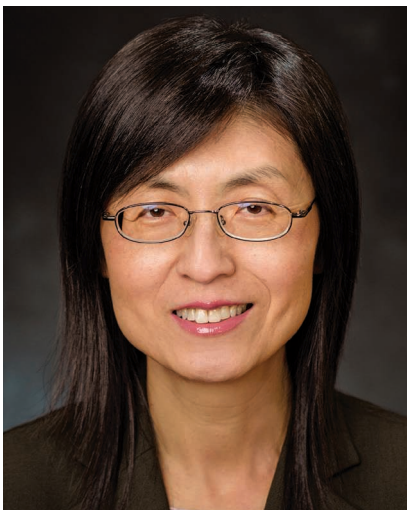
Best Practices: Becoming a Leader Through Conference Organization

By Lydia Tapia and Elena Delgado

The IEEE Robotics and Automation Society (RAS) organizes or co-organizes roughly 78 conferences and workshops each year, including 11 fully sponsored conferences, 19 financially cosponsored conferences, and 48 technically cosponsored conferences. Additionally, several positions within the RAS help with conference content and activities, including committees such as the Conference Activities Board (CAB), Member Activities Board, and Technical Activities Board. There are many opportunities for individuals to volunteer and become the next leaders by contributing to the organization of these multiday events. In 2019, four such individuals were interviewed by the Women in Engineering Committee at the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). This article shares their perspectives of, and experiences with, becoming involved with RAS-sponsored conferences and earning their high-level leadership roles.



Yi Guo

Karinne Ramirez-Amaro

Marcia O'Malley

Jing Xiao

Yi Guo, a professor at Stevens Institute of Technology, served as finance chair for the 2015 IEEE International Conference on Robotics and Automation (ICRA) as well as for IROS 2019 and 2020. She has been a CAB Member At Large since 2019, and she is the 2021 incoming editor-in-chief of *IEEE Robotics and Automation Magazine*. Prof. Yi has found every service role within the RAS rewarding, saying, "You learn how to serve the community, interact with smart people, and every conference you go to is a different experience."

Marcia O'Malley is the Thomas Michael Panos Family Professor in Mechanical Engineering at Rice University. She served as cochair of the 2012 and 2014 IEEE Haptics Symposium and of the IEEE World Haptics Conference editorial board; program chair of IROS

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2020; associate editor of *IEEE Transactions on Robotics*, *IEEE Transactions on Haptics*, and *IEEE/ASME Transactions on Mechatronics*; senior editor of *IEEE/ASME Transactions on Mechatronics*; associate editor-in-chief of *IEEE Transactions on Haptics*; and chair of the IEEE Technical Committee on Haptics. Prof. O'Malley found being a conference cochair rewarding. When she led the transition of the Haptics Symposium to a fully independent conference, she found the role "scary." However, she said her work greatly enhanced the conference experience for the research community by providing autonomy in determining the conference location and activities.

Karinne Ramirez-Amaro, an assistant professor at Chalmers University of Technology, has served as associate vice president (VP) for CAB operations and as a member of the organizing committees for ICRA 2023 and 2024. Prof. Ramirez-Amaro finds serving as a CAB VP to be most rewarding, as she has constant communication with more than 50 conference organizers. Currently, she and her team are collecting data about all conferences sponsored by the RAS to determine participation levels during past years. Robotics conferences, such as ICRA and IROS, have shown rapid growth, and Prof. Ramirez-Amaro is using these data to identify "ways to adapt" in coordination with conference organizers.

Jing Xiao is a Dean's Excellence Professor and William B. Smith Distinguished Fellow in Robotics Engineering at Worcester Polytechnic Institute. She served as a member of the RAS Administrative Committee, RAS Executive Committee, and RAS Awards Committee and as the RAS VP for member activities. In addition, she has held many leadership positions on ICRA and IROS conference committees. One of Prof. Jing's most rewarding accomplishments is serving as VP for RAS member activities. In this role, she helped "increase the funding for student travel awards and for attendees from developing countries." She saw the positive impact of her work through increased student participation and paper authorship at conferences, including ICRA and IROS.

These women took very different paths to their current service roles, but they all suggested starting out by performing well at small tasks. After starting as a reviewer for several ICRA conferences, Prof. Jing helped the Society as a Program Committee member for ICRA 1994. She found it was "a very frightening and rewarding experience." Through this, she learned how to be a good reviewer by working with more seasoned researchers, back when they sat around a table together and assessed papers.

Similarly, Prof. Ramirez-Amaro started out as a paper reviewer for conferences. She acquired the role by becoming known in the community through conference attendance and by talking with people and convincing them that she knew her research. She gave business cards to professors and thought, "Oh! The business cards worked!" when she was contacted to be a reviewer. Later, she realized the recognition was more about the quality of her own work and the visibility she earned by getting to know other researchers. After successfully reviewing papers for several years, she was nominated to become an associate editor, a position that required her to enhance her network to find suitable reviewers for submissions.

Prof. O'Malley recommended submitting articles, which helps get new authors into the database that associate editors use to find reviewers. She got started as an associate editor by proposing a journal special issue. To do this, she had to convince the editor that there would be enough submissions. After her pitch was accepted, she distributed a call for submissions, found reviewers, and suggested articles for publication.

All four of these professionals experienced times when they felt unprepared for certain leadership opportunities they had been offered. However, they emphasized that it is important to take some risks. Prof. Ramirez-Amaro recommends "trusting your gut." For example, when she was offered her current role as a CAB VP, she didn't even know what the CAB was. But she quickly saw the advantages of helping with ICRA and IROS organization. Prof. O'Malley noted that "it can be intimidating" when you get offered a new role. However, she remarked that, in robotics, it is very easy "to call up someone who was in that role previously and find out about their prior experience." This helps identify the true workload, time requirement, and necessary skills. Prof. Yi found there is a "learning curve" for every role but that adaptation enables the discovery of better and more efficient ways to solve many different problems. "Tasks come in, and you have to address them within a time frame" she said, emphasizing how people become more efficient each time they serve in a role.

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Each of the professors has performed service activities as an extra part of her workload. Prof. Jing noted that it is hard to balance work, family, and leadership roles, but "you find ways to become more efficient." She added that it is important to have a team and to hand off tasks to volunteers. Prof. O'Malley said she makes sure she "understands what is being asked of me" when she takes on a position and keeps in mind two things: finding out about the workload for the specific role and knowing the time commitment. For example, the role of associate editor can vary among journals and may mean "three papers at a time for one journal or 30 papers at a time for another." Additionally, when organizing a conference, it is important to note that "different roles are busy at different times—the registration chair can sit back until a couple months before the conference and then is really busy,

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whereas the finance chair is busy way before the conference with the budget and then is busy long after the conference resolving all the finances."

Since much of their service was beyond what was required for career enhancement, the leaders talked about the benefits they gained from helping the robotics community. Prof. Jing said that it helped her realize a "sense of community." Prof. Ramirez-Amaro thought of it as a "service" she performed to enhance the community. Prof. O'Malley also thought it was important to help the research community, but she notes the career benefit from service. "If you're on an academic track, at some point, you're going to be up for tenure and promotion, and you need external reviewers. And, if you have been involved in the community, then they're going to know you." Prof. Yi felt the true reward was "interacting with the leaders in the community." Finally, they each suggested some concrete ways to get started on a path toward leadership. Begin with networking at conferences, organizing workshops, reviewing papers, and putting together special journal issues. Doing well at these tasks will lead toward new opportunities and the chance to work with others to shape the direction of robotics research.