A first example

author May 30, 2018

Outline

- Introduction
 - Problem
- Proposed solution
- Big Picture
 - Related work
 - Main contribution
- Methods
 - Pipeline
 - Data Structs
- Results
- Conclusion

Introduction

What is SLAM?

Problem

- · Computational Heavyness
- · High Theoretical Complexity
- · How to pratically do it?

Proposed solution

ProSlam:

- · light
- · simple
- · clear

Big Picture

Story

- · LSD SLAM
- etc

State of the art

- ORB SLAM 2
- etc

Main contribution

ProSlam:

- open source cpp implementation
- easy to use for beginners...
- · computationally light
- good performances

Methods

SLAM Map

location based graph ... Loop:

- Relocation
- Adjustment

Pipeline

Core Modules:

- Triangulation
- · Incremental Motion Estimation
- · Map Management
- Relocation

Triangulation

...

Triangulation: Intuition

img of the fact that correspondences are expected only on one side of the other image and they can also be sorted with euclidean distance metric

Incremental Motion Estimation

....

Map Management

Three main steps:

- Correspondence recovery
- · Landmark optimization
- Local map generation

Relocation

....

Data Structs

- KeyPoint
- FramePoint
- Frame
- LandMark
- LocalMap
- GlobalMap

Results

Results

 \dots images of plots and performances \dots benchmarks

Conclusion

Conclusion

In the end:

- summmarizing implications of the results
- · connect results with provided claims
- · take home message