Report on 5 Days workshop
"ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING"

Artificial Intelligence and Machine Learning are two cutting-edge technologies that have potential to revolutionize commercial operations and human interaction. Industries including IT, Healthcare, Education and transportation are already being impacted by ML/AI and this trend will continue in future as well. Business is focusing more and more intensely on the value of AI as they move beyond the trial stage and seriously consider speeding its implementation. Because of this, there will soon be greater demand than ever for software engineers who are prepared to work in AI/ML development jobs.

Malla Reddy College of Engg &Tech of CSE department understood the demand in real time and made a chance for the students to develop their skills on AI/ML by organizing a 5days workshop on "Artificial Intelligence & Machine Learning" with hands on session from 5th August to 10th August 2022.The session was Inaugurated by **Dr.D.Shanthi, HOD,CSE, MRCET** and **Dr. P H V Sesha Talpa Sai, Director, R&D, MRCET.** Around 220 students of current third years has attended this workshop. It was organized in two parallel sessions on CSE block -first floor lab and second floor lab.

Dr.D.Shanthi, HOD,CSE, MRCET, has insist the students to attend the workshop attentively and grab knowledge on AI/ML which will help them benefit in their future. Also, she thanked Director & Principal for providing this opportunity in organizing this workshop.

Dr. P H V Sesha Talpa Sai, Director, R&D, MRCET has given an awareness to the students about the Institution Innovation Council @MRCET. He addresses the students to be more practical in learning which will help them to become an entrepreneur.

Schedule for the 5 Days of Workshop

Day1:

- Introduction to python and IDEs
- Python Basics- Variables, data types, Tuples, Sets, Lists, Dictionaries, Loops, Conditional statement, file handling & exception and Lambda function
- Creating arrays from ranges, indexing, slicing, array manipulation and functions

Day2:

- Numpy attributes, functions, trigonometric functions, round functions, arithmetic functions, power & reciprocal functions, mod functions, real(), imag(), concatenate (), statistical function, average function, sort, extract, argmax(), argmin(),string functions, matrix library.
- Linear algebra, Random module, Numpy indexing, basic operators.

Day3:

- Basics of pandas library
- Read, write data, perform data analytics and manipulation.

Day4:

- Aggregate data in pandas, merge and join data frames in pandas
- Exploratory data analysis, feature scaling, Normalization, standardization
- Null value imputations, outlier analysis and handling, cross validation techniques, train set split.

Day5:

- Supervised learning
- Unsupervised learning and related algorithms
- NLP and computer vision major demonstration

Inauguration & Day 1 workshop @MRCET Auditorium

Day 2 to 5th Workshop @MRCET CSE lab(Second Floor)