Final Presentation Master Thesis

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This is a test of the splines: $\boldsymbol{a}$ and the Jacobian: $\boldsymbol{J}_r((a)$ and the camera matrix: $\boldsymbol{K}$.

Introduction

Motivation

Dense SLAM

Motivation

B–Splines

Theoretical Concepts

B-Splines

Theoretical Concepts

Photometric error

Theoretical Concepts

Gauss-newton optimization

Results

Methodology

Problem setup

Methodology

Datasets

Mapping

Plane test case

Mapping
Simulation test case

Mapping

Middlebury dataset

Mapping

Inhouse dataset

Localization

Plane test case

Localization

Simulation test case

Conclusion

Achievements

Suggestions For Future Work