About The Institute

Malla Reddy College of Engineering & Technology (MRCET) is a constituent College of Malla Reddy Group of Institutions (MRGI) established in 2004. The College offers Engineering courses (B.Tech.) in AE, CSE, CSE(AI&ML), CSE(CS), CSE(IOT), CSE(DS), AI&ML, AI&DS, ECE, EEE, IT, MECH disciplines and Post Graduate (M.Tech.) courses in ECE, CSE, MECH and AE specializations in addition to MBA programmes. The college is conferred with Autonomous status from UGC, Govt of India and Approved by AICTE, Permanently Affiliated to JNTUH, Hyderabad, Accredited by NBA, NAAC with A-Grade. The institute is also certified with ISO 9001:2005.

About The Department

The Department of Information Technology was established in 2007 with an annual intake of 60 and has grown to a current annual intake of 180 students. The department has been accredited by NBA and NAAC – A Grade. The greatest resource of the department is its dedicated faculty with a wellbalanced mix of experienced seniors and energetic junior faculty members, organized in a well-defined hierarchy of administrationIt offers contemporary subjects like Mobile Application Development, Big Data Analytics, Machine Learning, Block-Chain Technology etc and specialized labs like Linux programming, Web Technologies, warehousing & Data Mining and has a Centre of Excellence in Big Data Analytics.

Chief Patron

Sri. Ch. Malla Reddy, Chairman, MRGI

Patrons

Sri. Ch. Mahender Reddy Dr. Ch. Bhadra Reddy

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Co – Convenors

Dr. T. Venu Gopal
Dean, Students Welfare, MRCET

Dr. P.H.V. Shesha Talpa Sai Dean – R&D

> Dr. G. Sharada HOD, IT

Coordinator

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Co-Coordinators

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AICTE Training and Learning (ATAL) Academy sponsored







6 Days ty Development Prog

Faculty Development Programme (FDP) on

NEXT GEN SOLUTIONS FOR MEDICAL CHALLENGES POWERED BY AI BASED INTELLIGENT SYSTEMS (Online Mode)

Coordinator

Dr. K. Suresh
Associate Professor, IT
Co-Coordinator

Mr. P.V. Naresh Assistant Professor, IT



Organized by
Department of Information Technology
Malla Reddy College of Engineering &
Technology

About ATAL Academy

The AICTE Training and Learning (ATAL) Academy, established by the AllIndia Council for Technical Education (AICTE), is a specialized institution dedicated to enhancing the knowledge and skills of faculty members, research scholars, and students in the field of technical education. ATAL Academy offers a wide range of faculty development programs in various contemporary technology areas. These programs are designed to keep educators and learners updated with the latest advancements in technology and to foster innovation and research in technical education. The academy conducts numerous programs in collaboration with government institutions, benefiting a significant number of participants each year. It plays a pivotal role in elevating the quality of technical education and research in India by providing access to cuttingedge knowledge, resources, and expertise. ATAL Academy is a valuable resource for those seeking to stay at the forefront of technological advancements and contribute to the growth and excellence of technical education in the country.

Objective of the FDP

The Faculty Development Programme is designed to offer participants an extensive overview of Machine learning and Deep learning fundamentals, tools and techniques that are critical in solving problems in deep learning domains. This course is customised to provide an insight into the latest research trends in healthcare applications using deep learning techniques. Participants will be exposed to a wide range of topics, encompassing the hands-on session on classification problems, the segmentation of chest X-Rays based on radiograph images, the detection of multi pulmonologydiseases, predictive analytics for cardiovascular diseases, and more. The participants will also have a wider perspective to Real world applications and research directions in healthcare industry. The Faculty Development Programme offers an invaluable opportunity for participants to expand their horizons and contribute to the cutting-edge advancements in healthcare and deep learning.

Topics to be Covered

The major topics to be covered (though not limited to) are as follows:

- Overview of AI and its impact on health care Industry
- Common Applications, trends in AI powered diagnosis
- Introduction to Machine, Deep Learning
- Types of Medical Data, Data Pre Processing
- Classification of various disease using Deep learning
- Segmentation using UNET, Various Segmentation Algorithms
- Ensemble Models for Developing AI Powered Applications
- Predictive Analysis in Health Care
- Article Discussions
- Security and privacy issues in healthcare applications
- Hands-on lab sessions on various case studies
- Recent Scope and Advancements in Artificial Intelligence for Healthcare

Resource Persons

Resource persons are from reputed institutes, software industries. Some key speakers are:

Dr. M. Anand Kumar, NIT Surathkal

Dr. E. Suresh Babu, NIT Warangal

Dr. M.H.M. Krishna Prasad, JNTUK

Dr. A.S.N. Chakravarthy, JNTUK

Dr.Paravathaneni Naga Srinivasu, AmrithaVishwa Vidyapeetham

Dr. G. Srinvas, Gitam, AP

Mr. Viswanath gangavaram, Swiggy, IND

Mr. Harish Bommidi, Accenture, IND

Ms. Mounika Narkedamilli, TCS, IND

Ms. Y. Pramathi, TCS, IND

Mr. K. Chenna Kesava Reddy, Cloud SI INC, USA

Mr. Raja Kurumalla, Cognizant Technologies, USA

Who Should Attend

The faculty members of the AICTE approved institutions, research scholars (PhD. and PG students), participants from Government and industry etc.

There is no fee for Registration, Course and Certification (Max. 100 participants). The participants will be selected on first come, first serve basis. Further, Certificate will be provided to the participant after successful completion of the training program with at least 80% attendance and Continuous Comprehensive Assessment.

How to Apply

Login to AICTE ATAL Portal and register as participant by visiting: https://atalacademy.aicte-india.org. After registering as participant, choose this program from the list of workshops.

Contact Details

For any queries regarding this programme,

Please contact:

The Coordinators, ATAL FDP
Department of Information Technology,
Malla Reddy College of Engineering & Technology

Telangana -500014, INDIA

Email: <u>kurumallaasuresh@gmail.com</u> Ph: +91 9951415559,9705243777

ATAL Online 6 Day Faculty Development Programmes 2024-25 Schedule

FDP Thrust Area: Health Care & Med-Tech

FDP Title: NEXT GEN SOLUTIONS FOR MEDICAL CHALLENGES POWERED BY AI BASED INTELLIGENT SYSTEMS

Start Date: 16.12.2024 End Date: 21.12.2024

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
6:00PM to 6:30PM Inaugural Session	6:00PM to 7:30PM Session 3 Topic: Types of Medical Data Annotation Techniques Handling Missing Data Data Pre-Processing Techniques. Name of the Expert: Dr.Paravathaneni Naga Srinivasu Associate Professor, Amritha Years of Exp: 11 Years	6:00PM to 7:30PM Session 5 Topic:Image Segmentation Using UNET &various Algorithms for Segmentation Name of the Expert: Dr. M. Anand Kumar Associate Professor, NIT Surathkal Years of Exp:12 Years	6:00PM to 7:30PM Session 7 Topic: Predictive Analysis in health care Article Discussion based on Predictive Analysis Name of the Expert: Mr. K. Chenna Kesava Reddy Data Engineer, Cloud SI INC, USA Years of Exp:11 Years	6:00PM to 7:30PM Session 9 Topic: Challenges in developing AI Applications. Role of optimizers Name of the Expert: Mr. G. Srinivas Professor, GITAM AP Years of Exp: 20 Years	2:00PM to 3:30PM Session 11 Topic: Article Discussion Real world Applications and Research Directions in Healthcare Technology Name of the Expert: Mr. Harish Bommidi, Software Analyst, Accenture, Years of Exp: 10 Years
6:30PM to 8:00PM Session 1 Topic: * Overview of AI and its impact on health care industry * Common Applications, trends in AI Powered diagnostics, treatment and patient care. Name of the Expert: Dr. M.H.M Krishna Prasad Professor, JNTUK	7:30PM to 9:00PM Session 4 Topic: Intelligent Applications in Disease detection Article Discussion Name of the Expert: Mr. Viswanath gangavaram, Data Scientist, Swiggy Years of Exp: 14 Years	7:30PM to 9:00PM Session 6 Topic: Ensemble Models for developing AI Powered healthcare applications Name of the Expert: Dr. E. Suresh Babu Associate Professor, NITW Years of Exp: 10 Years	7:30PM to 9:00PM Session 8 Topic: Hands on Session: to create AI Application for predictive analysis Name of the Expert: Mr. Raja Kurumalla Senior Associate, Cognizant Technologies Years of Exp: 10 Years	7:30PM to 9:00PM Session 10 Topic:Hands on practical session in developing machine learning model to detect disease Name of the Expert: Ms. Mounika Narkedamilli, IT Analyst, TCS Years of Exp: 10 Years	3:30PM to 5:00PM Session 12 Topic:Security and Privacy Issues in healthcare Applications Name of the Expert: Y. Pramathi, Senior Developer, TCS Years of Exp: 10 Years
8:00PM to 9:30PM Session 2 Topic: * Introduction to Machine Learning and Deep Learning Algorithms (Supervised and Unsupervised), Convolutional Neural Networks, Transfer Learning					5:00PM to 6:30PM Session 13 Topic:Recent Scope and Advancements in Artificial Intelligence for Healthcare Name of the Expert: Dr. E. Suresh Babu Associate Professor, NITW Years of Exp: 10 Years
Name of the Expert: Dr. A.S.N. Chakravarthy Professor, JNTUK Years of Exp: 20 Years					6:30PM to 7:30PM Online test & feedback 7:30PM to 8:00PM Valedictory Session