3D semantic labelling of colored LiDAR point cloud using supervoxels based segmentation approach.

Email: amramiya@gmail.com / ramiya@iist.ac.in , rao@iist.ac.in

Authors: Anandakumar M Ramiya , Rama Rao Nidamanuri, Ramakrishnan Krishnan Indian Institute of Space Science and Technology, India

Methodology

Steps:

- 1) Integration of digital aerial images(ortho photos) with the LiDAR point cloud data to produce a coloured point cloud.
- 2) Supervoxels based segmentation was used to segment the point cloud data resulting in 3D segments.
- 3) Spectral and geometrical features are extracted from the 3D segments created.
- 4) The features are classified using machine learning algorithms into 6 classes.
- 5) The feature labels were transferred to the points within the each segment.