

**Record 1 of 1****Title:** Relative Localization Methodology for Autonomous Robots in Collaborative Environments**Author(s):** Stancovici, A (Stancovici, Andrei); Indreica, S (Indreica, Sinziana); Micea, MV (Micea, Mihai V.); Cretu, V (Cretu, Vladimir); Groza, V (Groza, Voicu)**Editor(s):** Ferrero A**Source:** 2013 IEEE INTERNATIONAL INSTRUMENTATION AND MEASUREMENT TECHNOLOGY CONFERENCE (I2MTC) **Book Series:** IEEE Instrumentation and Measurement Technology Conference **Pages:** 1730-1733 **Published:** 2013**Times Cited in Web of Science:** 0**Total Times Cited:** 0**Cited Reference Count:** 11

**Abstract:** 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.

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