School of Earth and Environmental Sciences Colloquium Series

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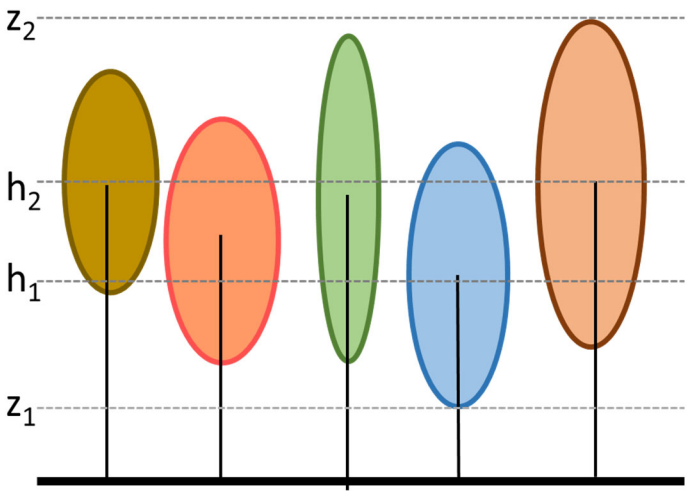
Navigating the Challenges of Applying Machine Learning and Deep Learning in Remote Sensing for Earth Property Mapping: Two Case Studies

Wednesday, Oct. 4th
12:15-1:30 PM,
Science Bldg. C-207
Zoom ID:
820 5441 6677
Passcode: 895367



Satellite remote sensing technology provides a global and high-temporal-scale view of Earth, albeit through an indirect approach. To bridge the gap between satellite observations and Earth property measurements, machine learning and deep learning techniques are often employed. This presentation explores the obstacles encountered in the application of ML/DL to derive Earth surface properties from remote sensing data. Two case studies are showcased: one focusing on tree species classification in the US using hyperspectral imagery, and the other leveraging multispectral data and lidar-derived vegetation height data to map bird-friendly coffee farms in Central America through machine learning. Join us as we delve into these challenges and innovative solutions in the realm of remote sensing.