Chair of Engineering Geodesy
TUM School of Engineering and Design
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Reconstruction and monitoring of urban trees based on dense MLS point clouds

Background and state-of-the-art

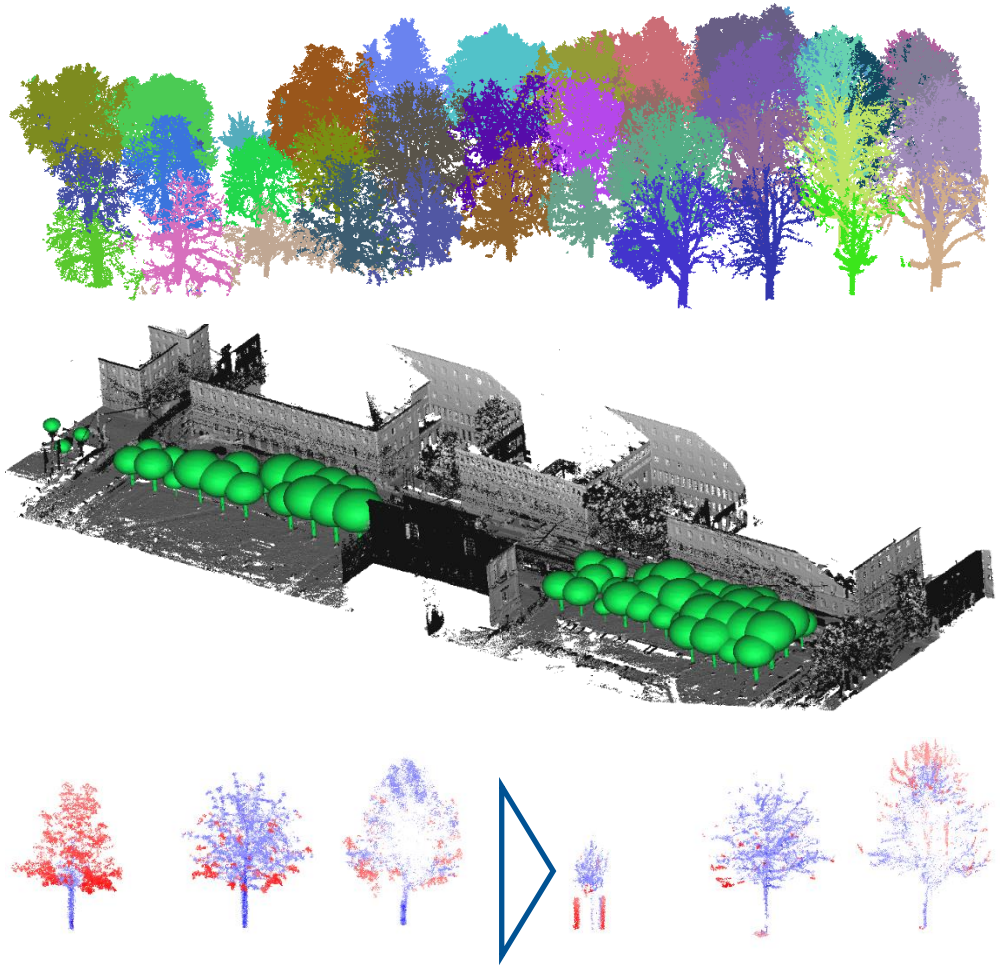
- Urban trees are an inherent component of cities
- Interference with traffic safety, space conflicts and tree care require an overview of the tree population and consistent monitoring
- Tree inventories and parametrization are state-of-the-art, yet only automated to a limited extend
- Changes over time need to be analyzed and predicted

Research questions

- Up to which level of accuracy and reliability can trees be extracted from MLS point clouds and which assumptions are imperative?
- How reliable is the automated update of a tree inventory in terms of completeness and evolution of tree parameters?

Research methods

- Semantic object extraction from point clouds
- Occupancy based change detection



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