals and good citizens who will be able to apply their knowledge critically and innovatively in solving professional and social problems. **(M2)**

Overview

GMRIT's Information Technology Department was formed in 1999 and covers the technical attributes of

IT, its multiple applications and the appropriate management of IT resources. Courses especially focus on the application of IT in various information and administrative systems. The annual intake of this Department is 120 students.

Facilities & Infrastructure

Three state-of-the-art laboratories - Interactive, Networking, & Unix Labs.

- Over 170 high configurations branded (HP) systems and two Intel Xeon dual processor servers.
- 1 GBPS Bandwidth Internet connectivity from BSNL & Airtel through dedicated leased lines.
- Video conferencing, Digital library, e-journals, e-learning & e-book facilities through INDEST (Indian National Digital Library in Engineering, Science & Technology) membership.
- CTLP and Video Courses on LAN.
- LAN connectivity through OFC, Wireless & Intranet.
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Major Courses Offered

- Data Structures
- Computer Networks
- Computer Organization
- Object Oriented Programming through Java
- Operating Systems
- Data Base Management System
- Middleware Technologies

- Software Engineering
- Information Security
- Object Oriented Analysis and Design
- Cloud Computing
- Distributed Databases
- Human Computer Interaction
- Design and Analysis of Algorithms
- Web technologies
- Network Programming
- Data Warehouse & Data Mining
- Data Analytics

Academic Achievements

Papers Published in Journals

1. Jayasri Kotti, et.al, published a paper on “Enhancing Gesture-Controlled Virtual Mouse and Virtual Keyboard Using AI Techniques”. journal: Journal of Mobile Multimedia, (29-March-2024), 437-494. Retrieved from DOI: <https://doi.org/10.13052/jmm1550-4646.2029>. (Q3, impact factor SJR(2022):0.17).
2. Jayasri Kotti, et.al, published a paper on “smart Agriculture: IoT and Machine Learning for Crop Monitoring and Precision Farming”. journal: International Journal of Intelligent Systems and Applications in Engineering, (26-03- 2024), 12(215), 266–273. Retrieved from <https://ijisae.org/index.php/IJISAE/article/view/5418>. (Q3, impact factor SJR(2022):0.23).
3. Jayasri Kotti, et al published a paper on “Multi-level brain tumor classification using hybrid coot

flamingo search optimization Algorithm Enabled deep learning with MRI images". journal: Networks: Computation in Neural Systems.

Retrieved from

<https://doi.org/10.1080/0954898X.2024.2343342>.

(Q3, impact factor SJR(2023):0.55).

4. Archana Uriti et al, Published a paper on "Secure method of communication using Quantum Key Distribution" in Applied and Computational Engineering 30(1):32-37. January-2024.
5. Karrothu, A., et al, published a paper on "Autism Spectrum Disorder Detection Using Fractional Social Driving Training-Based Optimization Enabled Deep Learning". Journal: Multimedia Tools and Applications, Volume 83, pages 37523–37548, (2024) 1-26. Retrieved from <https://doi.org/10.1007/s11042-023-16784-x>. (Q1, impact factor SJR(2023):0.8).

Papers Published in Conferences

1. Archana Uriti et al, published a paper on "An in-depth Analysis of the Elements Shaping Organic Farmers: A Systematic Review" in 2023 International Conference on Energy, Materials and Communication Engineering, ICEMCE 2023, December 2023. Retrieved from <https://doi.org/10.1109/ICEMCE57940.2023.10434263>.
2. Archana Uriti et al, published a paper on "A Survey on Generating Audio with Captions for a Live Video using Neural Networks" in

International Conference on Sustainable Communication Networks and Application, ICSCNA 2023 - Proceedings, November 2023, pp. 1012–1019. Retrieved from <https://doi.org/10.1109/ICSCNA58489.2023.10370514>.

Patents

1. Dr. V. Vasudha Rani published a patent titled on "A HANDWRITING RECOGNITION SYSTEM AND METHOD USING DEEP LEARNING TECHNIQUES" . Application no: 202341056333. date of filing: 22/08/2023, publication date: 29/3/2024.
2. Ms. Archana Uriti published a patent titled on "EFFICIENT DATA INGESTION AND PROCESSING FRAMEWORK FOR REAL-TIME BIG DATA ANALYTICS IN THE CLOUD " . Application no: .202441002049 A . date of filing: 11/01/2024, publication date: 16/2/2024.

Webinars and Faculty Development Programs

1. Dr. Vaddadai Vasudha Rani attended an FDP on "INTEGRATION OF IoT & BLOCK CHAIN TO IMPLEMENT SMART EDUCATION AND HEALTHCARE" from 26-feb-2024 to 1-march-2024. conducted by CSE Dept of GMRIT and Computer Science and Systems engineering of AU.
2. Pooja panapana attended an FDP on "INTEGRATION OF IoT & BLOCK CHAIN TO

IMPLEMENT SMART EDUCATION AND HEALTHCARE" from 26-feb-2024 to 1-march-2024. conducted by CSE Dept of GMRIT and Computer Science and Systems engineering of AU.

3. Dr. V. Vasudha Rani, Dr. Ajit Kumar Rout, Dr. K. Jaya Sri, Dr. Aravind, Dr. P. Srihari, Mr. M. Hari Krishna, Mr. Ch. Anil Kumar, Mrs. P. Padmavathi, Mrs. K. Santhoshi, Mrs. V. Ramya, Mrs. L. Swathi, Ms. U. Archana, Ms. B. Padmaja, Ms. Ch. Bharathi, Ms. P. Pooja, Ms. G. Sri Rupa attended A Collaborative Five-Day Online Faculty Development Program (Joint-FDP) On "Sustainable AI applications and LLM Technologies for Health Data Analytics" from 22-April-2024 to 26-April-2024. Organized by Department of Information Technology& Department of CSE -AI&ML/AI&DS GMR Institute of Technology, Rajam, & Department of IT&CA Andhra University.
4. Mrs. P. Padmavathi attended a Advanced Technology Program [ATP] training program and got trained on Artificial Intelligence & Machine Learning from 22nd April to 26th April 2024.

Others

1. Dr. Ajit Kumar Rout got a faculty appreciation awards on our Annual day from IT Dept.

2. Dr. Aravind Karrothu got a 2 faculty appreciation awards on our Annual day. From the dept. of CIVIL and another from CSE Dept.
3. Mrs. P. Padmavathi got a 3 faculty appreciation awards on our Annual day. From the dept. of BS&H(2 awards) and another from IT Dept.
4. Under ISTE Student Chapter IT Department successfully organized Power-BI Workshop on 5-03-2024, 6-03-2024&11-4-2024. resource person: Pavanraj (final year IT Student).



5. Under ISTE Student Chapter IT Department successfully organized UI/UX workshop on 18-03-2024 to 3-04-2024. resource person: P.Surya Karthik (3rd year IT Student).

