# INDIAN STATISTICAL INSTITUTE

## Special Talks on the Occasion of the 128th Birth Anniversary of Prasanta Chandra Mahalanobis

**June 29, 2021**
**Event Starts at 6.30 PM IST**
**(Link:** https://us02web.zoom.us/j/83413173675?pwd=aWtnY1U1b2lqU2Vud2hkSVZRdFNJUT09**)**

# Professor Raj Reddy

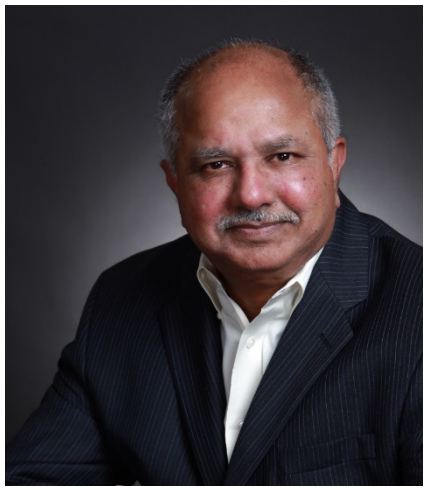
**University Professor of Computer Science and Robotics, and**
**Moza Bint Nasser Chair, School of Computer Science,**
**Carnegie Mellon University**

## Title: Future Role of Statistics in AI

**(6.45 PM - 7.15 PM IST)**

***Abstract*:** Early AI Research concentrated on Knowledge-Based Systems, with the assumption "Knowledge is God-Given Truth" and does not change. Even Einstein famously said that "God does not play Dice". Recent advances in AI have shown that all knowledge arises out of Learning and all learning is inherently Statistical. However, much of the recent work in Machine Learning has been focused on very large data sets (Big Data) and the use of unlimited computation, memory, and bandwidth. In this talk, we will present many different Strategies used by Human Beings that learn from "little data or no data" and propose that much needs to be done in Statistical Theory to account for such phenomena and derive new Machine Learning methods that facilitate low-cost incremental learning, reinforcement learning, and learning by discovery.

***Bio-sketch of the Speaker*:**



Raj Reddy is a University Professor of Computer Science and Robotics and Moza Bint Nasser Chair in the School of Computer Science at Carnegie Mellon University, where he served as the founding Director of the Robotics Institute and as the Dean of the School of Computer Science. He served as co-chair of the President's Information Technology Advisory Committee and has been awarded 11 honorary doctorates. Dr. Reddy is the recipient of the Legion of Honor, Padma Bhushan, Honda Prize, Vannevar Bush Award, and the 1994 Turing Award (jointly with Edward Feigenbaum) "for pioneering the design and construction of large scale artificial intelligence systems, demonstrating the practical importance and potential commercial impact of artificial intelligence technology."

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# Professor Dipak K. Dey

**Board of Trustees Distinguished Professor of Statistics,**
**University of Connecticut and Editor-in-Chief Sankhya**

## Title: On His 128th Birth Anniversary, Reminiscence of Prasanta Chandra Mahalanobis and His Impact in Today's Statistical Science
**(7.30 PM – 8.00 PM IST)**

***Abstract***: In this presentation, I will talk about some of my own reminiscence of P C Mahalanobis and his vast contributions in today's statistical science. In particular, I will talk about my days in ISI (1970 to 1975), how the external world perceives ISI today, and how this perception has changed over the years and some words of advice towards interdisciplinary statistical sciences.

***Short Biography***

Dipak K. Dey, is a Board of Trustees Distinguished Professor of Statistics, at the University of Connecticut. He received his Ph.D. in Statistics from Purdue University in 1980. He is an elected fellow of the American Association for the Advancement of Science, American Statistical Association, the Institute of Mathematical Statistics, International Society of Bayesian Analysis, Connecticut Academy of Arts and Sciences, Connecticut Academy of Science and Engineering and an elected member of the International Statistical Institute. Some of the awards and honors Dey has received include the Outstanding Alumni award from the Department of Statistics, Purdue University, Distinguished Alumni Award from College of Science, Purdue University, the first Marth award for mentorship from the University of Connecticut, the Research Excellence Award from the University of Connecticut Alumni Association, 2005 and the Research Excellence Award from the American Association of the University Professor, University of Connecticut. He has published ten books/edited volumes and over 300 refereed journal articles and book chapters in various statistical and interdisciplinary journals. His research area includes, statistical methodology and applications involving categorical and longitudinal data, classification and clustering, spatio-temporal and survival data analysis. Areas of his research applications include Biometry, Bioinformatics, Data mining, Environmetrics, Econometrics, Image processing, Morphometry, and Population Genetics. He has supervised more than 40 Ph.D. students and has presented more than 200 talks at professional meetings and various departments. He has been a visiting professor at Macquire University, Sydney, Australia, Pontificia Universidad de Catolica, Santiago, Chile, University of Sao Paulo, Sao Paulo, Brazil, University of British Columbia, Vancouver, Canada, Indian Statistical Institute, Calcutta and Delhi, India, the National Institutes of Standards and Technology, Gaithersburg, MD and Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, NC.