



CENTRAL UNIVERSITY OF HARYANA

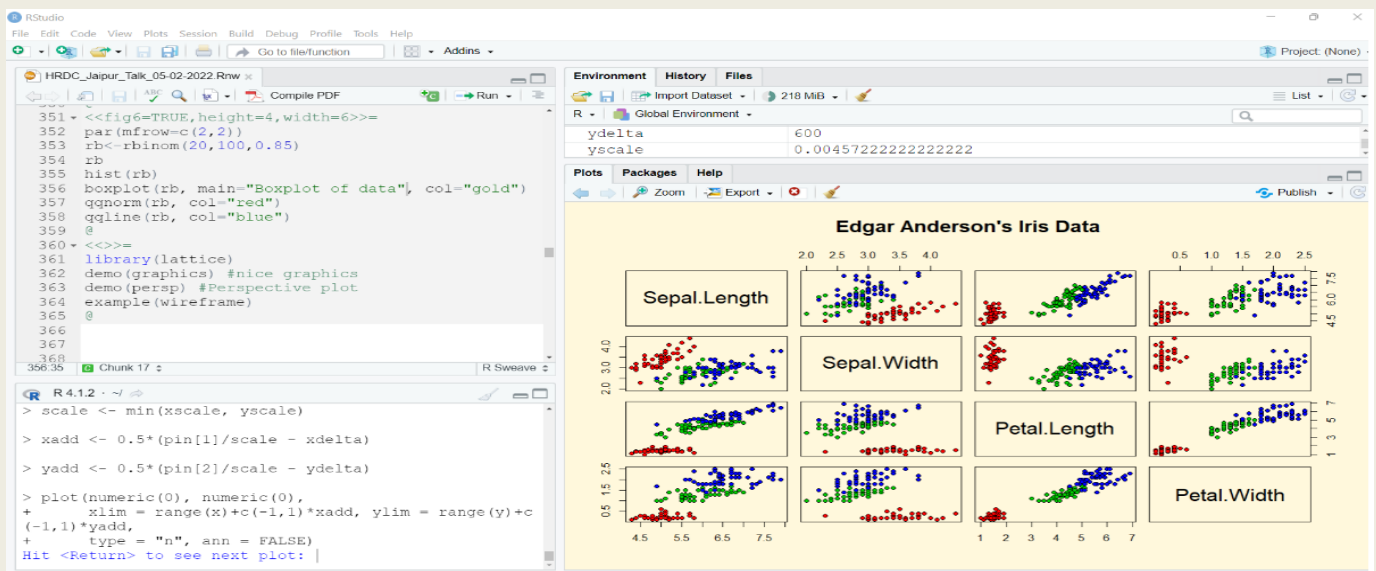
Mahendergarh, Haryana

(NAAC Accredited 'A' Grade University)

One Week Online National Workshop

on

Applications of Statistical Tools in Data Analysis



March 14-18, 2022

Organized by:

Department of Statistics

Under the Aegis of Azadi Ka Amrit Mahotsav



About the University

The Central University of Haryana is a Central University established under the Central Universities Act, 2009 of the Parliament. It is one of the 15 Central Universities established by MHRD, GoI under the XIth Five Year Plan (2007-12). The University is fully funded by the UGC. The campus of the University is situated in 488 acres of land at Jant-Pali Villages, Mahendergarh district of Haryana from where CUH is running its academic operations. The University has been awarded with “A” grade in the first cycle of NAAC assessment and Accreditation conducted in March 2017. Presently, University offers 73 study programmes (Diploma, UG, PG and Research) in 33 Departments under 8 different Schools of studies.

About the Department

The Department of Statistics was established from the academic session 2013-14 as a part of the School of Physical and Mathematical Sciences as an independent Department and now it comes under the school of Basic Sciences. The aim of the Department is to provide quality education in the field of statistics and to develop the subject of statistics with its application and usefulness to society. The Department offers M.Sc. and Ph.D. programmes in Statistics. The Major research areas of the Department are Distribution Theory, Order Statistics, Statistical Inference, Censored Data, Reliability and Life Testing, Reliability Theory, Survival Analysis, Bayesian Inference and Stochastic Processes. The Department of Statistics, Central University of Haryana has an excellent curriculum for M.Sc. Statistics programme according to New Education Policy (NEP) 2020. The courses are designed to develop a class of analytics and inferential aptitude among the students through rigorous practical assignments.

About the Azadi Ka Amrit Mahotsav

Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements.

About the Workshop

The statistical tools play an important role in the field of life sciences, engineering, management, humanities and allied sciences. Recent advancement in application-oriented sciences is compelling the researchers and users for learning and understanding the statistical

tools for modelling and analysis of the data arising from their experiments. Realizing the need of the time, the present workshop is aiming to give lectures and training on statistical topics like Exploratory Data Analysis, Linear Regression Modelling, Design of Experiments, etc. The participants will be exposed to the statistical basics, background and fundamentals behind the tools. They will also be trained and taught, how to do such analysis through **Statistical Software R** and how to interpret the outcomes.

Major Topics to be covered in the Workshop

- Introduction to R and RStudio.
- Different Data Types in R
- Data Import and Export in R
- Introduction to basic programming and working with functions in R
- Statistical distribution in R
- Data Visualization (Exploratory Data Analysis) in R
- Parametric Testing of Hypothesis
- Non-Parametric Testing of Hypothesis
- Analysis of Variance and Covariance
- Simple Linear Regression Analysis
- Multiple Linear Regression Analysis
- Logistic Regression Analysis
- Principal Component Analysis
- Factor Analysis

Resource Persons/Experts

The Resource Persons/Experts are prominent Professors and Scholars in the field of statistics and data science with excellent knowledge in R. They have extensive experience in the applications of statistical tools in data analysis.

Target Audience

Faculty Members, Research Scholars, Postgraduate and Undergraduate Students from all disciplines. A maximum of **100 participants** will be selected in this workshop on a First-Come-First-Serve basis.

E-Certificate

At the end of the workshop, the certificate will be provided to all participants who have successfully completed the assignments and attendance.

Registration Fee and Requirements

- The registration fee is **Rs. 200/-** for all participants.
- No TA/DA will be paid to the participants.
- The registration is compulsory, and the online Registration Link is: <https://phd.cuh.ac.in/applications-of-statistical-tools>
- **The last date of the registration is March 06, 2022.**

Organizing Committee

Patron

Prof. (Dr.) Tankeshwar Kumar, Vice-Chancellor, Central University of Haryana

Nodal Officer, Azadi Ka Amrit Mahotsav

Prof. Sarika Sharma, Registrar, Central University of Haryana

Advisory Board

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Prof. Vinod Kumar, Dean School of Basic Sciences, CUH

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- *We are requesting to all colleagues please share this pamphlet of the workshop with your friends, faculty members and students so that the interested persons may be benefited.*
- *Website of the Central University of Haryana: <http://www.cuh.ac.in/>*