

SRI. BHAGAVATULA RAMAMURTHY & SMT. BHAGAVATULA SARADAMBA 17TH MEMORIAL LECTURE

Role of Statistics in the era of Data Science



Abstract

For over a decade now, Big Data, Analytics, Data-Science have been buzz words. We can often hear comments such as: With large amounts of data available, who needs Statistical Models and Statisticians! We can get all the answers using an AI/ML/Statistics engine.

We will illustrate, through historical examples, that while in 90% or even 95% of the problems that need some decision based on available data, the standard tools in Artificial Intelligence or Machine Learning (AIML) and Statistics will yield the best or nearly the best answer.

But the remaining 5% will need something more than just the tools- it will need to draw of Statistical ideas developed over the last century and more.

About the Speaker

Professor Rajeeva L. Karandikar obtained his Ph.D. at the Indian Statistical Institute, Kolkata in 1981. He spent some years as a Visiting Professor in USA and returned to the Indian Statistical Institute, Delhi in 1984 as an Associate Professor. He became a full Professor in 1989 and served as Head of Department of Mathematics and Statistics at the Institute and also as Head of the Delhi Centre of the Institute. He has been a Visiting Professor at several universities in USA and Europe. In 2006, he moved to Cranes Software International Limited as Executive Vice President - Analytics. In 2010, he returned to academics and became Distinguished Professor at the Chennai Mathematical Institute. He was the Director of Chennai Mathematical Institute, Chennai, India from 2011 till 2021.

Prof. Karandikar has made significant contributions to various areas including Stochastic Calculus, Filtering theory, Markov processes and martingale problems, limit theorems, Monte Carlo techniques, queuing theory, game theory, theory of option pricing. He has authored two books with Professor G. Kallianpur, one on filtering theory and one on option pricing. He is a Fellow of Indian National Science Academy and Indian Academy of sciences and has been awarded the Young Scientist Medal by Indian National Science Academy (1985), S. S. Bhatnagar prize by Council of Industrial and Scientific Research (1999), C. R. Rao National Award in Statistics by Government of India (2000) and P. C. Mahalanobis Memorial Medal awarded by Indian National Science Congress.

Prof. Karandikar has been an Editor of Sankhya and on the editorial boards of Annals of Probability and Journal of Statistical Planning and Inference.

Prof. Karandikar has been involved in numerous consultancy projects over the years. He has worked on development of proprietary Blockcipher algorithms for Indian defense services. Prof. Karandikar has been involved with opinion polls and exit polls in India since 1998. He has worked with India Today, Doordarshan, T V Today (Aaj Tak) during 1998-2005. From 2005, he has been associated with CNN-IBN for opinion polls and has been responsible for all poll projections made on CNN-IBN since the launch of the channel.

Date: February 23, 2023
Venue: C V Raman Auditorium
Time : 03:30 PM, IST

All are welcome