

Today's Youth Are Our Future Leaders

By Wolfram Burgard

The IEEE Robotics and Automation Society (RAS) is one of the strongest IEEE Societies and is currently experiencing enormous growth. This growth and the additional input and fresh views new members bring provide great opportunities. And the greatest potential comes from our future leaders or, put another way, our young members. Given our over 3,980 student members, young people make up more than 28% of the RAS. Consequently, our Society has sought to continuously increase the portfolio of opportunities provided to today's youth.

One of the strongest measures of our success in supporting activities of young members is the more than 270 Student Chapters. The goal of Student Chapters is to create a local network of students and provide them the opportunity to

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meet and learn from fellow students, faculty members, and professionals in our field. These Chapters are based all over the world, including countries rarely represented at our major meetings like Bangladesh, Costa Rica, the Dominican Republic, Lebanon, Sri Lanka, and Tunisia. Our Society pro-

vides up to US\$40,000 per year to support these Chapters and strengthen Society involvement. In addition, our Distinguished Lecturer (DL) Program provides support to Student Chapters, covering all DL travel expenses so Chapter costs are minimal.

The RAS's Education Committee, which reports to the Member Activities Board, is in charge of coordinating and fostering educational initiatives. Important means toward this goal are specialized meetings, workshops, and conference sessions dedicated to student education. Society-sponsored books and summer schools/technical education programs are also the responsibility of this committee. The committee oversees and directs educational resources made available in electronic form and seeks to ensure the high quality of Society-sponsored educational activities.

One of our strongest initiatives in this regard is the Student Activities Committee, whose goal is to represent students in robotics worldwide. The chair of the Student Activities Committee is a voting member of our Administrative Committee and thus involved in all decisions about the future development of our Society.

We furthermore support several initiatives geared toward young members during three of our flagship conferences: the IEEE International Conference on Robotics and Automation (ICRA), IEEE International Conference on Automation Science and Engineer-



ing, and IEEE/Robotics Society of Japan International Conference on Intelligent Robots and Systems (IROS). These initiatives include the photo scavenger hunt, several dedicated get-togethers, and

Lunch with Leaders. The latter is open to students and Young Professional attendees and offers a chance to meet and interact with luminaries from our Society and industry for networking, career advice, insights into recent developments, and so forth.

The Women in Engineering Committee promotes women and, in particular, young women through Society activities and in cooperation with all Society boards, committees, and working groups. This committee organizes breakfasts and lunches at our flagship conferences to foster discussion on the role of women in robotics and automation, inspire girls, and promote collaborations and programs to advance women in leadership.

Our Young Professionals Committee supports the participation of young members in Society activities. One particularly successful activity of this committee is the Young Reviewers Program, which introduces young members of our Society to sound practices in peer reviewing of scientific papers.

Our Conference Activities Board has a dedicated budget to support robot challenges at ICRA and IROS. It also offers travel support for authors who are

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within the next 50 years as did mainstream IT and the Internet over the last half a century” [6]. For some time now, I have been writing these lines often and in different forms, and you, the members of our Society, know that. In fact, it is the reason we are IEEE’s RAS, because we know that our topic is there, that it is big, and that it has come to stay and disrupt the world. Many of you, having worked in the domain for decades, will agree; some might smile, and a few might roll their eyes, but we all are certain of it. But what we are not so very sure about is the “when.”

To answer this question, the RAS IAB initiated what will be the biggest global Delphi Study, “Future of Robotics 2050+” [7], [8]. The study seeks to question more than 200 worldwide robotics experts (mostly from our community) to gain maximum diversity and collect as much input as possible. Since the kickoff in 2016, several preparation workshops have been held at major IEEE RAS conferences, and a senior advisory committee has been instantiated, involving Wolfram Burgard, Oussama Khatib, Henrik Christensen, Raja Chatila, Satoshi Tadokoro

and Dong-Soo Kwon. After being discussed at this year’s IEEE/Robotic Society of Japan International Conference on Intelligent Robots and Systems in Macau, China, the questionnaire has been finalized and is now ready to be distributed to the experts. The goal is that, by ICRA 2020, the first round of answers will have been collected and analyzed so that the results can be presented in Paris before the second round starts. The experts taking part in the study will be carefully selected, and the list will be approved by the senior advisory committee. To learn more about the Delphi Study, please visit the website at www.robotics2050.org or contact me at boesl@ieee.org.

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PRESIDENT’S MESSAGE *(continued from page 6)*

student members of our Society or students from developing countries.

Further student-directed initiatives include our Best Student Paper Awards and the variety of educational material we create for the benefit of our young members. Thus, our Society is doing a lot for young members, but we are aware that we can always do more

and so are constantly considering additional ideas. We would be particularly happy to consider initiatives coming directly from our young members, who may have good ideas about the best options for their and, thus, our Society’s future.

I end this column with a personal statement, because this is the last one I

will write in my role as president of the RAS. I particularly enjoyed serving you all, and I truly hope that you viewed everything my team and I did throughout the past two years as what we all aimed for—a positive development of our Society.

Thank you for your support!

