

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING



FOUR DAY WORKSHOP ON AI&ML - ITS ALGORITHMS

(A HANDS-ON TRAINING)

August 10th -13th 2022



MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY



(Autonomous Institution – UGC, Govt. of India)



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(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC - 'A' Grade, ISO 9001:2008 Certified)

Maisammaguda, Dhulapally, Secunderabad - 500100.

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Malla Reddy College of Engineering and Technology (MRCET), Secunderabad is an UGC Autonomous Institution. Department of **Electronics and Communication Engineering** organized a **Four-day** workshop **on AI&ML- Its Algorithms, A Hands-on training** for III year ECE students from **10**th **to 13**th **August 2022**.

Objective of Workshop:

The main objective of this workshop is to provide hands-on experience to the students on AI&ML-Its Algorithms.

Highlights:

Machine Learning is one of the essential fundamentals required to step into the rapidly emerging and upcoming era of Artificial Intelligence (AI).

Python has surfaced as a dominant language in AI/ML programming because of its simplicity, flexibility and support for open source libraries





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Maisammaguda, Dhulapally, Komaplly, Secunderabad – 500100, Telangana State, India.

AI&ML – ITS ALGORITHMS HANDS-ON WORKSHOP SCHEDULE 2024 PASSOUT 10-13 August, 2022

S.No	DATE	Topics ad Sub Topics	DURATION
1	10.08.2022	 Introduction to Python and IDEs – The basics of the python programming language, how you can use various IDEs for python development like Jupyter, Pycharm, etc. Python Basics – Variables, Data Types, Lists, Tuples, Sets, Dictionaries, Loops, Conditional Statements, functions, lambda functions, file handling and exception handling Creating arrays from ranges, Indexing and slicing in numpy, Append and resize functions, Nditer and broadcasting, Array manipulation functions ,Numpy unique() ,Numpy delete() ,Numpy insert function ,Numpy ravel and swapaxes(), Split function,Hsplit function ,Vsplit function, Leftshift and rightshift functions 	6 Hrs
2		Basics with NumPy	
	11.08.2022	 Numpy attributes and functions, Creating arrays from existing data, Numpy trigonometric functions, Numpy round functions, Numpy arithmatic functions, Numpy power and reciprocal functions, Numpy mod function, Numpy imag() and real() functions, Numpy concatenate(), Numpy statistical functions, Statistical functions, Numpy average function, Numpy sort function, Numpy argsort(), Extract function, Numpy argmax argmin(), Numpy string functions, Numpy center function, String functions, Numpy matrix library, Numpy join arrays 	6 Hrs
3	12.08.2022 & 13.08.2022	& Pandas dataframe, binning data using Pandas, etc.	

- Exploratory Data Analysis, Feature engineering, Feature scaling, Normalization, standardization
- Null Value Imputations, Outliers Analysis and Handling, VIF, Biasvariance trade-off, cross validation techniques, train-test split.

Data Visualization & Algorithms

- Bar charts, scatter plots, count plots, line plots, pie charts, donut charts, etc, with Python matplotlib.
- Regression plots, categorical plots, area plots, etc, with Python seaborn.

Supervised Learning
Unsupervised Learning
and related Algrithms

S.NO	SECTIONS	VENUE	TRAINER NAME
	A & C	PLACEMENT BUILDING	Mr. Venkat
1		GROUND FLOOR LAB	
		PLACEMENT BUILDING	
2	В	II ND FLOOR LAB (FRONT	Mr.Krishna
		SIDE)	1
		PLACEMENT BUILDING	
.3	D	II ND FLOOR LAB	Mr.Saradhi
9		(BACKSIDE SIDE)	

Dr. N. Subash

TPO

Dr.K. MALLIKARJUNA LINGAM

HOD

Sd/-

Dr. S. SRINIVASA RAO

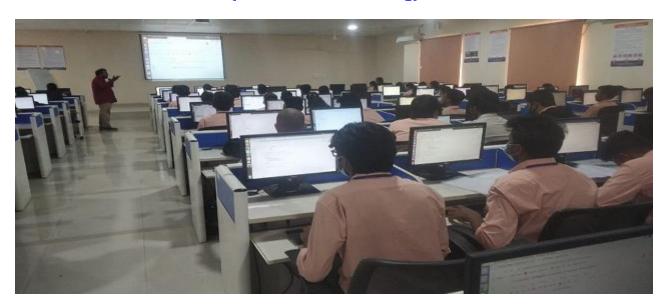
PRINCIPAL



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