

# International Lecture series

1 October 2023

Sunday

7.00 PM to 8.00 PM



<https://meet.google.com/thn-vsmm-bhp>

All are cordially invited

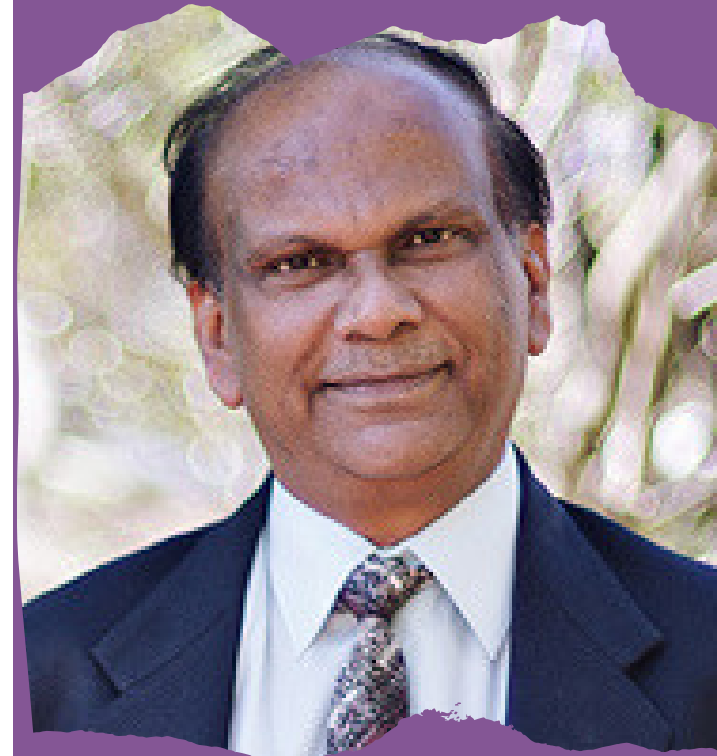


Mahatma Gandhi University, Kottayam

## Some Issues in Classification Problems with Applications in Medical Science

### Abstract

Developing an effective classification model in the medical and health sciences field is always challenging. It is also important to know which variables discriminate between two or more groups through variable importance analysis. In this seminar, we will discuss some cutting-edge recursive partitioning hybrid models based on statistical and machine-learning techniques. We will also discuss some issues in the classification problems like misclassification costs, class imbalance problems, optimum cut-off value, significant variables, etc. We will demonstrate the applications of classification problems in the context of Breast Cancer detection, Alzheimer's detection, Classifying Colorectal Tissues and Autoimmune Blistering disease.



Resource person

## Dr. Kuldeep Kumar

Kuldeep Kumar MSc, PhD(Kent), FSS, C.Stat  
Professor, Centre for Data Analytics

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[http://apps.bond.edu.au/staff/profile.asp?s\\_id=157](http://apps.bond.edu.au/staff/profile.asp?s_id=157)



# About the Speaker

## Professional Biography

Dr Kuldeep Kumar obtained PhD in Statistics from the University of Kent, Canterbury. He has taught at the Indian Institute of Management and National University of Singapore before joining Bond University in 1993. He is a Fellow of the Royal Statistical Society and a Chartered Statistician and currently he has been awarded Chartered Scientist by Science Council.

He has won the Commonwealth Scholarship Award, CEC Post Doctoral Fellowship Award and Young Statistician Award of the International Statistical Institute. He is also winner of the Bond-Oxford Fellowship in 1997 and Australia-Taiwan exchange program award in 1998 and 2007. He was winner of Vice Chancellor quality award for research supervision in 2006. He has twice (1998 and 2002) won the Teaching Excellence Award of the School of Information Technology and in 2005 he won Quality award for the post graduate supervision. Dr Kumar has also won Excellence in Research award of Faculty of Business in 2006.

Recipient of several grants Dr Kumar has published more than 100 research papers, 10 chapters in the book, 24 book reviews and edited four conference proceedings and one book. He has also edited a special issue of Managerial Finance. In the last 6 years he has successfully supervised 2 PhD students and several Masters Students. He is on the Editorial board of six International referred journals and has been invited speaker/chaired the session in several International Conferences.

DR Kuldeep Kumar who is winner of teaching excellence award has taught in Indian Institute of Management and National University of Singapore before joining Bond University. He has over 25 years of teaching experience and has taught various subjects.

## Awards

Vice Chancellor Quality award  
Teaching Excellence award  
Bond-Oxford Fellowship  
International Science Linkage award of AASc  
Professional admissions  
Chartered Statistician  
Chartered Scientist  
Fellow of Royal Statistical Society, etc.

## Qualifications

Doctor of Philosophy University of Kent, U.K.  
Bachelor of Science Lucknow University  
Master of Science Lucknow University, India

## Areas of Research

Fraud Detection	Gradient
Fraud	Boosting
Financial Fraud	Financial statement Fraud
Discriminant Analysis	Comparative Study
Prediction	Economic Forecasting
Financial Distress	Artificial Neural Network
Time Series Analysis	Statistics
Machine Learning	Survival Analysis
Business Failures	Time Series Data
Failure Prediction	Credit Rating
Decision Tree	Corporate Governance
Decision Making	Medical Research
Bankruptcy Prediction	Discriminant
Time Series Models	Health Care Fraud
Big Data	etc.