





The Institute of Electrical and Electronics Engineers, Inc

Computational Intelligence Society Chapter, Hyderabad

In Association with Department of CSE, JNTUH College of Engineering, Hyderabad

Presents Technical Talk on

Data Analytics in Climate and Environmental Modeling By

Dr. Santonu Goswami National Remote Sensing Centre (ISRO), Hyderabad

Date & Time :

02 September 2016 , 2:30 PM to 4:00 PM

Location:

Seminar Hall, Department of CSE, JNTUH College of Engineering, Kukatpally, Hyderabad https://goo.gl/maps/dhavTi74PJD2

Registrations: Mail to <u>naresh.k.m@ieee.org</u> For queries please contact:

IEEE CIS Chapter Leadership

Naresh M, Chair, naresh.k.m@ieee.org , Mobile : 9392431163

Swarna, Vice-Chair, swarnabai.arniker.dr@ieee.org

Hitendra, Secretary/Treasurer, <u>hitendrasarma@ieee.org</u> Mobile : 9493239032

JNTUH, College of Engineering Dr. Kavitha, Department of CSE athotakavitha@jntuh.ac.in

Abstract

Two of the pressing challenges of recent times are Climate Change and Rapid Urbanization of the world. Within last century, Earth's climate has warmed up exponentially due to increase in atmospheric concentration of greenhouse gases. This is causing a range of impacts such as variability in weather patterns, increase in extreme events etc. On the other hand, the urban areas of the world are rapidly expanding. By 2050, about 70% of the world's population are anticipated to live in urban areas. To understand these phenomena, data are being collected on daily/hourly basis from multiple sensors on-board satellites, ground and oceans, resulting in deluge of data. To enhance our understanding of these issues and towards evolving sustainable solutions requires development of innovative statistical and data mining techniques. This talk draws examples from some innovative observational and analytical approaches employed in Climate Change and Urban studies that I was involved in.

About the Speaker

Dr. Santonu Goswami is a Scientist within the Earth and Climate Sciences area in the National Remote Sensing Centre, Balanagar, Hyderbad. He holds a PhD from University of Texas at El Paso in interdisciplinary environmental science and engineering. Dr. Goswami's research focuses on understanding climate change impacts on vulnerable ecosystems by adopting methods in data analytics, data synthesis, GIS and remote sensing and sensor networks. Within the last ten years he worked in diverse interdisciplinary projects in environmental science and engineering using advanced sensing technologies, spatial analysis and statistical methods. His research has taken him to the extreme wilderness of high Arctic, the Antarctica and to the banks of Hudson River in the New York City.