Arni Rao, PhD

Director and Professor at Augusta University

Augusta, GA, US

Director of the Laboratory for Theory and Mathematical Modeling and professor at the Medical College of Georgia at Augusta University.

Biography

Dr. Rao is the director of the Laboratory for Theory and Mathematical Modeling and professor at the Medical College of Georgia at Augusta University. Until 2012, he held a permanent faculty position at Indian Statistical Institute, Kolkata. He has taught and/or performed research at several premier institutions including, the Indian Statistical Institute (ISI), University of Oxford (Oxford, UK), the Indian Institute of Science (Bengaluru, India) and the University of Guelph, (Guelph, Canada) prior to his arrival at Augusta University. Dr. Rao developed the first AI model in the world for the identification of COVID-19 through apps. His recent works on partition theorem in populations, Chicken-walk models, Rao's Partition Theorem in Populations, and Rao-Carey Fundamental Theorem in stationary populations, Multilevel Contours, and Bundles of Complex Planes are well received. His recent EDLM (Exact Deep Learning Machines) are anticipated as a game changer in AI related experiments.

Areas of Expertise

Mathematical Analyses, Artifical Intelligence, Complex Dynamics,, Infectious Disease

Affiliations

Handbook of Statistics (Elsevier/North-Holland, Amsterdam), Demography India, Complex Analysis and Operator Theory (CAOT), Springer, Handbook of Statistics, Elsevier, Demography, Duke University Press, Journal of Indian Institute of Science (JIISc), Springer, Journal of the Indian Society for Probability and Statistics, Springer, Journal of Mathematical Analysis and Applications (JMAA), Elsevier

Education

Deemed University, Internation
Doctoral degree Demography and Population Stud

Andhra University
Master's degree Pre-Medicine/Pre-Medical Studi

Accomplishments

Invited Speaker for American Mathematical Society (January 2024)
Invited Speaker for American Mathematical Society Special Session at The Joint Mathematics Meetings in San Francisco.

Invited Speaker for American Mathematical Society (January 2023)
Invited to be the speaker for the Special Session at The Joint Mathematics Meetings in Boston.

GIAN, MED, Govt of India, External Foreign Faculty lecturer (June 2022)
Delivered a presentation hosted by the Department of Education in Science and Mathematics within the National Council of Educational Research and Training of India. The presentation, ?United Nation?s Annual Country-Wise Human Development Index,? was part of the group?s National Student Outreach Program and the Pravasi Bharatiya Academic and Scientific Sampark?s series ?Integrating Indian Diaspora with the Motherland.?

John H Conway Invited Lecture Speaker (2022)
John Conway Spirited Seminar series started in 2021 by the Department of Mathematics at Syed Babar Ali School of Science and Engineering-LUMS, Pakistan. These seminars allow mathematicians from all over the World to indulge in productive discussions on recently evolved theories, expositions, and research.

member of AI-enabled Technologies & Systems Domain Expert Group (DEG) (2001)
Currently serving as a member of AI-enabled Technologies & Systems Domain Expert Group (DEG), constituted in 2021 by The Council of Scientific & Industrial Research (CSIR), Government of India.

ISCB23 Conference Awards for Scientists 2002, Dijon, France
An award presented by The International Society for Clinical Biostatistics.

Heiwa Nakajima Foundation Award, Tokyo
An awared presented by Heiwa Nakajima Foundation

Gold Medal for M.Sc Topper
An award presented by Andhra University