



DATA SCIENCE INSTITUTE



Thursday April 29th, 4:30–5:30 pm via [Zoom \(click to join\)](#)

Interview: Dr. Subit Chakrabarti, Team Lead, Remote Sensing and Geoscience @ Indigo



Subit is a data scientist with an extensive background in the development and application of machine learning algorithms to large scale earth imagery from satellites, unmanned aerial vehicles and aircraft. He leads the remote sensing and geospatial data science team at Indigo Agriculture—an interdisciplinary team of scientists and engineers working to build models at scale that can detect causal relationships among key agricultural drivers, practices and outcomes in the United States, Brazil, Argentina, and the European Union. Prior to Indigo, he was a data scientist at Telluslabs where he developed computer vision techniques for mapping crop species and crop yield in North and South America using satellite imagery.

Subit received the Ph.D. degree in Electrical and Computer Engineering from the University of Florida and a B.Tech in Electronics Engineering from the West Bengal University of Technology in India.

High Performance Computing: Allocation, Jobs, Scheduling, and Front-End

— Matt Dwyer, U.S. Army CCDC, Army Research Laboratory & CIS, UD

This talk will cover a brief introduction to the Caviness HPC environment including how to allocate interactive and batch workloads, executing distributed workloads using MPI, and how to configure port forwarding to connect to front-end applications running on compute nodes.



Matt received the M.S. in Computer Science with a Concentration in Data Science from Colorado Technical University and a B.S. in Computer Science from Lynchburg College. Alongside his career as a computer scientist for CCDC U.S. Army Research Laboratory, Matt is currently in the first year of a Ph.D. program in the Department of Computer and Information Sciences at the University of Delaware. He has a broad area of focus that includes distributed systems, virtualization, data science, machine learning, and blockchain. Matt has over 5 years of career experience with High Performance Computing systems at Los Alamos National Laboratory (DoE) and the CCDC U.S. Army Research Laboratory (DoD). He has extensive experience using a variety of distributed workload management technologies on HPC systems including PBS, LSF, and Slurm.

Thursday May 6th, 4:30–5:30

[Interview with a Data Scientist, TBD]

“Data Science opportunities in the evolution of the Electric Grid” — Sergio Sepúlveda, Institute of Energy Conversion | ECE, UD

Our current electric grid was designed for large and centralized power generation that carries power over long distances to the final users. With the rapid growth of Distributed Energy Resources, such as Solar PV, wind Power, and Battery Storage, there are new challenges and opportunities to balance generation and demand. I will introduce the concept of microgrids and show some current and future applications where data science will enable services that will help to make the electric grid more reliable, resilient and fault-tolerant.



Sergio Sepúlveda is a fourth year Ph.D. student in the Department of Electrical and Computer Engineering at the University of Delaware. He is working on simulation, modeling, and analysis of Microgrids based on renewable energy under the guidance of his advisor Dr. Steven Hegedus. Sergio is also an Assistant Professor in the Department of Electricity and Electronics at Francisco de Paula Santander University, in Cúcuta, Colombia. Outside academia, Sergio enjoys playing sports (basketball, volleyball, and racquetball), learning and cooking new recipes, and gardening.