

Navigating the New RAS Publications Landscape

A. Bicchi, K. Goldberg, E. Guglielmelli, A. Okamura, F. Park

As we welcome the recently launched Robotics and Automation Letters into the IEEE Robotics and Automation Society's portfolio of publications, members of our community will understandably have questions about the new IEEE Robotics & Automation Society (RAS) publications landscape. This article, authored by the editors-in-chief of the five major society publications—the IEEE Robotics and Automation Letters (RA-L), the IEEE Transactions on Robotics (T-RO), the IEEE Transactions on Automation Science and Engineering (T-ASE), the IEEE Robotics and Automation Magazine (RAM), and the IEEE International Conference on Robotics & Automation (ICRA) proceedings—is intended to help our members navigate this new landscape, to offer guidance on where to submit papers, and to clarify the vitality and respective roles of the RAS publications.

RA-L is a peer-reviewed, electronic-only journal that began receiving submissions in June 2015 and will publish its first issue in January 2016. RA-L was established in response to the evolving needs of our community, among them the recent rapid growth of our society and the increasing importance of journal publications in professional evaluation. The distinguishing feature of RA-L is rapid publication (six months from submission to publication, including revision and re-review). High-quality, original papers reporting on archival contributions that can be communicated in six pages (up to two additional pages will be allowed subject to page charges), are most appropriate for RA-L. A second distinguishing feature of RA-L is that for papers submitted within a designated time window, the authors of accepted papers will have the option of presenting their work at ICRA. For this year the window was 1 July - 31 August, in which 335 manuscripts requesting this option were submitted. If you have a result of archival value that can be communicated in six (max. eight) pages, and also wish to present the same work at ICRA, then RA-L is the natural destination for your paper.

It is important to emphasize that T-RO and T-ASE will continue to be the primary destinations for high-quality, high-impact research papers, especially those that benefit from additional time and/or space. It is often the case that significant results benefit from feedback from peers at workshops and conferences as well as from manuscript reviewers. These papers may also require more space for thorough presentation of experimental results, proofs, analysis, and comparison with prior work. For papers that have undergone the refinement process but can be presented concisely, T-RO and T-ASE will continue to accept short papers. T-RO and T-ASE strive to provide initial decisions within 90 days of submission.

RAM will continue to be the destination of choice for peer-reviewed archival papers of broad interest that report on breakthrough research developments with clear evidence of

experimental validation in real application scenarios, recent trends in robotics and automation, articles of a tutorial or survey nature, and works oriented toward the robotics and automation practitioner that complement those works published in T-RO, T-ASE, and RA-L. RAM also strives to provide initial decisions within 90 days of submission.

For papers that report on research that is not yet ready for journal publication, but has the potential to evolve into a journal publication, ICRA should be the natural destination. When deciding whether to submit one's work to ICRA directly or through RA-L, it is important to keep in mind that a paper submitted through RA-L will go through a more thorough review process, possibly including a revision and resubmission cycle. RA-L is an archival journal, and as such, material appearing in RA-L papers cannot be reused in another journal paper, while this can be done with papers published only in conferences under the evolutionary publishing paradigm.

We thank Raja Chatila, Alessandro De Luca, Seth Hutchinson, and Peter Luh for feedback and advice on this editorial. As this is the first year of the launching of RA-L, some adjustments in the operating procedures of our five publications can be expected in the coming years. For example, we are hoping to increase the page lengths for RAM, T-RO and T-ASE, to explore ways for some accepted RAM, T-RO and T-ASE papers to also be presented at ICRA, and for some accepted RA-L papers to be presented at the IEEE International Conference on Automation Science and Engineering (CASE) and other RAS-sponsored conferences besides ICRA. Of course there are also many excellent non-IEEE journals and conferences that authors may consider.

We welcome the addition of RA-L and hope that this memo will help RAS members navigate the new publications landscape. Further information on the scope, submissions guidelines, and procedures for the five publications in the RAS publications portfolio can be found at the links listed below.

<http://ieee-ras.org/publications/ral>

<http://ieee-ras.org/publications/tro>

<http://ieee-ras.org/publications/tase>

<http://ieee-ras.org/publications/ram>

<http://www.ieee-ras.org/conferences-workshops/fully-sponsored/icra>