Project-/ Bachelor Thesis

Thema:
Evaluation of the Potential Use of Satellite Data to Detect Vegetation on Railway Tracks

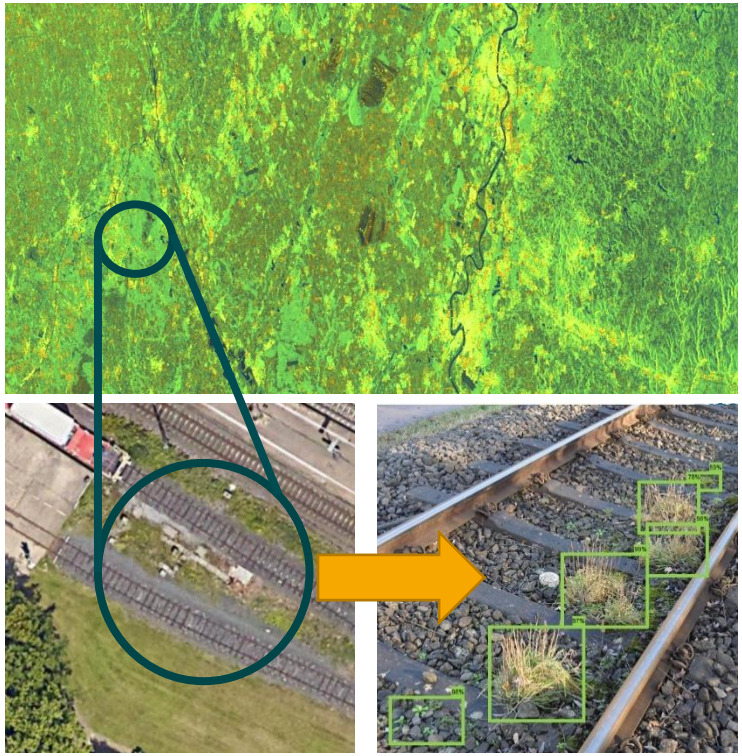
Situation:
Railway tracks, in particular sidewalks and ballast, lose their functionality and safety through emerging plants.

The efficiency of current measures for vegetation control can be improved by coupling them with a plant detection. Currently this is don by means of sensors and cameras. In an earlier thesis, an algorithm to detect plants on railway tracks has already been developed that now needs to be improved.

In this thesis the potential use of satellite data in form of images or radar data to detect vegetation on railway tracks needs to be evaluated.

Tasks:
- Research of different available types of satellite data (images, radar, etc.)
- Collection and comparison of important data parameters (time-interval, resolution, precision, etc.)
- Selection of the most suitable data source (also combination possible)
- Development of a concept for vegetation detection with the chosen data source

The thesis can be written in English or German.



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