Ing. Petr Dobeš, Supervised by: prof. Ing. Adam Herout, Ph.D.

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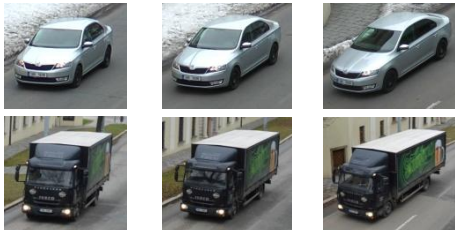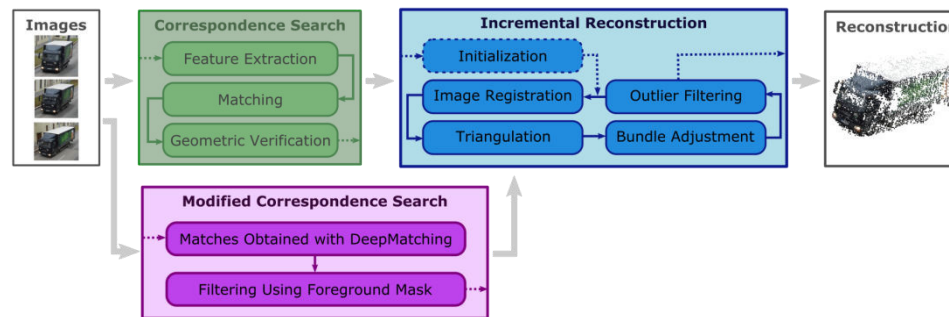OF TECHNOLOGY TECHNOLOGY

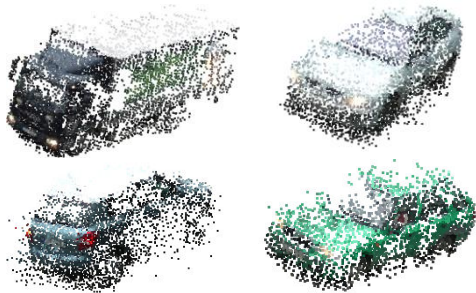# RECONSTRUCTION OF 3D INFORMATION ABOUT PASSING VEHICLES

OBTAINED DATA

MODIFIED STRUCTURE-FROM-MOTION PIPELINE

DEEPMATCHING

3D RECONSTRUCTION

MEASUREMENT RESULTS

Vehicle	Measurement [cm]	Absolute error [cm]	Relative error
1	293.1	8.1	2.8%
2	261.8	23.2	8.1%
3	289.0	4.0	1.4%
4	310.0	25.0	8.8%
5	269.5	15.5	5.4%
6	273.7	11.3	4.0%
7	322.7	37.7	13.2%
8	297.3	12.3	4.3%
9	256.4	28.6	10.0%
Mean	285.9	18.4	6.5%

REAL-WORLD MEASUREMENT

2,85 m

OLOMOUC