CosmiQ Works is an applied research lab at IQT focused on developing, prototyping, and evaluating emerging open source artificial intelligence capabilities for geospatial use cases.

Interested in collaborating with us?
CosmiqWorks@iqt.org | cosmiqworks.org
SpaceNet® 4 Challenge
SpaceNet 4 tasked participants to extract building footprints from varying levels of high-resolution off-nadir imagery.

SpaceNet 5® Challenge
SpaceNet 5 focuses on extracting roads, routes, and travel times from high-resolution satellite imagery.

RarePlanes Simulated Data
Explores whether if augmenting training data with synthetic data increases the performance of AI models to detect and classify aircraft types or models.

Super Resolution Trade Study
Analyzes how imagery super-resolution methods impact the performance of object detection models applied against satellite imagery.

Model Robustness Study
Quantifies how much training data is necessary to achieve a certain level of deep learning model performance.

Solaris Software Suite
An open source software python suite designed to support the entire geospatial machine learning workflow, from dataset preprocessing to final testing and evaluation.