

PROJECT PORTFOLIO



Data Commons Program

Earth Data Store

This project will collect, standardize, and secure data from multiple sources such as earth observation satellite imagery and environmental sensors, for predictive purposes. For example, better predicting where wildfires are most likely to occur and finding the most environmentally sensitive manner in which to construct a natural resource project. Through interactive visual maps and running deep learning algorithms, resource managers will be able to better observe and protect remote areas.

Consortium



Fresh Water Data Commons

Water is a precious resource under significant pressure globally as a result of climate change, and human and industrial activities. The development of a platform integrating various sources of data to better understand ecosystem health, specifically of major water systems such as the Columbia Basin, will better inform water use, conservation, and management.

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Precision Agriculture to Improve Crop Health

In the face of climate change, increasing threats from pests and pathogens are impacting our environment and food security. This project will develop new pest and pathogen controls through the application of computational biochemistry, genomics, machine learning, and robotics, to manage disease in field crops, minimize the use of pesticides, and secure export markets.



Forest Machine Connectivity

This project will use an Industrial Internet of Things (IIoT) network of 'smart' devices to monitor, collect, exchange, analyze, and deliver valuable insights to contractors, machine operators, and managers in the timber harvesting supply chain. This data will improve productivity, efficiency, and competitiveness of Canada's wood products manufacturing industry.

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