

Coordinating Conference and Journal Papers

By Bram Vanderborght

In the June 2018 “President’s Message,” Wolfram Burgard described, as the title indicates, “New Challenges for the IEEE Robotics and Automation Society.” Our IEEE Robotics and Automation Society (RAS) president stated that, in the past several years, the

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RAS has made substantial progress in increasing the quality of our flagship conferences and journals but that cooperation among conferences and journals will further improve the efficiency of all processes involved.

Dr. Burgard suggested that, inspired by the excellent results of our new *IEEE Robotics and*

Automation Letters, we should aim for a tight collaboration between RAS conferences and journals. As such, we want to progressively discourage the traditional evolutionary model (a short paper for conference presentation and

a longer one with additional experimental results for the journal version) because it requires considerable writing, reviewing, and editing, while reducing our impact factors. Frank Park has already successfully piloted this as editor-in-chief for *IEEE Transactions on Robotics (T-RO)* at the IEEE International Conference on Robotics and Automation (ICRA) 2017 and 2018, and we will also extend this to *IEEE Robotics and Automation Magazine* for ICRA 2019 in Montréal, Canada. There are, however, some rules similar to those for *T-RO*.

For ICRA 2019, eligible papers must have been published, or accepted for publication, in *IEEE Robotics and Automation Magazine* during the period 1 June–31 December 2018. Most of the paper’s key ideas may have never appeared at a conference with published proceedings (e.g., the paper is not the evolved version of a previous conference paper). At least one author of the paper commits to register for the conference and present the paper, satisfying all the registration and presentation requirements. Authors must agree that the paper is subject to the same requirements as regular papers (full registration of one author, two papers maximum per registration). The ICRA program committee makes rejection/acceptance decisions and assigns



papers to sessions, as with regular conference papers. As such, we want to offer our members improved services and add to our efforts to make our conferences and journals the most influential of their kind in our field.

In This Issue

As eyes in the sky, drones are booming, with many applications in infrastructure; however, these are limited to monitoring and surveillance of, for example, a bridge. In addition, underwater robots are being widely employed as a tool for mapping the seafloor using several sensors. Still, a large number of applications exist that go beyond surveying capabilities, and the possibility of manipulating objects with these two challenging technologies could open up an entirely new set of applications. Both underwater and aerial robots are floating-base robotic systems, and this fact makes their control different from classic ground mobile manipulators. This special issue provides up-to-date results and novel advanced solutions for floating manipulation, from the point of view of both aerial and underwater fields. I want to thank Matteo Fumagalli (University of Aalborg) and Enrico Simetti (University of Genova) for guest editing this special issue. Enjoy!