



ONE WEEK ONLINE INTERNATIONAL WORKSHOP

on

Empirical Methods in Social Sciences: *An Introduction to Statistics, Econometrics and Big Data*

13th – 20th October 2024

Organized by
Jindal Centre for the Global South and J & K Economic Association

ABOUT THE WORKSHOP

This workshop aims to introduce the researchers, faculty, and early-stage social sciences professionals to Empirical Methods in Social Sciences by focusing on its three key foundations: Statistics, Econometrics, and the emerging area of Big Data. By using an optimal mix of theory and practical applications, this workshop will be enriched by lively interactions between the experts and the participants. The workshop will also have several Keynote Sessions that will discuss the issues that are most essential for emerging and seasoned researchers alike. The hands-on sessions will concretely train the participants on actual empirical modelling using real-world datasets on cutting-edge tools such as Gretl, EViews, R, Python and Tableau. The primary motivation of this workshop is to train well-informed modellers who know how to use various empirical methods at the right place, at the right time and in the right manner. The focus is on building a strong theoretical background rather than simply learning software. The workshop is expected to inspire researchers to develop their way of modelling the real world using various empirical methods. Their knowledge will be solidified through hands-on sessions on real-world datasets from the social sciences.

KEY OUTCOMES

- Gain comprehensive training on empirical methods that are employed in the social sciences.
- Learn fundamental statistical concepts necessary for empirical modelling.
- Gain traction on the critical econometric concepts, techniques, and technologies.
- Learn the application of key statistical and econometric technologies.
- Interact and network with professionals who have a strong background in empirical research.

TOPICS TO BE COVERED

1. A Primer on Applied Statistics using *Microsoft Excel*

- Data and its types
- Concepts in Probability Theory
- Major Types of Distributions in Social Sciences
- Descriptive Statistics: Summarizing the Data
- Data Visualization
- Hands-on session with *Microsoft Excel*

2. Foundations of Econometric Modelling using *Gretl*

- Model-based thinking
- Equations and their importance
- Types of Models
- Fundamental elements of an econometric model
- Practical uses of econometric models
- Hands-on session with *Gretl*

3. Developing the Classical Econometric Model using *EViews*

- Linear Regression models
- Classical Normal Linear Regression Model
- Multiple Regression Analysis
- Hand-on session with *EViews*

4. Multicollinearity and Heteroskedasticity with *Analytical Solver*

- Multicollinearity
- Heteroskedasticity
- Hands-on session with *Analytical Solver*

5. Autocorrelation and Model Misspecification using *R*

- Autocorrelation
- Model Misspecification
- Hands-on session with *R*

6. Time Series Econometrics with *R*

- Introduction to Time Series Econometrics
- Hands-on with *R*

7. Big Data Analytics with *Tableau*

- Introduction to Big Data
- Hand-on session with *Tableau*

8. Machine Learning with *Python*

- Introduction to Machine Learning for Researchers
- Hands-on with *Python*

9. Panel Econometrics with *Gretl*

- Introduction to Panel Econometric Models
- Hands-on with *Gretl*

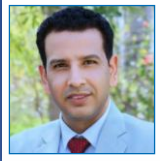
STATISTICAL AND ECONOMETRIC PROGRAMMES COVERED:

Microsoft Excel | Gretl | R | Eviews | Python | Tableau | Analytical Solver

WORKSHOP DETAILED PROGRAMME

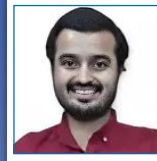
SUNDAY, 13TH OCTOBER 2024

11:00 AM – 12:00 PM | INAUGURAL SESSION



SPEAKER

Dr. Firdous Ahmad Malik
Assistant Professor
University of People, USA



MODERATOR

Dr. Bhagirath Baria
Assistant Professor
The Maharaja Sayajirao
University of Baroda, India

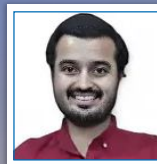
12:15 PM TO 12:45 PM | KEYNOTE SESSION - I

Fundamentals of Empirical Analysis – A Primer for Emerging Researchers



SPEAKER

Dr. K. Shanmugan
Secretary, The Indian Econometric
Society (TIES), and
Associate Professor,
Department of Business Economics,
Faculty of Commerce,
The Maharaja Sayajirao University of Baroda



MODERATOR

Dr. Bhagirath Baria
Assistant Professor
The Maharaja Sayajirao
University of Baroda, India

12:45 PM TO 2:00 PM | LUNCH BREAK

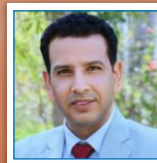
2:00 PM TO 2:30 PM | KEYNOTE SESSION - II

Data Sovereignty and Equitable Development: A path forward for the Global South



SPEAKER

Dr. Hebatallah Adam
Full Professor of Economics,
Founder and Director of
Jindal Centre for the Global South
Jindal School of International Affairs
O.P. Jindal Global University



MODERATOR

Dr. Firdous Ahmad Malik
Assistant Professor
University of People, USA

MONDAY, 14TH OCTOBER 2024

6:30 PM TO 8:30 PM | SESSION - I

A Primer on Applied Statistics using Microsoft Excel



SPEAKER

Dr. Parmeet Kumar Vinit
Assistant Professor
Dept. of Statistics
Patna University



MODERATOR

Dr. Naveed Ahmad Lone
Assistant Professor of Economics,
Department of Economics
GDC Pulwama, India

TUESDAY, 15TH OCTOBER 2024

6:30 PM TO 8:30 PM | SESSION - II

Foundations of Econometric Modelling using Gretl



SPEAKER

Dr. Bhagirath Baria
Assistant Professor
The Maharaja Sayajirao
University of Baroda, India



MODERATOR

Ms. Deepti Bapna
Junior Officer (Loans)
Saraswat Cooperative Bank Ltd
Ahmedabad, Gujarat, India

WEDNESDAY, 16TH OCTOBER 2024

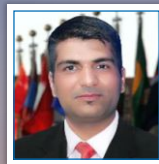
6:30 PM TO 8:30 PM | SESSION - III

Developing the Classical Econometric Model using Eviews



SPEAKER

Dr. Bhagirath Baria
Assistant Professor
The Maharaja Sayajirao
University of Baroda, India



MODERATOR

Mr. Owais Ismaeil
Doctoral Fellow
University of Delhi, Delhi, India

THURSDAY, 17TH OCTOBER 2024

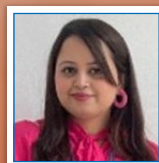
6:30 PM TO 8:30 PM | SESSION - IV

Multicollinearity and Heteroskedasticity with Analytical Solver



SPEAKER

Dr. Jasmeet Kaur Lamba
Full Professor & Associate Dean,
Jindal School of International Affairs,
O. P. Jindal Global University, India.



MODERATOR

Ms. Shivangi Priya
Research Assistant
Lingaya's Vidyapeeth, Faridabad, India

FRIDAY, 18TH OCTOBER 2024

6:30 PM TO 8:30 PM | SESSION - V

Autocorrelation and Model Misspecification using R



SPEAKER

Dr. Hersch Sahay
Assistant Professor
Department of Economics
Pondicherry University



MODERATOR

Mr. Ravi Luhar
Assistant Professor (Temporary)
Department of Business Economics
Faculty of Commerce
The Maharaja Sayajirao
University of Baroda, Gujarat, India

SATURDAY, 19TH OCTOBER 2024

6:30 PM TO 7:30 PM | SESSION - VI

Time Series Econometrics with R



SPEAKER

Dr. Hersch Sahay
Assistant Professor
Department of Economics
Pondicherry University



MODERATOR

Dr. Neha Pandya
Assistant Professor
Department of Banking and Insurance,
The M. S. University of Baroda, India

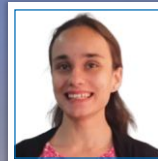
7:30 PM TO 8:30 PM | SESSION - VII

Big Data Analytics with Tableau



SPEAKER

Mr. Lucky Pandey
Climate Change Expert - IQVIA,
National Centre for Disease Control
Ministry of Health and
Family Welfare, Delhi



MODERATOR

Ms. Devanshi Himanshu Mehta
Assistant Professor (Temporary),
Department of Business Economics,
Faculty of Commerce,
The Maharaja Sayajirao
University of Baroda, India

SUNDAY, 20TH OCTOBER 2024

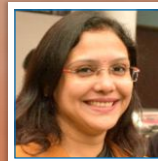
11:00 AM TO 12:00 PM | SESSION - VIII

Machine Learning with Python



SPEAKER

Mr. Dwarkesh Panchal
Manager
IPSOS-Market Research Company
Bengaluru, Karnataka, India



MODERATOR

Dr. Chanda Gulati
Associate Professor
Prestige Institute of
Management & Research, India

12:00 PM TO 01:00 PM | SESSION - IX

Panel Econometrics with Gretl



SPEAKER

Dr. Ram Pratap Sinha
Associate Professor
Government College of
Engineering and Leather Technology,
West Bengal, India



MODERATOR

Dr. Jaskaran Singh
Assistant Professor
Ramgarhia College Phagwara
Punjab, India

1:00 PM TO 2:00 PM | VALEDICTORY SESSION

WORKSHOP REGISTRATION DETAILS

- **Certification:** Certificate of a one-week “Workshop on Empirical Methods for Social Sciences”, by JKEA and JCGS
- **Registration Fees:** 500 INR

Registration Link:

<https://forms.gle/W5BBCB3A7AftLMx98>



Scan QR code
for Registration

- **Contact Details:** jkeconomicassociation@gmail.com

WORKSHOP CONVENERS

- **Prof. (Dr.) Hebatallah Adam**
Full Professor of Economics
Founder and Director of Jindal Centre for the Global South (JCGS)
Jindal School of International Affairs (JSIA), O.P. Jindal Global University
- **Dr. Firdous Ahmad Malik**
Assistant Professor, University of People, USA
- **Dr. Bhagirath Baria**
Assistant Professor, The Maharaja Sayajirao University of Baroda, India

ORGANIZING MEMBER

- **Mr. Owais Ismail**
Doctoral Fellow, University of Delhi, India
Research Fellow Jindal Centre for the Global South