



**Hope Foundation's
International Institute of Information Technology,
Hinjewadi, Pune – 411057**

Activity Report

(STATISTICAL COMPUTING USING R)

Academic Year: 2020-2021

Name of Event: Statistical Computing using R

Topic: Concepts of R, Objects and Statistics, Data pre-processing, Co-relation and regression analysis, deploying a R model.

Date & Time of Conduction: 19th & 20th October 2020 11.15am to 1.15 pm

Targeted Audience: Students of I2IT

Venue: Google meet

Coordinator: Rajeev Ramesh

Vikramjit Banerjee

Number of Participants: Day 1 attendance - 52

Day 2 attendance - 47

Activity Description in Nutshell: The members of CESA I2IT arranged a 2 days hands-on workshop on Statistical Computing using R. The workshop was conducted by co-ordinators of CESA, Rajeev Ramesh and Vikramjit Banerjee. It was arranged through Google Meet where the participants could join for accessing the workshop. Day 1 was carried by explaining Basics of R and concepts of objects and Statistics was explained. Also, concept of Data pre-processing was explained and visualization was done. And the concept of co-relation was explained and analysis of regression was done. On day 2 case study was done using Machine learning algorithms. And finally, a R model was deployed using R shiny.

Event Photos: Screenshot of co-ordinators explaining the concepts of R programming.

The screenshot shows a Google Meet window. The main content is a presentation slide titled "Variables". The slide lists:

- Valid Variables:
 - var_name2.
 - .var_name
 - var.name
- Invalid Variables:
 - var_name%
 - 2var_name
 - .2var_name
 - _var_name

The meeting interface includes a "People (95)" sidebar on the right with participants like Prashant G (You), Abhijeet Kale, Abhijeet Katore, abhijeet kulkarni, Abhinow Katore YT, abhishek patil, and akalbirsingh singh. The top of the browser shows tabs for "Inbox (2,380)", "Inbox (903)", and "Meet - R Programming Workshop".

Screenshot of R studio during demonstration of developing R model.

The screenshot shows R Studio running in a browser window. The main window displays a data frame with columns: `mpg`, `wt`, `qsec`, `vs`, `am`, `gear`, `carb`. The console shows the following code and output:

```
##> fit <- lm(mpg ~ wt, data = cars)
##> predict(fit, newdata = data.frame(wt = 2000))
##> plot(fit)
##> plot(fit, main = "Distance Matrix Computation")
```

The console also shows an error message: "Error: package or namespace file failed for 'car' in: loading from cache...". The "Environment" pane shows the `cars` data frame with 32 rows and 7 columns. The "Distance Matrix Computation" pane shows the description and usage of the `dist` function.

The meeting interface includes a "People (55)" sidebar on the right with participants like Varshitha, RAJEEV RAMESH, and Vikramjit Banerjee. The top of the browser shows tabs for "Inbox (2,380)", "Inbox (903)", and "Meet - ptc-nmnz-seh".