

Seminar Announcement

Speaker:

Prof. Arni S.R. Srinivasa Rao, Director of the Laboratory for Theory and Mathematical Modelling at Medical College of Georgia, Augusta, USA.

Title:

Exact Deep Learning Machines

Abstract:

Incorporating actual intelligence into the machines and making them think and perform like humans is impossible. In this talk, a new kind of machine called the EDLM (exact deep learning machine) is introduced. Such EDLMs can achieve the target with probability one and could be the best alternative for originally designed artificial intelligence models of the mid-20th century by Alan Turing and others that have so far not seen reality. In the current context, achieving a target is defined as detecting a given object accurately.

Brief Bio:

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. In 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. He taught subjects such as, real analysis, complex analysis, differential equations, Stochastic Processes, etc. Dr. Rao's mathematical models assisted in the national AIDS control planning in India. He proposed and developed the first artificial intelligence (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 the Arogya setu app. Among other committees, Dr. Rao is also currently serving as a member of the AI-enabled Technologies & Systems Domain Expert Group (DEG), constituted in 2021 by The Council of Scientific & Industrial Research (CSIR), Government of India. He is an elected Fellow of the Indian Society for Mathematical Modeling.