Relative localization methodology for autonomous robots in collaborative environments

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Abstract | Authors | References | Cited By | Keywords | Metrics | Similar

This paper focuses on the problem of relative location management in a robotic systems starting from the previous developed methods, techniques and algorithms. We discuss about inter-robot alignment, distance measurement and localization using the triangulation and trilateration methods. We will show the importance of the confidence number of the robotic nodes in the system, to the relative localization approaches. The measurement results, performed on the CORE-TX case study, show that the proposed solutions meet the design requirements previously specified.

Published in:
Instrumentation and Measurement Technology Conference (I2MTC), 2013 IEEE International

Date of Conference: 6-9 May 2013

Page(s):
1730 - 1733

ISSN :
1091-5281

Print ISBN:
978-1-4673-4621-4

INSPEC Accession Number:
13662864

Conference Location :
Minneapolis, MN

Digital Object Identifier :
10.1109/I2MTC.2013.6555711