



JC-M, 26.11.2015

SURFACE RECONSTRUCTION OF 3D POINT CLOUDS

MASTERTHESIS, MARKUS ECHTLER

**BMW
GROUP**
BMW Car IT GmbH



BMW GROUP BMW CAR IT GMBH

- Software company focused on the design and development of innovative software for future BMW Group automobiles and motorbikes
- Work areas:
 - Intelligent mobility infrastructure
 - System-wide timing and scheduling
 - Interaction of future software and hardware architectures
 - Model-based test automation of highly integrated systems
 - Centralized vs. decentralized software architecture Design
 - State of the art software development for the automotive domain

SURFACE RECONSTRUCTION OF 3D POINT CLOUDS

Vehicle environment model

Goal:

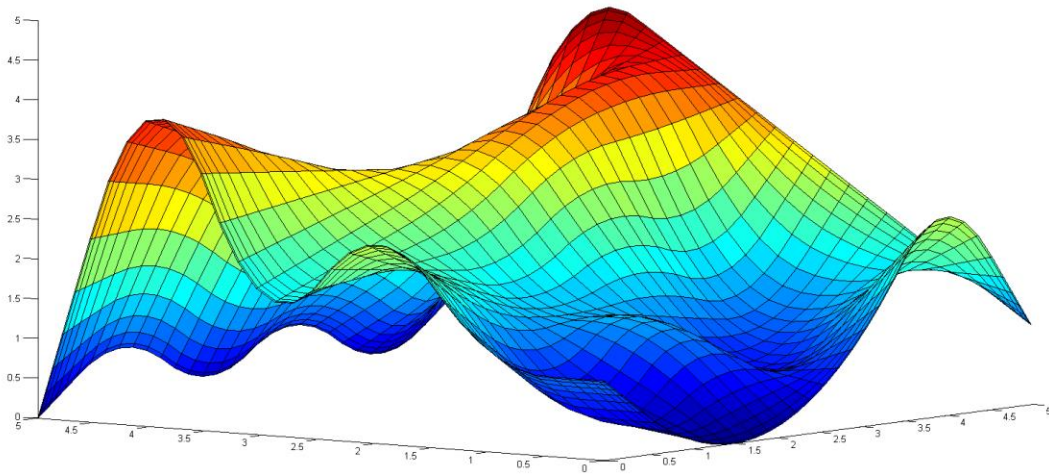
- Three-dimensional representation based on a 3D point cloud

Constraints:

- Real time
- Minimal resources

Use-cases:

- Augmented Reality (Labels, ...)
- Birds-Eye View



CONTACT



BMW Car IT GmbH

Petuelring 116
80809 Munich
Germany

Phone: +49 89 189311-0
Email: info@bmw-carit.de

Markus Echtler

Ellensberg 4
86975 Bernbeuren
Germany

Phone: +49 88860 922684
Email: markus.echtler@gmx.de