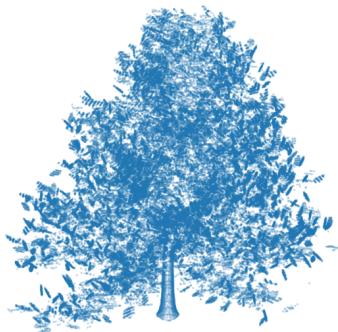# tls_lidar_leaf_counting

This repository contains code and data for leaf counting and area estimation using 3D point cloud data obtained from terrestrial laser scanning (TLS) of trees. The project focuses on processing the point cloud data to identify and count leaves, as well as estimate their surface area.

For reading report, please refer to Leaf Counting and Area Estimation using 3D Point Cloud Data.ipynb or Leaf Counting and Area Estimation using 3D Point Cloud Data.pdf.

For presentation slides, please refer to TAU02E_seminar.pdf.

For inspecting code and visualizations, please refer to leaf_counting.ipynb or leaf_counting.pdf.

For the case of multi-scan data, please refer to leaf_counting_multi_scan.ipynb or leaf_counting_multi_scan.pdf.