



Proceedings of the 40th International Symposium on Automation and Robotics in Construction

Chennai, India, July 5-7, 2023

Proceedings of the 40th International Symposium on Automation and Robotics in Construction

ISSN (for the proceedings series): 2413-5844

ISBN (for this issue of the proceeding series): 978-0-6458322-0-4

The proceeding series is Scopus indexed.

Scopus®

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Foreword

The International Association for Automation and Robotics in Construction (IAARC) and the local organizing committee are pleased to present the Proceedings of the 40th International Symposium on Automation and Robotics in Construction (ISARC 2023) held on July 5-7, 2023, at IIT Madras, Chennai, India. The 40th ISARC was proudly hosted by the Department of Civil Engineering at IIT Madras. This ISARC marks the 40th anniversary of this emblematic symposium. A total of 133 papers were submitted, and after a rigorous peer-review process, 103 papers (77%) were accepted, and 100 were included in the proceedings. Two hundred eighty-six authors representing 115 universities and 29 private/public research organizations and firms from 28 countries, including the Americas, Europe, Asia, and the Middle East, were selected after a two-step (including rebuttal phase) peer-review process with over 170 reviewers managed by 19 Area Chairs taking care of the 8 technical areas of interest of ISARC/IAARC including “Sustainable construction with automation”, the theme proposed by the local organizers for this edition. Submission of full papers with no prior submission of abstracts was requested, making the revision cycles and iterations more effective. The peer-review of the papers was single-blinded. Most of the papers (66%) had 2 reviews. In some cases, papers went through additional reviews before a decision could be made. Twenty-nine percent had 3 reviews, and 6% had 4. That allowed us to address situations where consensus by the reviewers was not reached, and additional reviews were required. During the review process, a rebuttal phase was incorporated to allow authors to address the comments by the reviewers. In general, authors appreciate the comments and feedback provided by the reviews. The peer-review process enabled the identification of high-quality papers, including short papers, in the proceedings. In terms of presentations, the traditional keynote, plenary and parallel presentations were identified. On top of that, this edition of ISARC includes a “poster category”. The posters were showcased during the symposium.

ISARC is the premier global event in the domain of automation and robotics in construction, and as such, the IAARC Technical Committee, with the support of the Area Chairs, strived to secure the acceptance of high-caliber papers. Along with the consolidation of ISARC/IAARC technical areas of interest, an explicit effort to consolidate the knowledge accumulated this year (and from prior years) was undertaken by the IAARC Technical Committee. In that regard, a supporting framework for Area Chairs and reviewers was put in place, including guidelines and standards, to include papers in the proceedings that were carefully curated. The establishment of this review framework and additional “standards” represent an incremental improvement to the ongoing efforts from IAARC to continue improving the standing of ISARC.

We trust that this year’s proceedings are interesting for readers, and they will find the papers included stimulating and inspiring. Please enjoy.

Borja García de Soto (New York University Abu Dhabi)

Vicente A. Gonzalez (University of Alberta)

Ioannis Brilakis (University of Cambridge)

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