

# Aspects of efficient processing of point clouds derived by laser scanners

## Background and state-of-the-art

- (Pre-)Processing of data involves manual intervention
- Due to large data volume, long processing times occur and complicated data handling is necessary
- Frequently, data processing includes identification of objects as QR-codes, spheres and cylinders for registration or object identification

## Research questions

- How to identify QR-codes, spheres, cylinders and related objects efficiently and precisely in structured and unstructured point clouds?
- How to establish algorithms that work for all kind of laser scanner point clouds: static and mobile laser scans, scanner-specific characteristics

## Research methods

- Design and evaluation of QR-codes and specific detection algorithms
- Design and evaluate algorithms for detection of spheres and planes in unstructured point clouds

