



# Remote-Sensing Big Data and its Applications in Agricultural Decisions

**Speaker:** Dr. Liping Di  
 Professor and Director, Center for Spatial Information Science and Systems (CSISS)  
 George Mason University

**Date/Time:** Friday, March 8, 2:00 pm

**Location:** University Museum Auditorium (Faner Hall 1526)

**Abstract:** Agro-geoinformation is critical for research and decision making in agricultural sustainability, food security, bioenergy, land use management, rural economy, etc. Remote sensing is one of the main methods to collect agro-geoinformation and is the cornerstone in agro-geoinformatics research and applications. With the rapid advances in space-born, air-born, close-range and on-the-go remote sensing platforms, innovative sensors, information extraction algorithms, and data processing technologies, the agro-geoinformatic research and applications are booming in recent years, especially in the areas of handling digital agro-geoinformation, such as collecting, processing, storing, archiving, preserving, retrieving, transmitting, accessing, visualizing, analyzing, synthesizing, presenting, modeling with, and disseminating agro-geoinformation.

In this talk we present an overview of remote sensing for agro-geoinformatics applications. In particular, we will highlight how to resolve the ‘big data’ challenges.

## **Lunch with Speaker [limited seats, need reservation]:**

Noon – 1:00 pm Fri Mar 8. DeJarnett American Heritage Room (R.S.V.P. contact [Ruopu.Li@siu.edu](mailto:Ruopu.Li@siu.edu))

**Workshop:** 9:30 – 11:30 am Fri Mar 8. Morris Library Room 752-754. **[Bring your own laptop]**

**Discussion:** 3:30 – 5:00 pm Fri Mar 8. University Museum Auditorium

# Biography of Dr. Liping Di



Prof. Liping Di is internationally known for his extraordinary contributions to the geospatial information science/geoinformatics, especially to the development of geospatial interoperability technology and the federal, national, and international geographic information and remote sensing standards. He is the pioneer in the development of web-based, advanced, distributed geospatial systems and tools. He is an Earth System scientist engaging in the study of land surface processes and dynamics. Dr. Di has engaged in the geoinformatics and Earth system research for more than thirty years and has published over 450 publications. He has received over \$57 million research grants as the principal investigator from federal agencies (NASA, NOAA, NSF, USGS, FGDC, DOE, NGA, USDA), international organizations (APN, OGC), and private companies.

Dr. Di is the founder and director of Center for Spatial Information Science and Systems (CSISS), a university-wide research center at George Mason University, one of the leading research centers in the world in the areas of geospatial information science, technology and standards. Dr. Di's Research Interests: Geospatial Data and Information Systems and Standards; Information Interoperability and Sharing; Geospatial Web services; Earth Observation Sensor Web; Architecture of Distributed Systems for Data, Information, and Knowledge Services; Agro-geoinformatics; Remote Sensing; Global Environment Change; Land Surface Processes.

## Financial Support for this Big Data Series Made Available by:

Sigma Xi Science, Mathematics, Engineering Education (SMEE) Program  
SIUC Office of Vice Chancellor for Research (OVCR)  
Department of Geography & Environmental Resources  
Department of Plant Biology  
Zoology Graduate Students Association  
SIUC Chapter of Sigma Xi

### Questions: contact

Dr. Jane Geisler-Lee [geislerlee@siu.edu](mailto:geislerlee@siu.edu)  
Dr. Justin Schoof [jschoof@siu.edu](mailto:jschoof@siu.edu)  
Dr. Wesley Calvert [wcalvert@siu.edu](mailto:wcalvert@siu.edu)  
Dr. Dunren Che [dche@cs.siu.edu](mailto:dche@cs.siu.edu)

