

O'DONNELL DATA SCIENCE & RESEARCH COMPUTING INSTITUTE SEMINAR

DR. BUDHU BHADURI

ABSTRACT & BIO >>

GeoAI, HPC, and Mapping for the Nation's Energy Mission: An Oak Ridge Experience

Oak Ridge National Laboratory (ORNL) has been a pioneer in embracing geography as a key disciplinary competency and, since the late 1960s, has focused on developing novel approaches to geographic data analysis and utilizing emerging computing platforms. With increasing spatial and temporal resolutions of geographic data including satellite imagery, there is a compelling opportunity to converge AI/machine learning, high-performance computing, and space-based and terrestrial data sources to answer new, local to planet-scale questions about the world we live in. As a world leader in high performance computing (HPC), ORNL has coupled HPC with a breadth of geospatial science capabilities to address demanding challenges in geospatial science to both mapping and human dynamics. Drawing from our experience at Oak Ridge National Laboratory providing scientific and programmatic support for federal agencies, this presentation will highlight progress and challenges of some of the emerging data analysis and computational approaches, including AI/ML and high-performance computing.



Dr. Budhu Bhaduri


Director, Geospatial Science and Human Security Division, Oak Ridge National Laboratory

BIOGRAPHY >>


Dr. Budhendra "Budhu" Bhaduri is a Corporate Research Fellow and the director of the Geospatial Science and Human Security Division at Oak Ridge National Laboratory (ORNL). In that capacity he is responsible for a research portfolio focusing on novel implementation of geospatial science and technology across energy, environment, and national security missions. His research has had global impact and has benefited the U.S. federal missions, international organizations, and private foundations. He has served on the Geographical and Geospatial Sciences Committee of the national academies and is a Fellow of the American Association for the Advancement of Science and the American Association of Geographers.

EVENT INFO >>

 Wednesday, March 6, 2024

 3:00 - 4:00 p.m.

 Light Refreshments Provided

 Hughes Trigg Student Center
Room 220BC
3140 Dyer St.
Dallas, TX 75205

