

g2o: A General Framework for Graph Optimization

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1 Resources

- [Paper](#)
 - [Beamer](#)
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2 Basic Information

2.1 Authors

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2.2 Conference

2011 IEEE International Conference on Robotics and Automation (ICRA 2011, Shanghai)

2.3 Abstract

- Simultaneous Localization And Mapping (SLAM) or Bundle Adjustment (BA) can be phrased as **least squares optimization** of an error function that can be represented by a **graph**.
- g^2o ¹ is an open-source C++ framework for optimization graph-based nonlinear error functions.

2.4 Keywords

3 Introduction

3.1 Problem & Solution

A wide range of problems in robotics as well as in computer-vision involve the minimization of a non-linear error function that can be represented as a graph.

3.2 Objective

3.3 Formulation

3.4 Contributions

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4 Related Work

5 Method Description

6 Experiment Evaluation

7 Conclusion

8 Note

¹<https://github.com/MengwenHe-CMU/g2o>