SCHOOL OF BUSINESS MANAGEMENT & COMMERCE

HALF DAY VIRTUAL WORKSHOP ON REGULARIZATION: LASSO & RIDGE REGRESSION

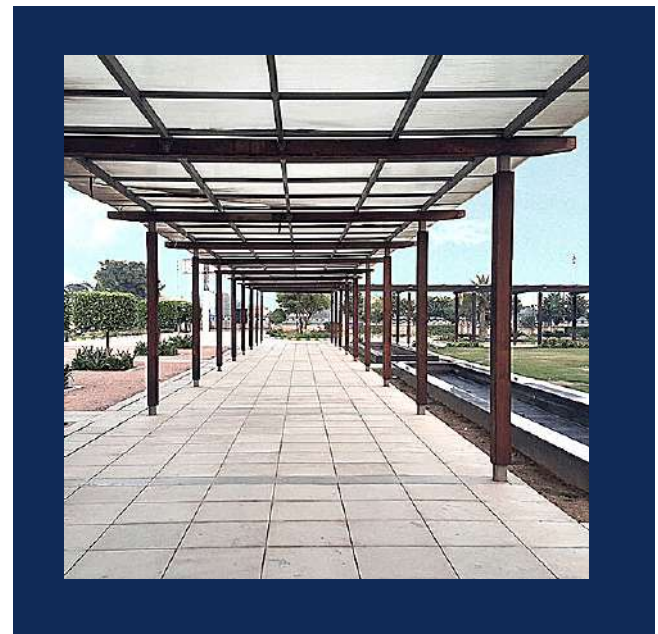**DATE & TIME OF VIRTUAL WORKSHOP: 22ND JULY 2022. (9.30 AM TO 2.00 PM)**

SCAN QR CODE TO REGISTER
https://forms.gle/TN5G56KknHvSMuoY8

Objective of the Workshop

- To familiarize participants with the weaknesses of ordinary least square, concepts such as bias, variance, overfitting and underfitting.

- To explain the benefits of regularization techniques (Lasso & Ridge) in getting optimal regression models with better performance parameters.
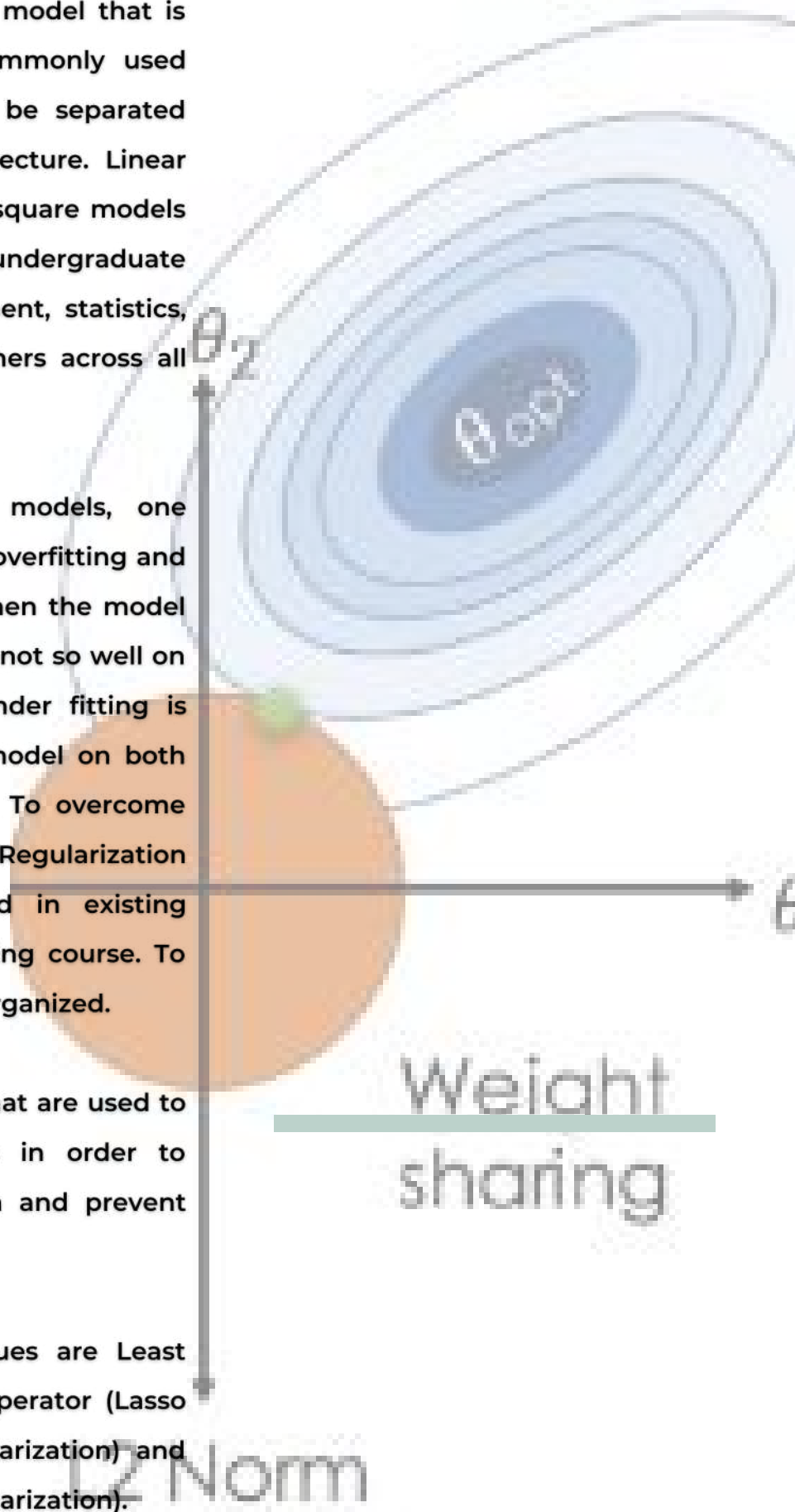
ABOUT

Linear regression is a type of linear model that is considered the most basic and commonly used predictive algorithm and it cannot be separated from its simple, yet effective architecture. Linear regression analysis or ordinary least square models are integral part of the syllabus of undergraduate and graduate program in management, statistics, engineering, social sciences, and others across all universities and institutions.

When it comes to training the models, one encounters two major problems, i.e., overfitting and under fitting. Overfitting happens when the model performs well on the training set but not so well on test data set (unseen data set). Under fitting is associated with poor performance model on both training data set and test data set. To overcome these weaknesses of OLS we use Regularization techniques. These are not covered in existing syllabus of Management & engineering course. To fill this gap, this workshop has been organized.
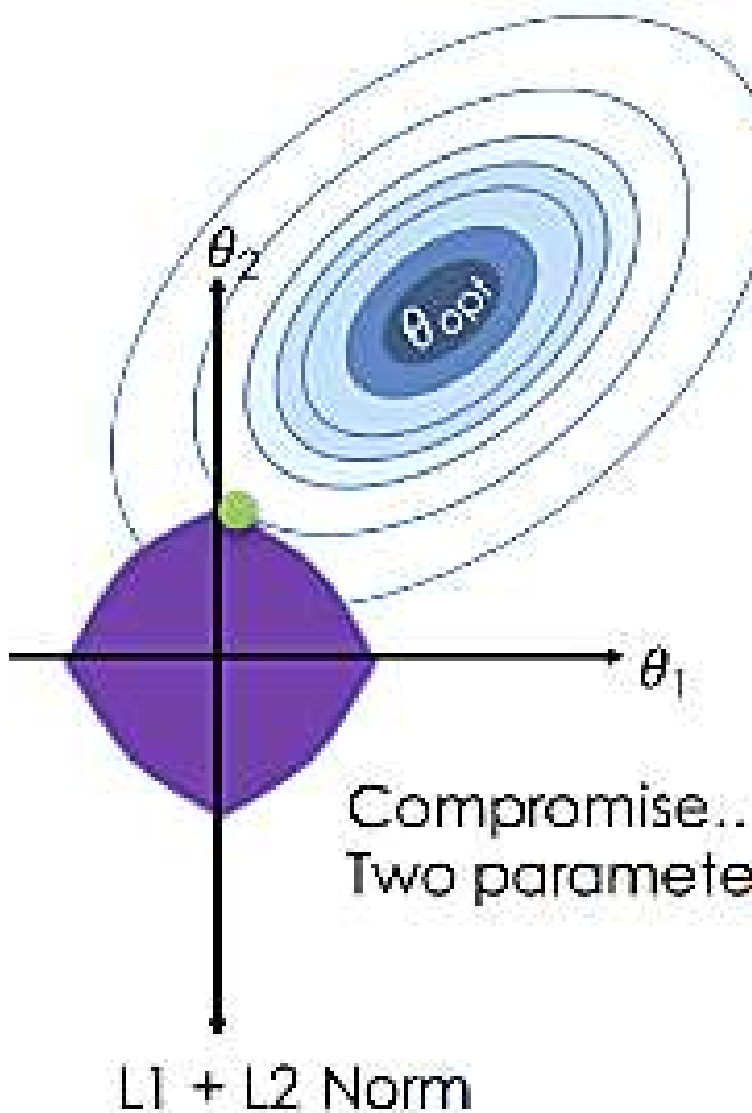
Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting.

Two popular regularization techniques are Least Absolute Shrinkage and Selection Operator (Lasso Regression) (also called as L1 Regularization) and Ridge Regression (also called L2 Regularization).

TOPICS TO BE COVERED:

LASSO & RIDGE REGRESSION

Ordinary least squares (OLS) models, bias, variance, overfitting & underfitting linked to OLS,

regularization techniques, Lasso regression & its underline concepts & theories with live examples in excel spread sheet, Ridge regression & its underline concepts & theories with live examples in excel spread sheet;

Detailed case in excel comparing OLS, Lasso & Ridge Regression.

FEE & PAYMENT - PEDAGOGY & MODE - TARGET GROUP

Fee of the Course: 500/-
Payment Mode: Internet Banking (IMPS/RTGS/NEFT)
Beneficiary Name: MVN University
Saving Bank Account Number: 0167 0001 0127 3059
IFSC Code: PUNB0016700
Bank Branch Address: Punjab National Bank (PNB), N.I.T. Faridabad
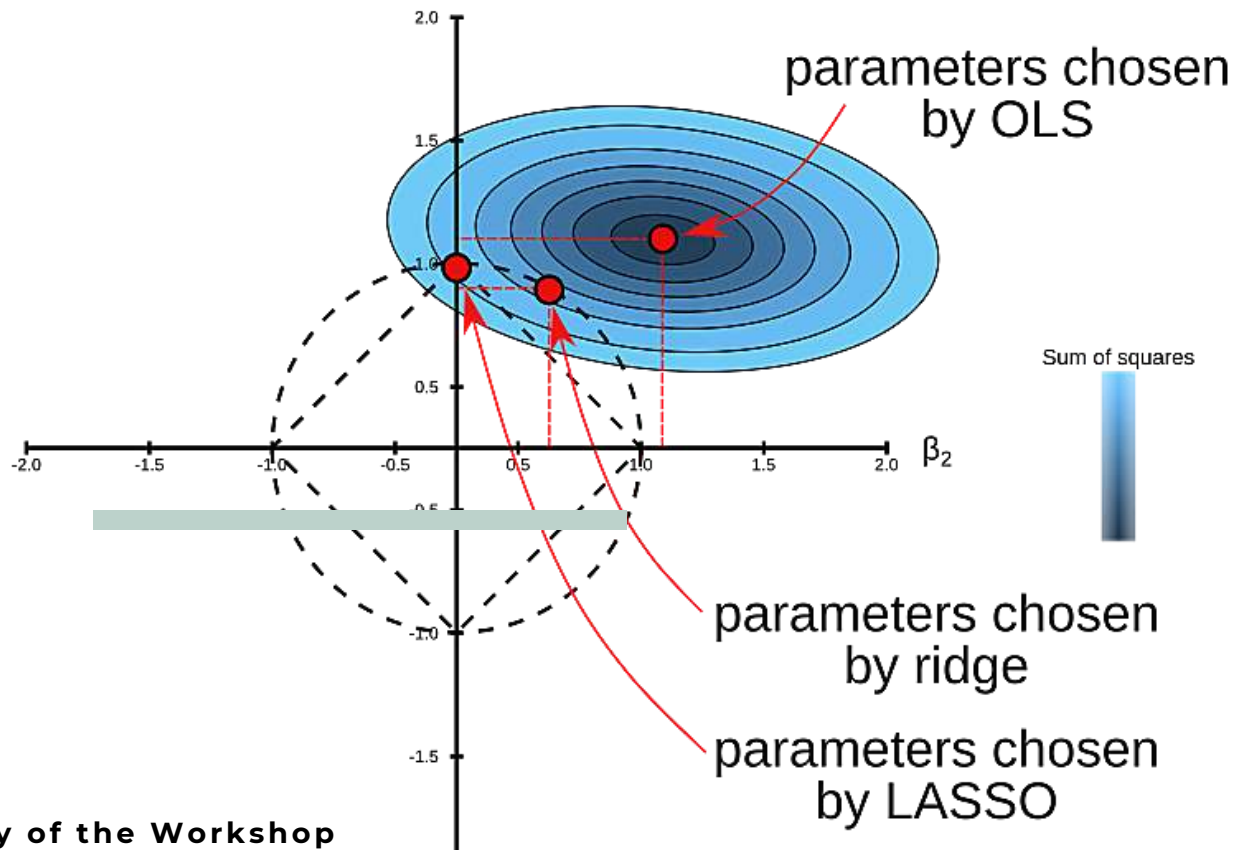
Pedagogy & Mode:

All topics will be discussed with numerical examples using Excel Spread Sheet. It is assumed that the participant will have good knowledge of spread sheet functions.

The workshop will be conducted in online mode

Target Group:

Working executive with 2 to 3-year work experience and presently involved in doing data analysis using OLS or other predictive models with excel spread sheets, Undergraduate and graduate students of universities & institution, and anyone interested in knowing predictive analytics, Research scholars of management, technology, agriculture and social sciences. The program is also open to the faculty members who are keen to learn the new concept so that student offering their courses of OLS are benefitted in turn.
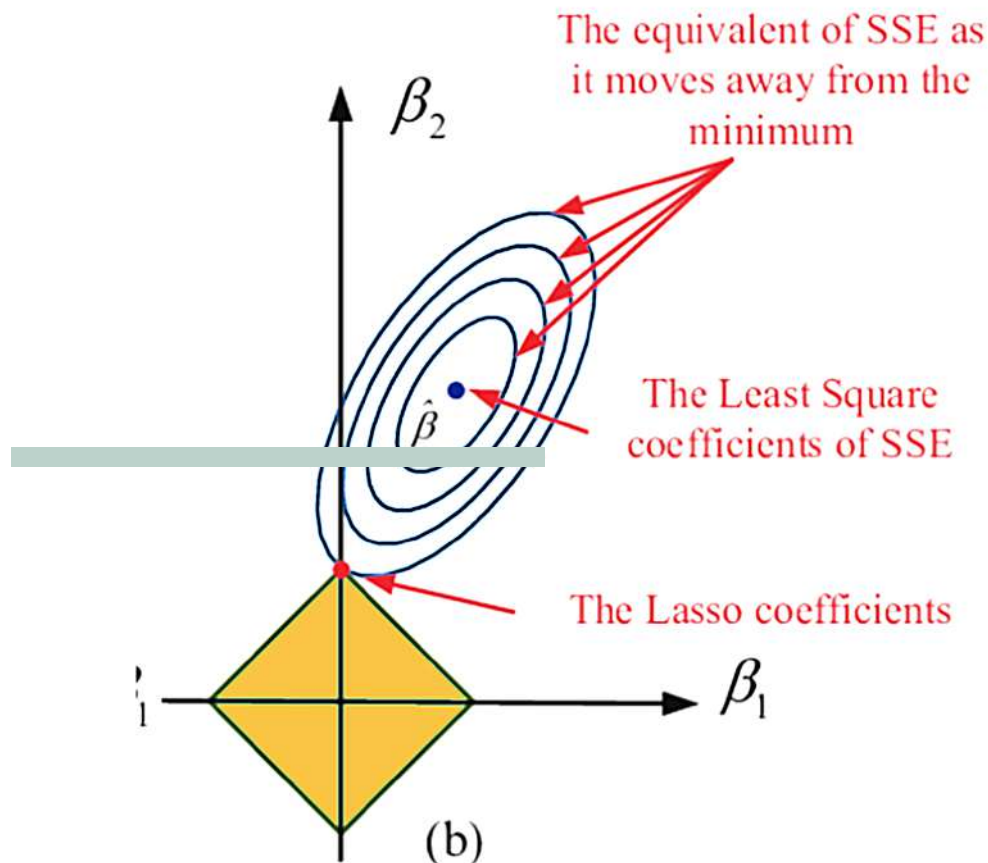
LASSO & RIDGE REGRESSION

Faculty of the Workshop

Prof. (Dr.) N P Singh is Pro-Vice Chancellor and Professor & Dean, School of Business Management & Commerce at MVN university, Palwal- 121105, Haryana, India. He received his M.Sc. from CS Meerut University, Meerut, India, M.S. from Birla Institute of Technology & Science, Pilani, India, and Ph.D. from CCS Haryana Agriculture University, Hisar, India.His research experience and interests are telecom Management, Business Intelligence- Data Mining & Analytics, Business Analytics, Enterprise Systems, Mergers and acquisitions, Merger & Requisitions, Mathematical Models for Management etc. He has published more than 105 research articles in National & International Journals. He has worked at CCS HAU, Hisar, (India), Institute of Rural Management, Anand (India), National Institute Financial Management, Faridabad (India), Management Development Institute (MDI), Gurugram (India), KIMEP University, Almaty (Kazakhstan). He has also taught at Indian Institute of Management, Sirmaur (India), Indian Institute of Management, Kashipur (India), & Lomonosov Moscow State University (Russian Federation). Hehas completed more than 50 consulting assignment for the organizations such as Asian Development Bank, World Bank Project of tertiary educations, Government of Sri Lanka, Ministry of MSME, (Government of India), Ministry of MSDE (Government of India), Ministry of Consumer Affairs (Government of India), Food Corporation of India, Ministry offood and civil supplies (Government of India), National Thermal Power Corporation, National AluminiumCorporation Limited, Security Printing & Minting Cooperation Limited, etc.

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LASSO & RIDGE REGRESSION

The equivalent of SSE as it moves away from the minimum

The Least Square coefficients of SSE
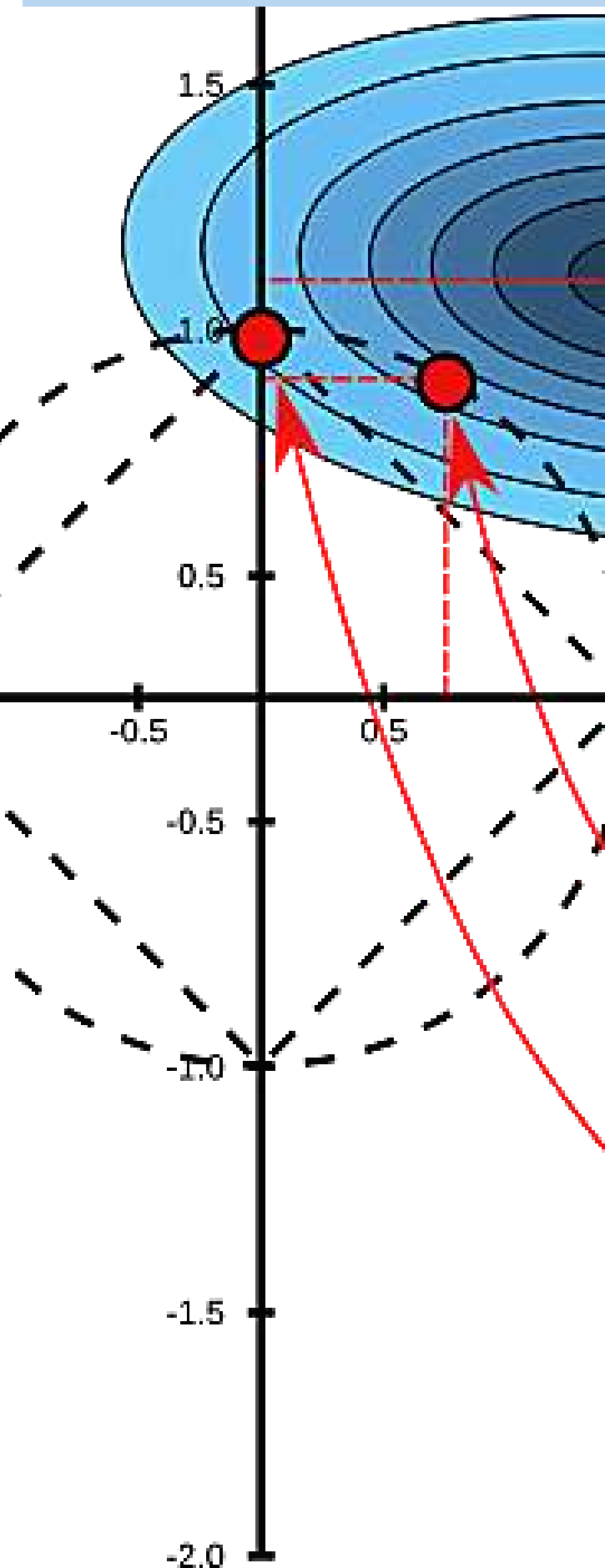
The Lasso coefficients

Faculty of the Workshop

Prof. Aradhana Sorout is presently working with School of Business Management & Commerce, MVN University. She received her B. Com (Hons.) from Delhi University, M. Com from MDU Rohtak. She is UGC NET qualified. Her areas of research interest are Management Foundation, Entrepreneurship, Banking & Insurance, Business Statistics, Digital Marketing & E-commerce, Economics
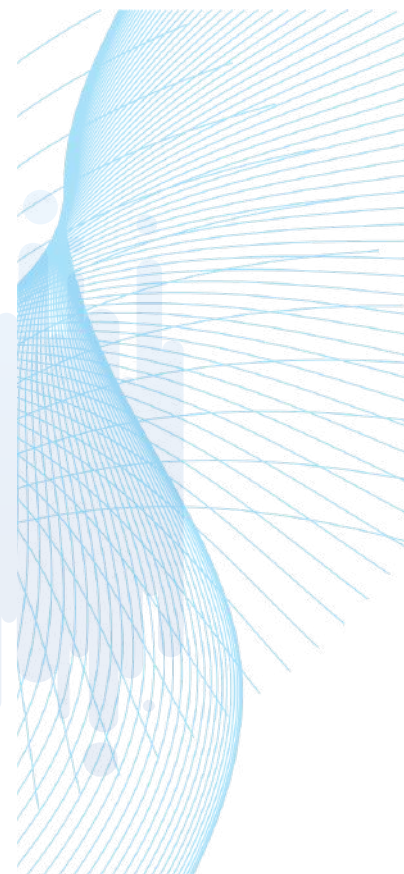
Prof. Ruby Mittal is presently working with School of Business Management & Commerce, MVN University. B. Com (Hons.), M. Com and MBA degrees to her credit. Her areas of research interest are Financial Management, Accounting, Business Management, Human Resource Management etc. She has 10 years of teaching experience.

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It is well equipped with the state- of - Art Facilities and infrastructure as well as qualified and dedicated faculty members in all discipline commensurate with excellence and high standards in all domain of the higher education. The University exhibits a vibrant and electrified atmosphere in engaging both teaching and learning. Advance curriculum, innovative pedagogy, institute/industry interactions, guidance from expert from academics and industry make the students at MVN university "industry ready"

LASSO & RIDGE REGRESSION

HOW TO REGISTER IN THE WORKSHOP?

After making payment of fee, fill the following form and sent via mail to dr.npsingh@mvn.edu.in or aradhana.sorout@mvn.edu.in or ruby.mittal@mvn.edu.in

Registration form

Name			
	First Name	Middle Name	Last Name.
Email Address			
Mobile Phone:			
Affiliation			
	Position	Name of the Organization	Address
Payment Details			
	Amount	Bank Name	Branch
Signature			

Certificate:

All participants will be given certificate of attendance by School of Business Management & Commerce, MVN University, Palwal- 121105, Haryana, India.

Contact Person:
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Mobile Phone: +91-9034882141

SCAN QR CODE FOR
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