

2021 GIS and Remote Sensing Research Symposium



April 30, 2021 | 1:30 – 4:30ish pm

Hosted by the Virginia Tech Office of GIS and Remote Sensing

Symposium registration is free, but required. Registration is available (through April 28th) at

<https://tinyurl.com/VTOGIS>

Program

1:30 – 1:40 **Welcome**

1:40 – 2:10 **Commercial, Space-Based Remote Sensing: From Science to Business**
Wesley Lawson, Vice President and Chief Technology Officer for the Mission Solutions Operation (MSO) at Leidos.

2:10 – 2:40 **Comparing Machine Learning Techniques for Estimating Soil Moisture Content Using Landsat and Sentinel Satellite Imagery**
Sanaz Shafian, Ph.D. Assistant Professor, Virginia Tech School of Plant and Environmental Sciences. Blacksburg, VA.

2:45 – 4:30ish **Student Poster Presentation Session**
Join us for a student poster presentation! We have over 25 student posters (representing both undergraduate and graduate) on display. Each poster will be introduced by student authors through a 3-4 minute lightning presentation format.

Student Poster Presentation Awards Provided by:



www.virginiaview.net

2021 GIS and Remote Sensing Research Symposium Speaker Biographies

Commercial, Space-Based Remote Sensing: From Science to Business

Wesley Lawson, Vice President and Chief Technology Officer for the Mission Solutions Operation (MSO) at Leidos.

Mr. Lawson is currently the Vice President and Chief Technology Officer for the Mission Solutions Operation (MSO) at Leidos. He has a BS Electrical Engineering from Virginia Tech and MS Systems Engineering from George Washington University with over 20 years of experience working in the commercial and federal sectors to include international commercial and government projects. In his current role, Mr. Lawson leads the technology investments and strategy for MSO and works across the corporation on topics such as National Security space strategy and sensor system development in multiple domains. Mr Lawson joined Leidos as part of the merger with the Lockheed Martin IS&GS Business Unit where he held various roles typically focused on technical program execution and business and technology strategy.



Comparing Machine Learning Techniques for Estimating Soil Moisture Content Using Landsat and Sentinel Satellite Imagery

Sanaz Shafian, Ph.D., Assistant Professor, Virginia Tech School of Plant and Environmental Sciences.

Sanaz is an assistant professor in school of plant and environmental sciences, as well as an affiliated faculty of CAIA at the Virginia Tech. Before her faculty assignment at the Tech, she was an assistant professor in the Department of Soil and water systems at the University of Idaho. She holds a doctorate in plant and soil sciences from Texas Tech University and master's and bachelor's degrees in Remote Sensing and Civil Eng from the Khaje Nasir Toosi University, Iran, respectively. She has a broad knowledge base and practical experience in various aspects of Remote sensing and Precision agriculture. Her considerable portfolio of academic papers, conference presentations, reviewer invitations by scholarly journals evidently indicate her wide recognition within the scientific sphere.

