

Ground System Architectures Workshop

Pete Doucette

Pete is the Director of the Earth Resources and Observation Science (EROS) Center in Sioux Falls, South Dakota. EROS is part of the U.S. Geological Survey (USGS) in the U.S. Department of Interior (DOI). The EROS mission is to develop and operate Landsat satellites; manage national and global land remote sensing data from a variety of sensor types; and to conduct remote sensing research and development (R&D) to understand our changing planet. The Sustainable Land Imaging collaboration between NASA and DOI/USGS enables the long-term development of a spaceborne system that can provide users worldwide with high-quality observations that are compatible with the existing Landsat record dating back to 1972.

Pete began his career in the geospatial sciences in 1990, which included positions with the federal government and the private sector. He's conducted R&D in remote sensing, image processing, machine learning with neural networks, spatial analysis, and geostatistics. Pete's vision is to advance the use of geospatial data science to better model and predict changes to the Earth's land surface through time, using multimodal Earth observation data with analytical and deep learning methods. He's a leading strategist for the development of data driven A.I. approaches across a range of domains that include satellite fight and ground system operations, data management, and cognitive automation. He holds a Ph.D. in Spatial Information Engineering from the University of Maine, a M.S. in Civil Engineering (Geomatics) from Purdue University, and a B.S. in Physics from the University of Maine.