Chair of Engineering Geodesy
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Efficient and precise optimal positioning of mobile mapping systems

Background and state-of-the-art

- Mobile Mapping applications increase in a lot disciplines
- Geometric registration of large projects is needed
- Current algorithms just achieve non optimal solutions for registration

Research questions

- How is the registration improved by global optimization in comparison to local or iterative methods?
- Which are important structures for feature extraction to register point clouds?
- Is distribution-based statistics like Bayesian statistics helpful to solve the global registration task?
- Is it possible to reduce the financial effort for sensors through Improvements in the registration process?

Research methods

- Bayesian Parameter estimation in dynamic sensor systems
- Mobile Mapping
- Automatic feature extraction

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