TWO DAYS HANDS-ON WORSHOP ON

"R PROGRAMMING"

DATE:-29& 30 SEPTEMBER 2023   **VENUE: VON NEUMANN LAB**

R programming workshop was conducted on **29th & 30th September 2023** by **Mr. Naga Sri Mouli Borusu**, a speaker, Industry Expert and a very well knowledge resource person in the field of Data Science and Machine Learning. The main objective of this workshop was to make aware the students of one of the latest technologies, R Programming which is not part of their curriculum.

As R Programming has become one of the most prominent and in demand programming language, this workshop was planned to give students sufficient knowledge and technicality which may prove to be more beneficial and fruitful for them during their respective career path. The venue for the workshop is at Von Neumann lab at CSE department. The workshop was conducted from 9.30 am to 4.00 pm for two days. Around 135 students of third year have participated and got benefited.

The workshop started with formal inauguration where **Dr.S.Shanthi, HOD of CSE**, welcomes the resource person, **Dr.S.Srinivasa Rao , Principal of MRCET** , **Dr.T.Venugopal, Dean**, and students. Dr.S.Shanthi, HOD of CSE, insisted students to use the opportunity in developing their skills and knowledge on R Programming. Dr.S.Srinivasa Rao , Principal of MRCET, addressed students to be attentive and grab the knowledge. Dr.T.Venugopal, Dean of MRCET, facilitate the students with the current ongoing opportunities and technologies.

The speaker began the workshop by throwing light on the general technological trends and the emergence of machine learning and data science as one of the fastest growing technologies of this time and their need in the current growth rate of data production. The students were also briefed about the general concepts of data science and machine learning and also given valuable insights in the career opportunities available in this field. Following this, a brief introduction and hands on training in programming using R was given where they learnt the central and main concepts required for conducting analytics using R programming language. Post lunch was followed with hands-on machine learning and data analytics using a simple example of dataset using R language.

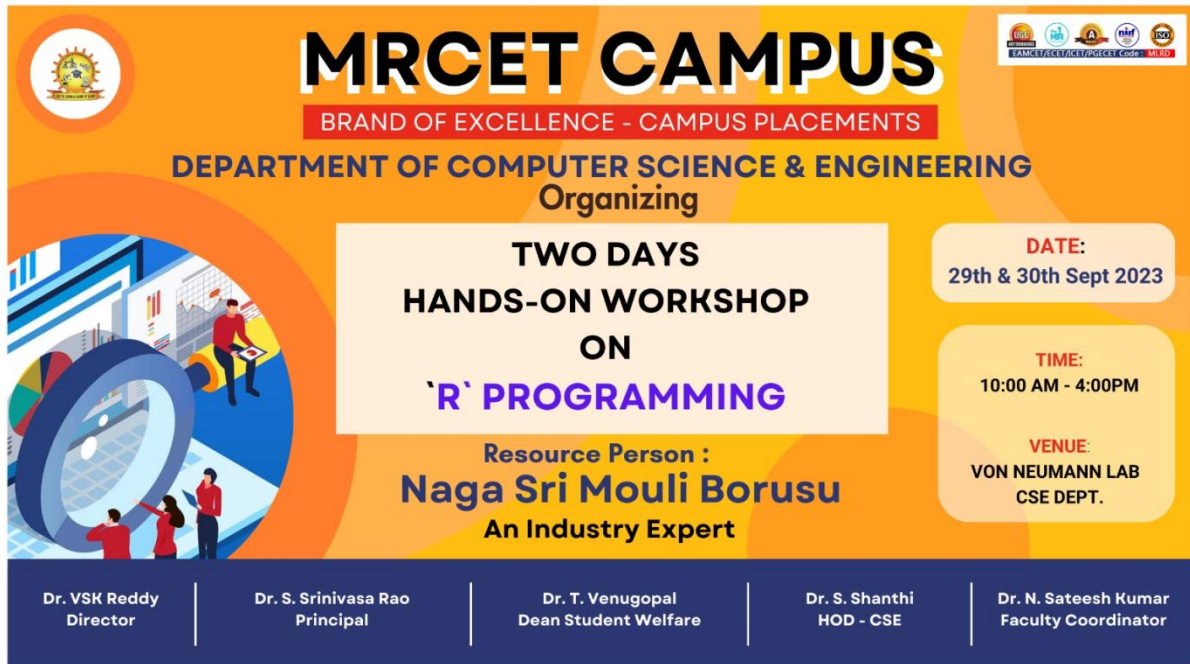# Schedule of the workshop is given below.

Day 1

1. Installation and downloading, features of R programming and its interface

2. Declaration and assignment of variables and how to print them

3. Types of data types and syntax for finding the data type of a variable

4. Types of Operators (symbol, usage, examples)

5. Conditional and unconditional statements (syntax, examples) and syntax for taking input from the user, Types of loops (syntax, examples) & Sequence function, usage of range in them

7. Vector (syntax, example), other built-in functions like min (), max (), prod (), sum (), mean (), median ()

8. Programs regarding above topics and assignment questions

Day 2

1. List (declaration, accessing, usage, syntax)

2. Factors (declaration, ranking, usage, syntax) and how to get the structures

3. How to import and export a csv file, and their manipulations

4. Introduction to data frames and their manipulations

Data visualization ● Scatters plot ● Pie chart (2D,3D) ● Skewness and its types

Statistics ● Mean, median, mode, variance and standard deviation and their programs

At the end of session, students have learned about frames and visualization with hands-on. Dr.S.Shanthi, HOD, CSE has thanked the Director, Principal and the management for the greatest platform and facilities provided for the successful conduction of two days workshop. She also thanked the co-coordinator Dr.N.Sateesh sir for arranging the workshop in flawless manner and she extends thanking the resource person for the knowledgeable insights on industry based R programming workshop.

R PROGRAMMING WORKSHOP # INVITATION

DIGNITARIES SPEECH @ R PROGRAMMING WORKSHOP
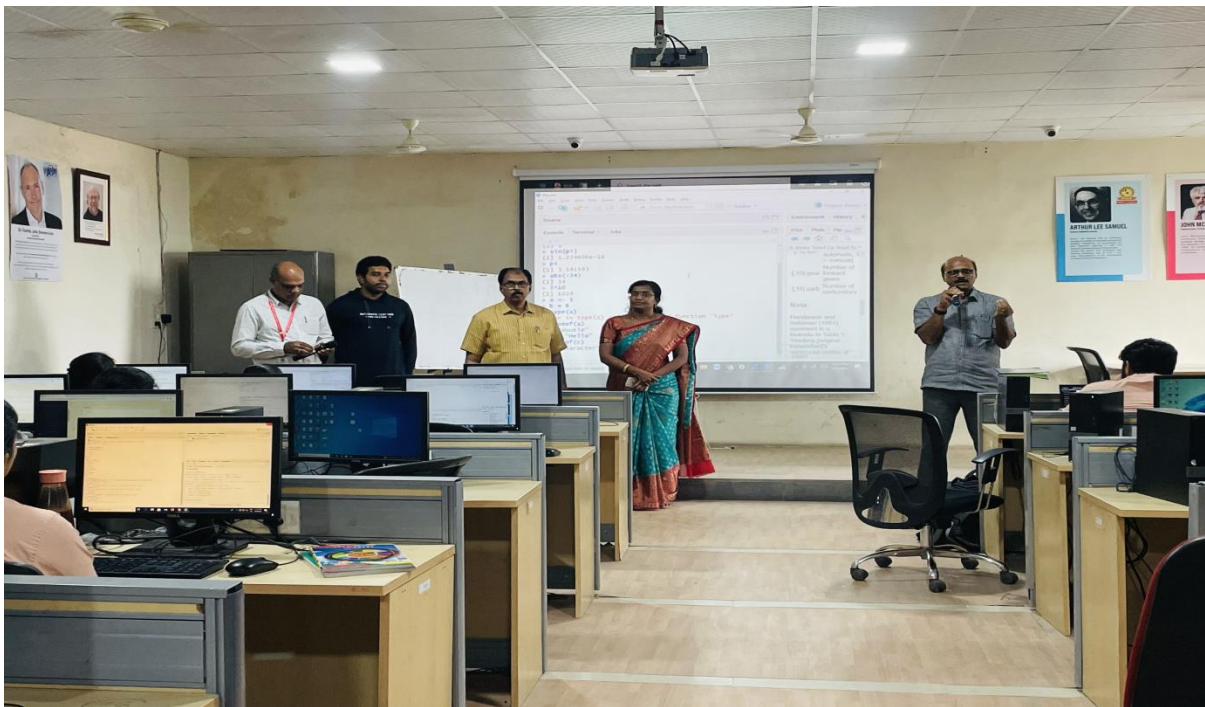
TWO DAYS SESSION @ R PROGRAMMING WORKSHOP