Citation

Prof. Arni S. R. Srinivasa Rao

Fellow of ISPS

Arni S. R. Srinivasa Rao is a Professor and Director of the Laboratory for Theory and Mathematical Modeling, at Medical College of Georgia, Augusta, USA. Until 2012, he held a permanent faculty position at Indian Statistical Institute, Kolkata. More than 700 instances his science was covered in the media. His work directly impacted research in Artificial Intelligence, medicine, public health, mathematics, poultry farmers and civil and computer engineering sciences. He conducted research and/or taught at several institutions, such as the Indian Statistical Institute, the Indian Institute of Science, Hiroshima University, and the University of Oxford. Dr. Rao has been expertizing in theoretical and translational sciences. He has been experienced in developing real world technology and applications to society. Dr. Rao delivered the John H. Conway Lecture in March 2022. He was the plenary speaker for National Statistics Day Celebrations 2023 organized by NIMS, ICMR, New Delhi and Chief Guest for the National Statistics Day Celebrations 2022 at the C.R. Rao Institute, Hyderabad, India and plenary speaker for the National Statistics Day Celebrations 2022 at ICMR, New Delhi. He gave more than 55 invited/plenary/seminars during past five years. In 2022, he was a GIAN international expert to deliver lecture series on the Stochastic Process at MDU Rohtak, India.

Dr. Rao's mathematical models assisted in the national AIDS control planning in India. His AIDS modeling that he led in Oxford was included in REF2014 round in the U.K. He served and is currently on various committees and consultants on mathematical modeling, public health, and artificial intelligence (AI). He proposed and developed the first AI based model in the world in February 2020 to identify COVID-19 cases using mobile-based Apps. That work later inspired several such Apps all over the world during the COVID-19 pandemic including Arogya setu app.

He edited ten volumes of Handbook of Statistics, Elsevier jointly with legendary statistician C.R. Rao. He guest edited special issue in 2022 on probability and statistics to oldest journal from modern India, Journal of Indian Institute of Science (Springer). He was also in editorial boards of other journals, and special issue editor of other major journals including Complex Analysis and Operator Theory (Springer) to be released in 2024. Dr. Rao is also currently serving as a member of AI-enabled Technologies & Systems Domain Expert Group, constituted in 2021 by CSIR, Government of India. He is also serving as a member of Academic sub-committee of KAMP which is an Initiative and Knowledge Alliance of CSIR-NIScPR and industrial partner M/S Nysa Communications Pvt. Ltd.

Arni's other noted contributions include Rao's Partition Theorem in Populations, multilevel contours using 2 Markov chains in complex bundles, A major theorem in stationary population models (Rao-Carey Theorem), blockchain technology in disease detection, and exact deep learning machines (EDLMs). He had published in several top journals such as Notices of American Mathematical Society, The Lancet, Significance, Journal of Mathematical Analysis and Applications (Elsevier), Bulletin of Mathematical Biology (Springer), Journal of Mathematical Biology (Springer), Journal of Theoretical Biology (Elsevier), Mathematical Biosciences (Elsevier), Mathematical Methods in Applied Sciences (Wiley), PNAS, etc. In 2023, he was the program chair of a high-profile mathematics meetings on PDE and Complex Analysis that took place in St. Louis, MO. In 2020, he was Chair and Organizer of a Special Invited Session in JSM2020. In 2015 he was co-organizer and scientific committee of Annual Meetings of the Society of Mathematical Biology held in Atlanta. Dr. Arni received funds from NSF, NIH, BBSRC, DFID U.K.

The ISPS is Privileged to honour and confer the **Fellow of ISPS** award to **Dr. Arni S. R. Srinivasa Rao** a renowned scientist, an inspiring teacher, an able researcher, a profound Statistician and a great humanist on the eve of Prof G. Sankarnarayanan birth centenary celebrations jointly organized by Indian Society for Probability and Statistics (ISPS) and Depat of Statistics, Sri Padmavati Mahila Visvavidyalayam, Tirupati, INDIA on Monday, the 19th February 2024.

Indian Society for Probability and Statistics (ISPS)

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