Master thesis:
Single tree detection for the city of Munich

Earth Observation for Ecosystem Management

Start Date: *Spring / Summer 2025*

Description of Project:
In this thesis, you will create a remote sensing based tree registry for a fictional landscape maintenance department for the city of Munich. You will use the open data provided by the "Landesamt für Digitalisierung, Breitband und Vermessung", e.g.:

- *Digital Orthophoto RGB and NIR 20 cm*
- *Airbone LiDAR point clouds*
- *Digital Elevation Model 1 m (DEM)*

Research Question:
a) *How many trees are located within the boundaries of the city of Munich?*
b) *How accurately can single tree locations be detected by combining Airborne LiDAR point cloud data with digital orthophotos?*

Objective:
Develop a remote sensing based workflow to register all trees for the city of Munich

Additional Information can be found here:

Bayern Open Data Portal

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